THE UNIVERSITY OF MICHIGAN

Department of Pathology

ANNUAL REPORT

1 July 1994 - 30 June 1995
THE UNIVERSITY OF MICHIGAN

Department Of Pathology

ANNUAL REPORT

1 July 1994 - 30 June 1995
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<tr>
<th>Name</th>
<th>Rank</th>
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<tbody>
<tr>
<td>Abell, Murray R.</td>
<td>Professor Emeritus</td>
<td>The University of Michigan</td>
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<tr>
<td>Abrams, Gerald D.</td>
<td>Professor</td>
<td>The University of Michigan</td>
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<tr>
<td>Annesley, Thomas M.</td>
<td>Associate Professor</td>
<td>The University of Michigan</td>
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<tr>
<td>Appelman, Henry, D.</td>
<td>Professor</td>
<td>The University of Michigan</td>
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<tr>
<td>Baker, James R.</td>
<td>Associate Professor</td>
<td>The University of Michigan</td>
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<tr>
<td>Barr Jr., Mason +</td>
<td>Professor</td>
<td>The University of Michigan</td>
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<tr>
<td>Beals, Theodore F.</td>
<td>Assistant Professor</td>
<td>Veterans Affairs Medical Center</td>
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<tr>
<td>Blaivas, Mila I.</td>
<td>Clinical Associate</td>
<td>The University of Michigan</td>
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<tr>
<td>Bonadio, Jeffrey</td>
<td>Professor</td>
<td>The University of Michigan</td>
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<tr>
<td>Caplan, Michael J.</td>
<td>Assistant Professor</td>
<td>The University of Michigan</td>
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<tr>
<td>Capps, Rodney D.</td>
<td>Clinical Assistant</td>
<td>The University of Michigan</td>
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<td>Chensue, Stephen W.</td>
<td>Assistant Professor</td>
<td>The University of Michigan</td>
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<tr>
<td>Crockett-Torabi, Elahe</td>
<td>Research Investigator</td>
<td>The University of Michigan</td>
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<tr>
<td>D'Amato, Constance J.</td>
<td>Assistant Professor</td>
<td>The University of Michigan</td>
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<tr>
<td>Davenport, Robertson</td>
<td>Assistant Professor</td>
<td>The University of Michigan</td>
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<tr>
<td>de la Iglesia, Felix**</td>
<td>Adjunct Research Scientist</td>
<td>Warner-Lambert/Parke Davis</td>
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<tr>
<td>Dixit, Vishva M.</td>
<td>Associate Professor</td>
<td>The University of Michigan</td>
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<tr>
<td>Elner, Victor M. + +</td>
<td>Assistant Professor</td>
<td>The University of Michigan</td>
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<tr>
<td>England, Barry G.</td>
<td>Associate Professor</td>
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<td>Fantone, Joseph C.</td>
<td>Professor</td>
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<td>Flint, Andrew</td>
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<td>Frank, Thomas S.</td>
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<td>Friedman, Bruce A.</td>
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<td>Giacherio, Donald</td>
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<td>Gikas, Paul W.</td>
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<td>Gordon, David</td>
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<td>Greenson, Joel</td>
<td>Assistant Professor</td>
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<td>Hanks, Carl T.*</td>
<td>Associate Professor</td>
<td>The University of Michigan</td>
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<tr>
<td>Headington, John T.</td>
<td>Professor</td>
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<td>Heidelberger, Kathleen P.</td>
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<td>Hendrix, Robert C.</td>
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<td>Hicks, Samuel P.</td>
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<td>Jones, Michael L.</td>
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<td>Judd, W. John</td>
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<td>Killen, Paul D.</td>
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<td>Kunkel, Steven L.</td>
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<td>Lowe, John B.</td>
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<td>Lukacs, Nicholas</td>
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<td>McClatchey, Kenneth D.</td>
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<td>McKeever, Paul E.</td>
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<td>Midgley, A. Rees</td>
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<td>Mitra, Raj S.</td>
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<td>Naylor, Bernard</td>
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<td>Nickoloff, Brian J.</td>
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<td>Nunez, Gabriel</td>
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<td>Oberman, Harold A.</td>
<td>Professor</td>
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<td>Phan, Sem H.</td>
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<td>Pierson, Carl L.</td>
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<td>Rachmaninoff, Nikolai</td>
<td>Lecturer</td>
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<td>Rasche, Rodolfo</td>
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<td>Remick, Daniel G.</td>
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<td>Repola, Kenneth L.</td>
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<td>Ross, Charles W.</td>
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<td>Schnitzer, Bertram</td>
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<td>Selvaggi, Suzanne M.</td>
<td>Assistant Professor</td>
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<td>Shanberge, Jacob N.</td>
<td>Clinical Professor</td>
<td>William Beaumont Hospital</td>
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<td>Sheldon, Susan</td>
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<td>Shope, Thomas C. '+'</td>
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<td>Silverman, Eugene M.</td>
<td>Clinical Associate Professor</td>
<td>The University of Michigan</td>
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<td>Sima, Anders A.F.</td>
<td>Professor</td>
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<td>Stoolman, Lloyd M.</td>
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<td>Sulavik, Denise</td>
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<td>Till, Gerd O.</td>
<td>Professor</td>
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<td>Varani, James</td>
<td>Professor</td>
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<tr>
<td>Ward, Peter A.</td>
<td>Professor and Chairman</td>
<td>The University of Michigan</td>
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<tr>
<td>Warren, Jeffrey S.</td>
<td>Associate Professor, Director, Clinical Laboratories</td>
<td>The University of Michigan</td>
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<td>Weatherbee, Lee</td>
<td>Associate Professor</td>
<td>Veterans Affairs Medical Center</td>
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<td>Weiss, Bernard</td>
<td>Professor</td>
<td>The University of Michigan</td>
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<td>Weiss, Sharon W.</td>
<td>Professor and Director, Anatomic Pathology</td>
<td>The University of Michigan</td>
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<tr>
<td>Wolter, J. Reimer</td>
<td>Professor Emeritus</td>
<td>The University of Michigan</td>
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* Joint Appointment, Dental School
** Clinical Appointment, Warner-Lambert, Parke Davis
+ Joint Appointment, Department of Pediatrics and Communicable Diseases
++ Joint Appointment, Department of Ophthalmology
+++ Joint Appointment, Department of Surgery
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DEPARTMENTAL OVERVIEW
DEPARTMENTAL OVERVIEW
1994/1995

The academic year 1994-95 has been highly successful for the Department of Pathology. During the Summer and Fall of 1994, the Department underwent a review process, which occurs every five-seven years. This is followed by an on-site review by external consultants and is, in essence, a "report card" on the accomplishments of the sitting Chairman. In the data base that has been assembled, the success of the Department in all of its aspects has been evaluated. Of interest is the fact that we have moved into a position of number nine of all academic Department's of Pathology in terms of NIH support. Based on frequency of citation of faculty publications, we are clearly in the top five academic Departments of Pathology in the United States. These accomplishments are due to the very broad base of strengths in the Department in the areas of teaching, service and research and reflect the scholarly accomplishments of the faculty.

As we enter into the new academic year, there are two outstanding issues that will affect the health and vitality of the Department. These bear on space and the Medical Service Plan of the Department. Regarding the former, the Department is currently out of space. We have no space from which to create offices for new faculty, and we have no space for recruitment of new faculty who require research laboratory space. Except for the Departmental purchase of approximately 6,000 sq. ft. of research space in Medical Science Research Building I in the Spring of 1986, since my assumption of Chairmanship of the Department of Pathology in 1980, we have not received from the Medical School any additional space allocation. Currently, the plan is to reassign space in the Pathology Building as clinical activities are moved out the structure. However, the ability to secure this space for new faculty offices and research laboratories will await accomplishment of three other construction projects: the West "bump" addition to University Hospital, construction of laboratory space at the new East Medical Campus, and renovation of the clinical laboratory space in the University Hospitals. In all likelihood, it will be late Fall of 1997 before any moves out of the Pathology Building can be made. Unless the Medical School and Hospitals can provide interim space relief, the Department will be placed in a position of substantial jeopardy.

With reference to our Medical Service Plan (MSP), the institution is putting into place a version of a combined Medical Service Plan which has a profit sharing plan with the University Hospitals, the first of its kind at the Medical Center. These arrangements address the key issue of how to reorganize highly successful Medical Service Plan programs in the face of mounting pressures to respond to care that is either largely managed or contracted. The new program (combining the Clinical Delivery System headed by the Hospital Director and the Medical Service Plan Executive Committee headed by the Dean) will provide for a centralization of clinical activities, contracting and disbursement of revenues. The three key issues in this new system are: (a) retention of effective incentives for individuals and departments; (b) decisions on revenue disbursements (both routine operating revenues as well as profit sharing); and (c) governance in this new system. In the context of the last item, centralization of power in the Medical Service Plan Executive Committee and the Clinical Delivery System Executive Committee puts into the hands of the Committee members a great deal of authority which in the past has rested chiefly in the hands of the sitting Clinical Chairmen. Developing a system of effective and
equitable governance and having in place a program that will not lose focus of the academic missions of both the Medical School and the University Hospitals will be some of the challenges of the immediate future.

Respectfully submitted,

Peter A. Ward, M.D.
Professor and Chairman
INDIVIDUAL FACULTY REPORTS
GERALD D. ABRAMS, M.D.  
PROFESSOR OF PATHOLOGY  
DEPARTMENT OF PATHOLOGY  

ANNUAL DEPARTMENTAL REPORT  
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:
   A. Surgical Pathology Services - 4 1/2 months.  
   B. Necropsy Service - on call.  
   C. Pathologist, Cardiac Transplant Team.  
   D. Consultant for Gastrointestinal Pathology. 
   E. Consultant for Cardiovascular Pathology.

II. TEACHING ACTIVITIES:
   A. Freshman Medical Class:  
      1. Pathology 500, Course Director, Lecturer, "Basic Concepts of Disease" - 20 lecture hours.  
      2. Multidisciplinary Conferences - six contact hours.  
      3. Introductory Histopathology Sequence, Sequence Director, Lecturer, Lab Instructor - 18 contact hours (six lectures, 12 lab hours).
   B. Sophomore Medical Class:  
      1. Cardiovascular Sequence - five lecture hours.  
      2. Cardiovascular Sequence - Pathology Lab Coordinator.  
      3. Pathology Lab Instructor - 32 contact hours.  
      4. Surgical Pathology, Individual Studies Seminar, 15 contact hours.
   C. Senior Medical Class:  
      1. Pathology Clerkship Mentor - 20 contact hours.  
   D. Inteflex (I-3):  
      1. Medical Economics - five contact hours.
   E. Undergraduate LS&A:  
      1. Biology #224 - 2 contact hours.
   F. Hospital Conferences:  
      1. Cardiovascular Pathology Conference - monthly.  
      2. Internal Medicine CPC's - occasional.  
      3. Internal Medicine Necropsy Review - occasional.  
   G. House Officers:  
      1. Training in Surgical and Necropsy Pathology.
   H. Invited Lectures:  
      3. Northern Michigan Summer Conference, June 1995 (Department of PGM and HPE).
III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:

None

PROJECTS UNDER STUDY:

A. Pathologic-Radiologic Correlation in Aortic Disease, with D. Williams.
B. Pathogenesis of venous thrombosis, with T. Wakefield.
C. Tissue reactions to implanted vena caval filters, with L. Greenfield.
D. Mycophenolate in prevention of cardiac allograft rejection, with J. Nicklas.

IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:

A. Member, Pathology House Officer Selection Committee.

MEDICAL SCHOOL/HOSPITAL/UNIVERSITY:

A. Member, Historical Center for the Health Sciences Liaison Committee.
B. Member, Component I Committee.
C. Ombudsperson, Medical Faculty.
D. Member, Executive Committee on Clinical Affairs.
E. Member, Provost's Task Force on Retirement.
F. Chair, Panel of Inquiry into Federally Sponsored Human Radiation Research at U of M (OVPR).

REGIONAL AND NATIONAL:

A. Editorial Board, Modern Pathology.
B. Deputy Medical Examiner, Washtenaw County.
C. Manuscript Reviewer for Cancer, Archives of Pathology and Laboratory Medicine.

V. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:

BOOKS/CHAPTERS IN BOOKS

   Chapter 1: General Concepts of Disease. Health vs. Disease.
   Chapter 3: Cellular Injury and Death.
   Chapter 4: Response of the Body to Injury. Inflammation and Repair.
   Chapter 6: Response of the Body to Infectious Agents.
   Chapter 7: Disturbances of Circulation.
   Chapter 8: Disturbances of Growth, Cellular Proliferation, and Differentiation.
THOMAS M. ANNESLEY, PH.D.
ASSOCIATE PROFESSOR OF CLINICAL CHEMISTRY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:
   A. Director, Drug Analysis and Toxicology Laboratory.
   B. Consultant to Veterans Administration Hospital, Ann Arbor, Michigan.
   C. Laboratory Director, Chelsea Family Practice, M-Care Facility.
   D. Laboratory Director, Briarwood Medical Group, M-Care Facility.
   E. Laboratory Director, Briarwood Family Practice Facility.
   F. Laboratory Director, Chelsea Internal Medicine Associates.

II. TEACHING ACTIVITIES:

MEDICAL SCHOOL/HOSPITALS:
   A. Medical Students:
      1. Course Director, Fundamentals of Laboratory Medicine (PTHCLNL.101)
         Component IV Medical School Curriculum.
   B. House Officers:
      1. Lecturer, Clinical Pathology Grand Rounds.
      2. Lecturer, Clinical Pathology Didactic Lecture Series.
      3. Daily sign-out and interpretation of Laboratory Results.
      5. Coordinator, Clinical Pathology Block B.

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:
   A. "Multicenter Randomized Dose Ranging Study Comparing the Safety and Efficacy of
      OG37-325 Oral Solution to Sandimmune in Renal Transplant Patients", $45,000, Sandoz

PROJECTS UNDER STUDY:
   A. Metabolism, analysis, and therapeutic effect of OG37-325 (CsG) in renal transplant
      patients.
   B. Distribution of cyclosporine and metabolites in blood and tissues.
   C. Measurement of therapeutic drugs using alternative fluids beyond serum.
   D. Esoteric analysis of drugs by gas chromatography/mass spectrometry.
   E. Microbore applications to the analysis of drugs.

IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:
   A. Director, Drug Analysis and Toxicology Laboratory.
B. M-Labs Technical Group.

**MEDICAL SCHOOL/HOSPITAL:**

A. Pharmacokinetics Quality Improvement Team.

**REGIONAL AND NATIONAL:**

A. Board of Directors, American Board of Clinical Chemistry.
B. Clinical Chemistry Examination Committee, American Board of Clinical Chemistry.
C. Task Force on Sponsorship, American Board of Clinical Chemistry.
D. Board of Directors, National Registry in Clinical Chemistry.
E. Toxicology Examination Committee, National Registry in Clinical Chemistry.
F. Credentials Committee, National Registry in Clinical Chemistry.
G. Faculty, National Toxicology Review Course, American Association for Clinical Chemistry.
H. Member, NCAA Drug Testing Team.
I. Member, Academy of Clinical Laboratory Physicians and Scientists.
J. Member, Clinical Ligand Assay Society.
K. Member, American Association for Advancement of Sciences.
L. Member, Association of Clinical Scientists.
M. Executive Committee, TDM/Clinical Toxicology Division, American Association for Clinical Chemistry.

**V. OTHER RELEVANT ACTIVITIES:**

**EDITORIAL BOARDS:**

A. Clinical Chemistry, Editorial Board.
B. Therapeutic Drug Monitoring, Editorial Board.
C. Biomedical Chromatography, Editorial Board.
D. Therapeutic Drug Monitoring and Clinical Toxicology Newsletter, Editorial Board.

**OTHER:**

A. Clinical Chemistry, Reviewer.
B. Mayo Clinic Proceedings, Reviewer.
C. Journal of Clinical Immunoassay, Reviewer.
E. Biomedical Chromatography, Reviewer.
F. Therapeutic Drug Monitoring, Reviewer.
G. Selected Editor, Proceedings of the Third International Congress on Therapeutic Drug Monitoring.

**INVITED LECTURES/SEMINARS:**

VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:


ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:

HENRY D. APPELMAN, M.D.
PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:

A. General surgical pathology - four and one-half months.
B. Gastrointestinal and hepatic pathology consultation services - six months.

II. TEACHING ACTIVITIES:

MEDICAL SCHOOL/HOSPITALS:

A. Medical Students:
   1. Pathology 600 - five full class lectures.
   2. Pathology 630 (dental) - one full class lectures.
   3. Senior medical student, elective rotation in pathology, supervisor one month.

B. House Officers:
   1. Surgical pathology diagnosing room instruction for assigned house officer - 4½ months.
   2. Gastrointestinal and hepatic pathology tutoring - full time.

C. Interdepartmental:
   1. G-I Tumor Conference - Every other Wednesday (three hours/month).
   2. Liver Biopsy Conference - one hour per month.

III. RESEARCH ACTIVITIES:

PROJECTS UNDER STUDY:

A. Hepatic histopathologic changes in methotrexate-treated psoriatics, with Andrew Flint and members of the Gastroenterology Division.
B. Helicobacter-associated gastritis and non-ulcer dyspepsia with Grace Elta.
C. The fate of the transplanted liver in chronic alcoholic patients with Michael Lucey and Kyle Carr.
D. National Study of Thymosin Treatment of Chronic Hepatitis B with Milton Mutchnick.
E. Crohn's disease of the appendix with Jane Huang.
F. Recurrent autoimmune hepatitis in the transplanted liver with Michael Lucey and Kyle Carr.
G. Classification of gastric polyps with Priscilla Chamberlain.
H. Genetic changes in hepatoma with Graeme Macdonald and Joel Greenson.
I. Stromal tumors of small intestine with Joe Tworek and Joel Greenson.
J. Carcinoma of ampulla, distal common bile duct and pancreatic head with Margaret Anderson and Joel Greenson.

IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:

A. Chairman, Advisory Committee on Appointments, Promotions and Titles.

MEDICAL SCHOOL/HOSPITAL:

A. Member, Cancer Work Group, University Hospital.
B. Co-Coordinator, Gastrointestinal Sequence for 2nd year medical students.

REGIONAL AND NATIONAL:

A. Chairman, Publications Committee and Member, Executive Committee, Gastrointestinal Pathology Society.
C. Visiting Pathologist for Regional Workshops on Pathologic Diagnosis in Inflammatory Bowel Disease, sponsored by the Crohn's and Colitis Foundation of America and the University of Chicago.
D. Member, Education Committee, United States-Canadian Academy of Pathology.
E. Member, Editorial Board, Human Pathology.
F. Member, Editorial Board, Modern Pathology.
G. Member, Editorial Board, American Journal of Surgical Pathology.
H. Reviewer, Archives of Pathology and Laboratory Medicine, Cancer, Gastroenterology, and American Journal of Gastroenterology.

V. OTHER RELEVANT ACTIVITIES:

INVITED LECTURES/SEMINARS:

1. Lecturer, "The Role of the Pathologist in the Diagnosis and Management of IBD", presented at the Inflammatory Bowel Disease: Memphis Update, Memphis, Tennessee, September 24, 1994.
3. Lecture: "It's a Shame to Waste a Liver Biopsy, so Let's Milk It for All It's Worth". Eleventh Annual Eisenstein Memorial Hospital, Mercy Hospital, Port Huron, Michigan, October 21, 1994.


8. Lecturer, GI Pathology, Second Annual Seminar in Pathology, Pittsburgh, Pennsylvania, May 4-7, 1995. Sponsored by the United Hospital Center, Clarksburg, West Virginia.


10. Visiting Professor, Department of Pathology, Stony Brook University Hospital, Stony Brook, New York, May 26, 1995. Lecture on: "Differential Diagnosis of the Acutely Presenting Colitides".

11. Visiting Professor, Department of Pathology, Albany Medical College. Lectures and Seminars in GI Pathology, Albany, New York, June 6-8, 1995.


VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:


A. Referee for the following journals:

1. Molecular and General Genetics.
2. Biochemistry.
3. Journal of Biological Chemistry
4. Molecular Microbiology.

CHAPTERS IN BOOKS:


ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:

JAMES R. BAKER, JR., M.D.

ASSOCIATE PROFESSOR OF PATHOLOGY
DIRECTOR, TISSUE TYPING LABORATORY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:

A. Director, Histocompatibility and Immunogenetics Laboratory.

II. TEACHING ACTIVITIES:

A. Director, Basic Immunology Course for Allergy Fellows-In-Training.
B. Instructor, ICS Course for Fellows-In-Training.
C. Instructor, Host Defense Course, First Year Medical School Students.
D. Attending, General Internal Medicine Service.
E. Instructed Pathology Residents, Renal Fellows and Allergy Fellows in HLA Typing.
F. Supervised graduate students undergraduate students in research: David Miller, Brent Wiersma.
G. Supervisor for:
   Allergy fellows: Drs. Katherine Liddle, Gregory Gilmet.
   Medical students: Sasha Krupnik.
H. Internal Medicine Grand Rounds.
I. Director, Allergy Training Program.

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:

D. Long-Term Effects of Mycophenolate Mofetil in Renal Transplants", Syntex Corporation (Study ICM MYC/1880/USA), $53,904/year, July 1, 1993 - June 30, 1997.
E. "Randomized, Controlled, Dose Ranging Study of Mycophenolate Mofetil", Syntex Corporation (Study ID 2176), $227,296/year, August 12, 1993 - August 11, 1996.
IV. **ADMINISTRATIVE ACTIVITIES:**

**MEDICAL SCHOOL/HOSPITAL:**

A. Executive Board, Michigan Diabetes Research and Training Center.
B. Dean's Committee on Restructuring Immunology.
C. Hybridoma Core Steering Committee.
D. Chief, Division of Allergy, Department of Medicine.

**REGIONAL AND NATIONAL:**

A. Histocompatibility Committee, Organ Procurement Agency of Michigan.
B. Chair, Awards Committee, American Thyroid Association.

V. **OTHER RELEVANT ACTIVITIES:**

**INVITED LECTURES/SEMINARS:**

2. Life Technologies, Gaithersburg, Maryland.
4. Promega, Madison, Wisconsin.
6. Grand Rounds, Wayne State University, Detroit, Michigan.

**SCIENTIFIC ACTIVITIES:**

B. Reviewer, Annals of Internal Medicine.
D. Reviewer, Endocrinology.
F. Reviewer, Autoimmunity.
G. Reviewer, Thyroid.
H. Reviewer, Journal of Biological Chemistry.
M. Regional Accreditation Commissioner, American Society for Histocompatibility and Immunogenetics.
N. Editor, JAMA Primer.

**WORKSHOPS/PANEL DISCUSSIONS:**

A. American Thyroid Association.
B. Endocrine Society.
VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN PEER REVIEWED JOURNALS:


ARTICLES SUBMITTED FOR PUBLICATION:


BOOKS AND CHAPTERS IN BOOKS:


ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:

THEODORE F. BEALS, M.D.
ASSISTANT PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:

A. National Director, Pathology and Laboratory Medicine, Veterans Health Administration.
B. Diagnostic Electron Microscopy, Veterans Affairs Medical Center, Director of Electron Microscopy Center of Excellence.
C. Cytopathology, Veterans Affairs Medical Center, Director Center of Excellence.
D. Coordinator of Decentralized Hospital Computer Program in Pathology and Laboratory Medicine Service, Veterans Affairs Medical Center.
E. Fine Needle Aspiration, Veterans Affairs Medical Center.
F. Surgical/Autopsy Pathology, Veterans Affairs Medical Center.
G. National Chief Surgical and Cytopathology, Department of Veterans Affairs.
H. National Director Veterans Affairs Cytopathology Proficiency Program.
I. Tumor Board, Veterans Affairs Medical Center.
J. Deputy Washtenaw County Medical Examiner.
K. Consultant: Diagnostic Electron Microscopy, Allen Park, VAMC and Danville, VAMC.

II. TEACHING ACTIVITIES:

A. Pathology House Officer monthly elective: Diagnostic Electron Microscopy.
B. Diagnostic Electron Microscopy Case Conference, bi-weekly.
C. Pathology House Officers, fine needle aspiration technique and interpretation.
D. Instructor, National Laboratory Practicum Program, Department of Veterans Affairs.

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:

A. Pathologist for: Veterans Administration Cooperative Study #268, "A New Strategy to Preserve the Larynx in the Treatment of Advanced Laryngeal Cancer". (G. Wolf, Principal Investigator).
B. A Prospective, Controlled, Randomized and Double-Blind Multi-Center Clinical Evaluation of Monoclonal Antibody 17.13.C1.10 for its Capability to Detect Head and Neck Squamous Cell Carcinoma in Primary Site Malignancies and Lymph Nodes. (Co-Investigators: Baker, Beals, Carey, Krause, McClatchey, Wolf).
C. Predicting Response to Chemotherapy in Head and Neck Cancer. (Bradford, Principal Investigator).

PROJECTS UNDER STUDY:

A. Clinical relevance of ultrastructural characteristics of small cell carcinoma.
B. Role of plastic embedded cell-blocks and electron microscopy in fine needle aspiration.
C. Growth of cells on microcarriers (with J. Varani).
D. Cell damage caused by oxidants (with D. Hinshaw).
E. DNA content as a predictor of chemotherapeutic response and prognosis in squamous cell carcinoma of the larynx (with C. Gregg and G. Wolf).
F. Differentiation of isolated renal tubular cells in culture (with D. Humes).
H. Apoptosis in lung injury (with J. L. Curtis).

IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:

A. Electron Microscopy Committee.

MEDICAL SCHOOL/HOSPITAL:

A. Clinical Executive Committee, elected member, Veterans Affairs Medical Center.
B. Invasive Procedures Review Committee, Veterans Affairs Medical Center.
C. Electron Microscopy Committee, Chair, Veterans Affairs Medical Center.
D. Medical Records Committee, Veterans Affairs Medical Center.
E. Automated Data Processing Committee, Veterans Affairs Medical Center.
F. Medical School Admissions Committee.
G. Cancer Committee, Veterans Affairs Medical Center.

REGIONAL AND NATIONAL:

A. Department of Veterans Affairs, National Electron Microscopy Review Group.
B. Armed Forces Institute of Pathology, Scientific Advisory Board.
C. Association of Pathology Chairs, Veterans Affairs Committee, Consultant.
D. National Veterans Affairs Pathology Field Advisory Board.
E. American Society of Clinical Pathologists, Quality Management Cytology Committee.
F. College of American Pathologists, Cytopathology Committee.
G. National Veterans Affairs Cytopathology Committee, Chair.
H. National Veterans Affairs Surgical Pathology Committee, Chair.
I. Clinical Information Council.
J. Laboratory Medicine Committee, Veterans Health Administration, Department of Defense, National Institutes of Health, Indian Health Service.
K. Interagency Coordinating Committee for Minority Health Care Careers, VHA, DOD, HHS, Commerce, DOE, NASA.
L. Reviewer: Gastroenterology, Biotechnic and Histochemistry, Diagnostic Cytopathology, Acta Cytologica, Analytical and Quantitative Cytology and Histology.

V. OTHER RELEVANT ACTIVITIES:

INVITED LECTURES/SEMINARS:

A. Diagnostic Problems in Cytopathology (Department of Internal Medicine, Pulmonary Conference Series).

VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFERRED JOURNALS:


BOOKS AND CHAPTERS IN BOOKS:

None.

ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:

MILA BLAIVAS, M.D., PH.D.
CLINICAL ASSOCIATE PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:

A. Eight and one-half months of Neuropathology Service.
B. Four weeks of Autopsy Service and five weekends autopsy calls.
C. Muscle and nerve biopsies referred by other hospitals in- and out-of-state throughout the year.
D. Consultations on brain biopsies, autopsied brains and rheumatology cases.

II. TEACHING ACTIVITIES:

A. Taught residents, fellows and staff in Neurology, Rheumatology and Pediatrics and medical students on muscle and nerve biopsies.
B. Taught Pathology Residents how to perform and read-out autopsies.
C. Lectured on muscle, nerve and brain pathology to residents in Pathology, Neurology, and Neurosurgery.
D. Conferences on muscle cases with Neurology Department.
E. Neuropathology cases review with Pathology Residents.
F. Conferences with Neuromuscular staff.
G. Conferences and lectures for Neurosurgery Residents and staff.

III. RESEARCH ACTIVITIES:

PROJECTS UNDER STUDY:

B. Histology and histochemistry of orbicularis muscle, normal and aging.
C. Histochemistry, morphometry and EM of levator palatini muscle in children with cleft palate.
D. Histology of animal models of rheumatoid arthritis with Arthritis and Rheumatology Section.
E. Correlation of morphology and imaging studies in cases of craniopharyngioma with Neuroradiology.
IV. **ADMINISTRATIVE ACTIVITIES:**

**DEPARTMENTAL:**

A. Supervision of the muscle histochemistry.
B. Continuing improvement of interdepartmental coordination of muscle biopsy service.

**MEDICAL SCHOOL:**

A. Member of the Admissions Committee.

**REGIONAL AND NATIONAL:**

A. Lectures on muscle and nerve pathology to EMG/PM&R/ neurology, residents and fellows in Medical College of Ohio, Toledo, Ohio.
B. Workshop on handling muscle and nerve biopsies with the overview of muscle and nerve pathology at the Ohio Histotechnologists meeting in Perisburg, Ohio, June 3, 1995.
D. Member, American Association of Neuropathologists, IAP, and AAN.
E. Attended IAP, American Association of Neuropathologists and International Society of Neuropathologists meetings.

VI. **PUBLICATIONS:**

**ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN PEER REVIEWED JOURNALS:**


**ARTICLES SUBMITTED FOR PUBLICATION:**

ABSTRACTS, BOOK REVIEWS PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:


JEFFREY BONADIO, M.D.
ASSISTANT PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:
A. Attending Staff, University of Michigan Autopsy Service.

II. TEACHING ACTIVITIES:
A. Graduate Students, John Germiller (MSTP), Jeffrey Rouleau (Bioengineering), Robert
Guldberg (Bioengineering) and Kuo-Fung Tseng (Bioengineering).
B. Postdoctoral Fellows, Wushan Yin, M.D., Jianming Fang, M.D.
C. Undergraduate Students: None
D. Courses:
   1. Pathology 600: Laboratory Instructor.
   3. Pathology 581: Course Director.
E. Continuing Medical Education:
   1. "Collagen Disorders", Short Course on Molecular Diagnostics, Genetic
      Counseling and the Human Genome Project, University of Michigan, August 10,
      1994.
   2. "Gene therapy for wound healing: using DNA as a pharmaceutical." Gene

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:
A. Principal Investigator, "Direct Gene Transfer into Osteogenic Cells In Vivo," U-M Office
   of the Vice-President for Research.
B. Principal Investigator, "Direct Osteoinductive Gene Transfer," Sponsored Research
   Agreement, Matrigen, Inc.
C. Principal Investigator, "LTBP Genes and Proteins: Regulators of TGF-β Activity,"
   National Institutes of Health, AR44043.

PROJECTS UNDER STUDY:
A. Molecular cloning of microfibril constituents.
B. Direct gene transfer in vivo.
IV. ADMINISTRATIVE ACTIVITIES:

MEDICAL SCHOOL/HOSPITAL:

A. Member, Pre-Clinical Advisory Program, 1988 - present.
B. Biomechanics Core Steering Committee, Multipurpose Arthritis and Musculoskeletal Diseases Center, 1991 - present.
C. Member:
   1. University of Michigan Multipurpose Arthritis Center.
   2. Michigan Cancer Center.
D. Patents:
   3. "Latent TGF-Beta Binding Protein Genes, Composition and methods." (US Patent Office serial number is pending.).

DEPARTMENTAL:

A. Oversight Committee, Graduate Program, 1989-present.

V. OTHER RELEVANT ACTIVITIES:

EDITORIAL BOARDS:

A. Ad-hoc Reviewer:
   3. Genomics.
   4. Developmental Dynamics.
   5. American Journal of Medical Genetics.
B. Consultant Editor:
C. Study Section:
   1. NIH, NIDR, Special Emphasis Panel, Small Grant Program, April 18, 1995.

INVITED LECTURES/SEMINARS:


VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:


ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:


I. CLINICAL ACTIVITIES:
   A. AP/CP Pathology, Veterans Administration Hospital.

II. TEACHING ACTIVITIES:
   A. Pathology House Officers, Surgical Pathology/Autopsy, Department of Veterans Affairs Medical Center.

III. RESEARCH ACTIVITIES:
      None.

IV. ADMINISTRATIVE ACTIVITIES:
    MEDICAL SCHOOL/HOSPITAL:
   A. Member, Research and Development Committee, Department of Veterans Affairs Medical Center.

V. OTHER RELEVANT ACTIVITIES:
    EDITORIAL BOARDS:
   A. Oncology Reports.

    PROFESSIONAL ORGANIZATIONS:
   A. Member, International Society of Urological Pathology.
   B. Editorial Board, Oncology Reports.

VI. PUBLICATIONS:

   ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:


6. Studies done jointly with the Pathology Departments of Case Western University School of Medicine, Mayo Clinic, Texas A & M University School of Medicine, University of Liverpool and the University of Colorado and studies done jointly with the Urology Departments of Texas A & M University School of Medicine, Hammersmith Hospital and the University of Colorado (submitted or in press - exact status unknown).


CHAPTERS IN BOOKS:


ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:

1. Abstracts of several published articles reprinted in Yearbook of Pathology and Clinical Pathology, The International Monitor in Oncology.
MICHAEL J. CAPLAN, M.D.
CLINICAL ASSISTANT PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 AUGUST 1994 - 30 JUNE 1995

I.  CLINICAL ACTIVITIES:

A.  Director, Forensic Pathology and Medicolegal Autopsies.
B.  Supervision of Medicolegal Autopsies (ten months, six days per week).
C.  Supervision of Hospital autopsies (six weeks, plus six weekends).
D.  Coordinator, Deputy Medical Examiner activities for University Hospitals, Coordinator of Deputy Medical Examiner call schedule and consultant to Deputy Medical Examiners for University Hospitals.
E.  Deputy Medical Examiner for University Hospitals (six weeks).
F.  Courtroom testimony, Washtenaw County District and Circuit courts in Ann Arbor, Pittsfield Township and Ypsilanti.

II.  TEACHING ACTIVITIES:

A.  Presentation to Pathology House Officers: Monthly Forensic Pathology Conference (one hour; September 1994 - May 1995).
B.  Anatomic Pathology Conference Presentation: "Putting the Autopsy in its Place - The Evaluation of Bodies Found in Water".
C.  Presentation to University of Michigan Nursing Students, "Introduction/Orientation to the Autopsy Room".
D.  Presentation to Fourth-Year Medical Students, Laboratory Medicine Elective, "Introduction to Forensic Pathology/Medicolegal Autopsy".
E.  Presentations to Fourth Year Medical Students, Pathology Elective, "Basic Principles of Forensic Pathology and Death Certification".
F.  Presentation to Ann Arbor Community High School Students, "Introduction to Forensic Pathology".
G.  Presentation to Pathology House Officers, Fellows, and Junior Faculty: "Forensic Pathology Review for ASCP Pathology Resident In-Service Examination, American Board of Pathology Certifying Examinations".
H.  Presentations to Michigan State Police Officers in Training (Cadets), "The Rule of The Forensic Pathologist/Medicolegal Autopsy in Death Investigation".
I.  Coordinator and Instructor of Training Program for Deputy Medical Examiner Investigators (nonphysicians), St. Joseph Mercy Hospital.
J.  Presentation to Pathology House Officers: "The Evaluation of Gunshot Wounds".
III. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:

A. Director, Medicolegal Autopsies (Forensic Pathology).
B. Coordinator, Deputy Medical Examiner System, University Hospitals.

INTERDEPARTMENTAL/INTERDISCIPLINARY:

A. Consultant, Office of Clinical Affairs/Risk Management.
B. Participant, Sentinel Events, University Hospitals.

IV. INVITED LECTURES AND SEMINARS:

1. Presentation, Huron Valley Ambulance Annual Conference: "Atypical Asthma: A Retrospective Look".
2. Panel Discussion, Medical Association of Medical Examiners Annual Meeting, "Medical Examiner Issues in Organ and Tissue Procurement".
3. Presentation, Michigan Association of Medical Examiners Annual Meeting, "Putting the Autopsy in its Place: The Evaluation of Bodies Found in Water".
4. Presentation, Oakland County Medical Examiner Annual Conference, "Goals and Objectives of the Medicolegal Autopsy and the Evaluation of Postmortem Changes".
5. Presentation, University of Michigan Department of Public Safety. Big Ten-Wide Conference, "The Investigation of Deaths on Campus".
I. CLINICAL ACTIVITIES:
   A. Director, Clinical Laboratories, Veterans Affairs Medical Center, responsibilities include, equipment and methodology evaluation, review and consultation regarding quality management programs, personnel counseling and grievance procedures.
   B. Hematology, daily evaluation of pathologist referred blood smears, bone marrow smears, Veterans Affairs Medical Center.
   C. Surgical/Frozen Section Diagnosis, (four months/year, approximately 2,200 cases/year).
   D. Autopsy Service, rotational basis, on call 13 weeks/year.
   E. Special Chemistry/Immunology, daily interpretation of protein electrophoreses, isoenzyme studies, and problem ligand studies, Veterans Affairs Medical Center (six months/year).
   F. Blood Bank, consults and investigations, full time as needed, Veterans Affairs Medical Center.

II. TEACHING ACTIVITIES:
   A. Medical School, Pathology 600 laboratory course, (two semesters, 30 contact hours).
   B. Graduate course, Epidemiology 520, four lecture hours.
   C. Pathology house officers, Surgical Pathology/Autopsy supervision and instruction, (four months/year).
   D. Technologists and technicians, ongoing instruction on clinical laboratory topics.
   E. Graduate students, research training toward doctoral degrees.

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:

PROJECTS UNDER STUDY:
   A. Cytokine manipulation of mycobacterial (TH1) and schistosomal (TH2) Ag mediated forms of hypersensitivity granuloma formation.
   B. Production and regulation of interleukin-1 receptor antagonist during immune/inflammatory responses.
   C. Role of chemotactic cytokines, MCP, MIP and RANTES, in granulomatous inflammation.
   D. Regulation of chemotactic cytokine production by leukocytes and stromal cells.
   E. Analysis of eosinophil recruitment factors in Schistosoma mansoni egg-induced granulomatous inflammation.
IV. **ADMINISTRATIVE ACTIVITIES:**

**DEPARTMENTAL:**

A. Member of graduate student thesis committees.
B. Interviewing of resident and faculty applicants.

**MEDICAL SCHOOL/HOSPITAL:**

A. Blood Utilization Review Committee, Veterans Administration Medical Center, Chairman.
B. Ambulatory Care Committee, Veterans Administration Medical Center, voting member.
C. Hospital Quality Assurance Investigations, ad hoc committees.
D. Personnel employment and annual evaluations.
E. Editor, "VALABS Interface Laboratory News", Laboratory Newsletter.

**REGIONAL AND NATIONAL:**

A. Editorial Review:
   2. Journal of Immunology, Associate Editor.
   3. Agents and Actions, Section Editor.
   5. Laboratory Investigation.
   6. Paristiology.
B. Medical Advisory Committee, American Red Cross, SMBSR.

V. **OTHER RELEVANT ACTIVITIES:**

**INVITED LECTURES/SEMINARS:**

2. Case presentations at Tumor Board and Morbidity and Mortality Conferences.
3. Tissue evaluation for clinical researchers.

VI. **PUBLICATIONS:**

**ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:**


BOOKS/CHAPTERS IN BOOKS:

ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:
ELAHE CROCKETT-TORABI, Ph.D.
ASSISTANT RESEARCH SCIENTIST
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:

None.

II. TEACHING ACTIVITIES:

A. Training and supervision of premedical/medical students in research.

III. RESEARCH ACTIVITIES:

A. Signal transduction pathways of neutrophil activation through Mac-1 molecule.
B. Mechanisms of L-selectin-induced neutrophil activation.
C. Signal transduction pathways of neutrophil activation through FcγR.
D. Mechanisms of immune complex-induced human neutrophil activation.

SPONSORED SUPPORT:

A. Principal Investigator, "Mechanisms of Fc Dependent Neutrophil Activation", NIH-1R29 AI/GM 31436 (85%), $556,500/total costs, July 1, 1991 - July 1, 1996.
B. Principal Investigator, "Mechanisms of L-Selectin Dependent Human Neutrophil Activation", American Heart Association of Michigan Grant-in-Aid, 63GB956 (15%), $28,000 total direct costs/year, July 1, 1995 - June 30, 1996.

IV. ADMINISTRATIVE ACTIVITIES:

None.

V. OTHER RELEVANT ACTIVITIES:

A. Designed the T-shirt logo for The 9th International Congress of Immunology, 1995.
V. **PUBLICATIONS:**

**ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:**


**BOOKS/CHAPTERS IN BOOKS:**


**ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:**

CONSTANCE J. D'AMATO, B.S.
ASSISTANT PROFESSOR OF NEUROBIOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:

A. Work with house officers and staff in Pathology and other departments in the gross and
microscopic examination of brains from autopsies at University Hospital.

B. Attend and instruct house officers in the removal and gross examination of brains from
autopsies at University Hospital.

C. Work with Neuropathology Staff on autopsy brain material sent for consultative study
from University-associated hospitals, other hospitals, and institutions.

D. Work with house officers in planning weekly Brain Cutting Conference for house
officers, students and staff, for gross diagnosis and demonstrations of diagnostic methods,
and teaching.

E. Plan and present gross and microscopic Neuropathology occasionally for the Neurology
Department, including their Grand Rounds.

F. Continuous review of quality control of diagnostic techniques, autopsy and surgical
neuropathology, and search for improved and new methods.

G. Co-ordinator, Neuropathology Core Laboratory, MADRC.

II. TEACHING ACTIVITIES:

A. Neuroscience Sequence, Neuropathology for Second Year Medical Students, one hour
lecture, eight hours laboratory, and sequence coordinator for the 8 week sequence.

B. Neuropathology for Pathology house officers. This exercise is integrated with Clinical
Activities A, B, and D.

C. Neuropathology 858. Intensive laboratory-lecture course for house officers and fellows,
in Pathology and in the several clinical services concerned with the nervous system, and
medical students, graduate students, and faculty; implement general plan of course and
lecturing. Annual, 18 hours. One credit hour elective.

D. Neuropathology teaching for house officers and fellows from the several clinical services
concerned with the nervous system, and medical students who take an elective rotation in
Neuropathology.

E. Teach laboratory techniques and basic neuroanatomy and neuropathology to our
laboratory technologists.

III. RESEARCH ACTIVITIES:

PROJECTS UNDER STUDY:

A. Co-Investigator with Dr. Anders Sima on MADRC Project, The Pathology of Diffuse
Lewy Body Disease. June, 1994 -

B. The Pathologic Examination of Human Autopsy Brains From Patients With Clinical
Diagnosis of Alzheimer's, Huntington's, Pick's and Other Dementing Diseases is being
done in collaboration with Dr. Roger Albin, in the Michigan Alzheimer Disease Research
Center.
IV. **ADMINISTRATIVE ACTIVITIES:**

**DEPARTMENTAL:**
A. Anatomic Pathology Committee.
B. Coordinator, Neuropathology 858 Course.

**MEDICAL SCHOOL/HOSPITAL:**
A. Co-coordinator for the Neuroscience Sequence (new curriculum).
B. Neuroscience Curriculum Committee, Chairman.
C. Coordinator for Neuropathology, Neuroscience Sequence.
D. Neuroscience Examination Committee, Chairman.
E. Admissions Committee, the University of Michigan Medical School.
F. Executive Committee of the Admissions Committee.

**REGIONAL AND NATIONAL:**
A. American Association of Neuropathologists.
B. American Academy of Neurology.
C. Society for Neuroscience.
E. Teratology Society.
F. Neurobehavioral Teratology Society.

V. **OTHER RELEVANT ACTIVITIES:**
A. Member, Dementia Subcommittee of the Chronic Disease Advisory Committee (State of Michigan).
B. Member, Executive Committee of the Postmortem Examination Work group of the Dementia Subcommittee (State of Michigan).
C. Consortium to Establish a Registry for Alzheimer's Disease (CERAD) Committee.

VI. **PUBLICATIONS:**

**ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:**

None.

**ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:**

ROBERTSON D. DAVENPORT, M.D.
ASSISTANT PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:
   A. Associate Medical Director, Blood Bank and Transfusion Service, University of
      Michigan Hospitals.
   B. Cytopathology, consultation and staff coverage.
   C. Staff coverage of Necropsy Service.
   D. Deputy Medical Examiner, Washtenaw County.

II. TEACHING ACTIVITIES:
   A. Introductory course in Blood Banking/Transfusion Medicine for Pathology House
      Officers.
   B. Daily teaching rounds for Pathology House Officers assigned to the Blood Bank.

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:
   A. Principal Investigator, "Cytokine Roles in Hemolytic Transfusion Reactions", National
      Institutes of Health, K08-HL02757.

PROJECTS UNDER STUDY:
   A. Cytokine production in hemolytic transfusion reactions.
   B. Endothelial cell responses in transfusion reactions.
   C. Safety and efficacy of solvent/detergent treated plasma.
   D. Polymorphisms and function of CR1 on erythrocyte membranes.
   E. Reactivation of cytomegalovirus in lymphocytes of blood donors.
   F. Mechanisms of immune suppression by blood transfusion.

IV. ADMINISTRATIVE ACTIVITIES:

MEDICAL SCHOOL/HOSPITAL:
   A. Transfusion Committee.
   B. Quality Improvement Team in Outpatient Care.
   C. Department of Pathology Internal Review Committee.

V. OTHER RELEVANT ACTIVITIES:
   A. Reviewer, Chest.
   B. Reviewer, Transfusion.
   C. Reviewer, American Journal of Clinical Pathology.
D. Executive Committee, Michigan Association of Blood Banks.
E. Program Committee, Michigan Association of Blood Banks.

INVITED LECTURES AND SEMINARS:


VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:


VII. ABSTRACTS, AND PRESENTED PAPERS:

FEILX A. DE LA IGLESIA, M.D.  
ADJUNCT RESEARCH SCIENTIST  
DEPARTMENT OF PATHOLOGY  

ANNUAL DEPARTMENTAL REPORT  
1 JULY 1994 - 30 JUNE 1995  

I. CLINICAL ACTIVITIES: 

A. None.  

II. TEACHING ACTIVITIES: 

A. Graduate students:  
  I. Responsible during the current academic year for the following activities:  
     a. Student Training and Doctoral Committees.  
     b. Joint Student Training in Pharmacology and Toxicology with Florida A&M School of Pharmacy, Toxicology Program.  
     c. Direct Postdoctoral Research Fellowship Program in Experimental Pathology.  

III. RESEARCH ACTIVITIES:  

SPONSORED SUPPORT:  

A. All research activities are conducted with intramural support from Parke-Davis.  
B. Collaborates with K. Johnson in the development of morphometric models for the evaluation of pathologic changes.  
C. Consultant in quantitative microscopy, Morphology Core Lab.  
D. Development of image analysis network system.  

IV. ADMINISTRATIVE ACTIVITIES:  

DEPARTMENTAL:  

A. Co-chair with Dr. P.A. Ward, Joint University of Michigan/Parke-Davis Research-Pathology Program.  

MEDICAL SCHOOL/HOSPITAL:  

A. None.  

REGIONAL AND NATIONAL:  

A. Member, Scientific Advisory Committee, NSF Center for Light Microscopy, Carnegie Mellon University, Pittsburgh, Pennsylvania.  
B. Member, Organizing Committee, International Symposium on "Peroxisomes: Biology and Role in Toxicology and Disease".  

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V. OTHER RELEVANT ACTIVITIES:

EDITORIAL BOARDS:
A. Editorial Board Member, Drug Metabolism Reviews.
B. Editorial Board Member, Toxicologic Pathology.

VI. INVITED LECTURES/SEMINARS:

7. "Cell Proliferation and Apoptosis in Rat Gastrointestinal Tract upon Continuous Infusion of Recombinant Human EGF 1-48”, American Society of Investigative Pathology, Atlanta, Georgia, April, 1995.
8. “Cell Proliferation in the Gastrointestinal Tract of Cynomolgus Monkeys upon Continuous Intravenous Infusion of Recombinant Human EGF 1-48”, American Society of Investigative Pathology, Atlanta, Georgia, April, 1995.

VII. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:


ARTICLES SUBMITTED FOR PUBLICATION:

BOOKS/CHAPTERS IN BOOKS:

ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFERRED JOURNALS


KENNETH O. DEVANEY, M.D.
ASSOCIATE PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:
   A. Surgical Pathology Service - 12 weeks.
   B. Cytopathology Service - two weeks.
   C. Primary Consultant for Bone and Joint Pathology.
   D. Secondary Consultant for Soft Tissue Pathology.
   E. Secondary Consultant for Head and Neck Pathology.

II. TEACHING ACTIVITIES:

MEDICAL SCHOOL/HOSPITALS:
   A. Sophomore Medical Class:
      1. Pathology 600 - lecture - three contact hours.
   B. House Officers:
      1. Training in Surgical Pathology.
      2. Lectures - two hours.
      3. Surgical Pathology Consultation Conference - four hours.
      4. Pathology Resident Elective in Musculoskeletal Pathology (M. Putzi, M.D.- Feb. 1995) - four weeks.
      5. Pathology Resident Elective in Musculoskeletal Pathology (J. Homeister, Ph.D., M.D. - April, 1995) - four weeks.
   C. Interdepartmental:
      1. Sarcoma conference - monthly: 24 hours.
      2. Department of Orthopedic Surgery, Orthopedic Pathology Lecture Series: two hours lecture.
      3. Department of Orthopedic Surgery, Quarterly Interdisciplinary Musculoskeletal Tumor conference: four hours.

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT (PENDING APPROVAL):

   A. Wolf, G.T., Bradford, C., Carey, T., Esclamado, R., Terrell, J., Urba, S, Wicha, M., Eisbruch, A., Lawrence, T., Beals, T., Devaney, K., McClatchey, K., Nunez, G., Wahl,

PROJECTS UNDER STUDY:

A. Low grade fibrosarcomas of the soft tissues.
B. Angiosarcomas developing in the first two decades of life.
C. The utility of MIC2 antibody staining in the evaluation of neuroendocrine tumors.
D. Clonality in fibromatosis.
E. Androgen receptor gene expression in fibromatosis.
F. MDM2 and p53 expression in fibromatosis.

IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:

A. Quality Assurance/Quality Control Representative for Section of Surgical Pathology, Department of Pathology, University of Michigan Hospitals-1995-present.

UNIVERSITY:

A. Member, Musculoskeletal Core, Year II Curriculum.

REGIONAL AND NATIONAL:

A. Member, Arthur Purdy Stout Society of Surgical Pathologists.
B. Ad hoc Reviewer, Cancer.

V. OTHER RELEVANT ACTIVITIES:

WORKSHOPS:

1. "Radiologic-Pathologic Correlation in the Diagnosis of Solitary Skeletal Lesions", (Donald E. Sweet, M.D. and Kenneth Devaney, M.D., Course Directors), presented at the 1995 Annual Meeting of the United States and Canadian Academy of Pathology (Toronto, Canada).

VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:


ARTICLES SUBMITTED FOR PUBLICATION:


CHAPTERS IN BOOKS:


ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNAL:

VISHVA M. DIXIT, M.D.
ASSOCIATE PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:

None.

II. TEACHING ACTIVITIES:

A. Supervised the following graduate students: Muneesh Tewari, Akhilesh Pandey, Haining Shao.
B. Supervised the following post doctoral fellows: Vidya Sarma, David Beidler, Jim Bretz, Claudius Vincenz.

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:

A. Principal Investigator, "Mechanisms of Glomerular and Tubular Injury", NIH-DK39255-03, 10% effort, Budget - $58,524 current year, $292,620 Total, 78/31/92-08/01/97.
B. Principal Investigator, "Heparin and Aortic Smooth Muscle Cell Proliferation", NIH-1RO1 HL4785701A1, 20% effort, Budget $86,621 current year, $421,592 Total, 08/01/92 - 07/31/95.
C. Principal Investigator, "Novel Zinc Finger Protein that Inhibits TNF Cytotoxicity", NIH-9RO1-CA61348, 20% effort, Budget $163,278 current year, $1,201,474 Total, Period 07/01/93 - 06/31/98.
D. Principal Investigator, "Thrombospondin 2; Structure, Expression and Function", NIH-RO1 - CA58182-06, 20% effort, Budget $143,657 current year, $1,236,526 Total, 8/04/92 to 05/31/97.
E. Principal Investigator, “Erb-B2 Expression and Resistance to TNF Killing”, NIH-LA-64803. 10% effort, Budget $148,779 current year, $858,304 Total, 07/01/94 - 06/31/98.

PROJECTS UNDER STUDY:

A. Characterization of the components of the cell death pathway.
B. Mechanisms of action of tumor necrosis factor.
IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:

A. Interview prospective graduate students for:
   1. Molecular and Cell Biology Program, and
   2. Medical Scientist Training Program.
B. Participated in graduate school pathology program.

MEDICAL SCHOOL/HOSPITAL:

A. Review BMRC grants.
B. Taught in Cell and Molecular Biology course for fellows.
C. Committee on Cell and Molecular Biology.

REGIONAL AND NATIONAL:

A. Reviewer for the following journals:
   1. Journal of Biological Chemistry.
B. Pathology A Study Section (Ad-hoc).

V. OTHER RELEVANT ACTIVITIES:

INVITED LECTURES AND SEMINARS:

1. Invited Speaker, AHA, Lathrop Village, Michigan, 1994.
10. Invited Speaker, American Society for Biochemistry and Molecular Biology Fall Symposium, Lake Tahoe, California, 1994.

VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:


GREGORY R. DRESSLER, M.D., Ph.D.
ASSISTANT PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 AUGUST 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:

None.

II. TEACHING ACTIVITIES:

A. Mentored Ph.D. candidate, Dawn Phelps, who received degree in April, 1995 from George Washington University, Washington, D.C.

MEDICAL SCHOOL/HOSPITALS:

None.

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:

A. Principal Investigator, Howard Hughes Medical Institute - 001819, "Analysis of Mammalian Developmental Control Genes", (50%), October 1, 1994-September 30, 1997. Approximately $221,500 current year (includes staff salaries, supplies and equipment) excluding PI's salary and benefits. The actual budget is negotiated yearly.

PENDING:


B. Co-Principal Investigator (Dr. Kate Barald, Principal Investigator), "Role of Hindbrain in Molecular Development and Innervation of the Inner Ear, NSF, (10%), April 1, 1996-March 31, 1999. Total costs: $534,681.

PROJECTS UNDER STUDY:

A. The identification of co-factors required for Pax protein mediated transcription activation.
C. The development of novel methods for identifying genes regulated by Pax proteins.

IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:

None.

REGIONAL AND NATIONAL:

None.

V. OTHER RELEVANT ACTIVITIES:

INVITED LECTURES/SEMINARS:


VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREEED JOURNALS:


ARTICLES SUBMITTED FOR PUBLICATION IN REFEREEED JOURNALS:

None.
BOOK CHAPTERS IN BOOKS:


ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:

BARRY G. ENGLAND, Ph.D.
ASSOCIATE PROFESSOR OF REPRODUCTIVE BIOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:

A. Director, Ligand Assay Laboratory.

II. TEACHING ACTIVITIES:

A. Instructor for Pathology House Officers Laboratory Rotation.
B. Instructor for Nuclear Medicine Residents Laboratory Rotation.
C. Participant, Clinical Pathology Grand Rounds.
D. Instructor for Medical Student (M-4) rotation through Chemistry Laboratories.

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:

A. USPHS (NIDDKD) 2P60AM20572-10: Michigan Diabetes Research and Training Center, Director Ligand Assay Core Facility, $130,000/year, 1993-1998.

IV. SERVICE ACTIVITIES:

DEPARTMENTAL:

A. Director, Central Ligand Assay Laboratory.

MEDICAL SCHOOL/HOSPITAL:

A. Director, Chemistry Core Facility, Michigan Diabetes Research and Training Center.
B. Co-Director, Standards and Reagents Core Facility, Reproductive Sciences Program.
C. Member, Selection Committee, Reproductive Sciences Program.

V. OTHER RELEVANT ACTIVITIES:

2. Executive Committee Member of the Clinical Ligand Assay Society, 1994-1995.
3. Chairman of Scientific Program (Roundtables) of the 1996 Annual Meeting of the Clinical Ligand Assay Society to be held in Los Angeles, California.

VI. INVITED LECTURES AND SEMINARS:

None.

VII. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:


ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:


JOSEPH C. FANTONE, M.D.
PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:
   A. Autopsy Service.

II. TEACHING ACTIVITIES:
   A. Director, Resident Training Program.
   B. Graduate Program Committee (Chairman).
   C. Course Director - Pathology Teaching Laboratories.
   D. Director - Component I and II: Medical Student Curriculum.
   E. Laboratory Instructor, M1 Histopathology Sequence.
   F. Lecturer, M1 Host Defense Sequence.
   G. Coordinator, Department of Pathology Summer Clinical Program for Minority Medical Students.
   H. Pulmonary Pathology Conference (six per year to Pulmonary Division, Department of Internal Medicine).
   I. Graduate Student Ph.D. Thesis Committee (three).
   J. Medical Student Advisor (3rd and 4th year).

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:
   A. Principal Investigator, "Mechanisms of Myocardial Ischemia/Reperfusion Injury", NIH-R01-HL44085.
   B. Co-Investigator, "Regulation of IL-Gene Expression", (D.G. Remick, Principal Investigator) NIH GM50401.

PROJECTS UNDER STUDY:
   A. Mechanisms of phagocytic cell-mediated tissue injury.
   B. Signal transduction pathways of phagocytic cells.
IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:

A. Chairman's Advisory Committee.
B. Coordinator - Educational Programs.
C. Department ACAPT Committee.
D. Human Resource Committee.
E. Research Space Advisory Committee.
F. Faculty Sexual Harassment Contact Person.

MEDICAL SCHOOL/HOSPITAL:

A. Medical School - Executive Committee.
B. CD/ACD Education Committee.
C. Component I Committee.
D. Component II Committee.
E. Medical Student Basic Science Academic Review Board.
F. Medical Student Clinical Academic Review Board.

REGIONAL AND NATIONAL:

C. USMLE, Pathology Test Group.

V. OTHER RELEVANT ACTIVITIES:

EDITORIAL BOARDS:

A. Editorial Board, Laboratory Investigation.
B. Editorial Board, Biological Signals.

VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:


ANDREW FLINT, M.D.
ASSOCIATE PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I.  CLINICAL ACTIVITIES:

A.  Surgical Pathology Rotations, July (1/4), August (2/4), September (1/4), October (2/4),
B.  Estrogen and progesterone receptor analysis of paraffin embedded breast carcinomas by
    image analysis - 91 samples.

II.  TEACHING ACTIVITIES:

A.  Pathology 600 Lectures:
    6.  Student question and answer sessions, afternoons and evenings, October, 1994 -
B.  Pathology 630:
C.  Residency Training:
D.  Other educational activities:
    2.  Center for Research on Learning and Teaching Workshop: Motivating Students,
        October 17, 1994; Using Student Feedback, February 6, 1995; Adapting Lectures,
        February 8, 1995.
    4.  Course Director, M-4 Student Pathology Clerkships.
    5.  Workshop on Lung Transplantation, University of Pittsburgh, Pittsburgh,
    7.  Facilitator, Pathology for High School Students, Community High School, March,
        1995.
III. **RESEARCH ACTIVITIES:**

**SPONSORED SUPPORT:**

A. Pathology Consultant, Morphologic Studies of Diffuse Interstitial Lung Diseases, A Multi-Institution Project, Reuben M. Cherniak, M.D., National Jewish Hospital, Program Director.

B. Prognostic Markers of Urinary Bladder Cancer (RFACA 91-09), H. Barton Grossman, M.D. (Principal Investigator), Andrew Flint, M.D. (Co-Investigator).

C. Role of Urothelial Cell Activation in Interstitial Cystitis (DK-91-04), Monica Liebert, Ph.D. (Principal Investigator), Andrew Flint, M.D. (Co-Investigator).

D. Interstitial Lung Diseases - Specialized Center of Research (1 P50 HL- 46487-01), Galen Toews, M.D. (Principal Investigator), Andrew Flint, M.D. (Co-Investigator).

E. Monoclonal Antibodies to Bladder Tumor Antigens, H. Barton Grossman, M.D. (Principal Investigator), Andrew Flint, M.D. (Co-Investigator).

**PROJECTS UNDER STUDY:**

A. Analysis of TGF-β and its binding protein, decorin, in lung tissue of ARDS patients.

B. Histologic predictors of obliterative bronchiolitis in lung transplant patients.

C. Histologic prognostic indicators of survival in ARDS patients treated with ECMO.

D. Correlation of TGF-β levels in BAL specimens with histochemical demonstration of TGF-β in lung tissue sections.

E. Ploidy analysis and P53 expression in Barrett's esophagus.

F. Pathologic effects of perfluorocarbon liquid ventilation of ARDS patients.

G. The clinical usefulness of the abnormal nondiagnostic lung biopsy sample.

IV. **ADMINISTRATIVE ACTIVITIES:**

**DEPARTMENTAL:**


B. Director, Surgical Pathology Fellowship Program (July, 1994 - March, 1995).

C. Member Credentials Committee, University Hospital D. Member Bylaws Committee of the Arthur Purdy Stout Society, 1992-1994.

E. Member, Admissions Committee of the University of Michigan Medical School, 1995-present.

V. **OTHER RELEVANT ACTIVITIES:**

**EDITORIAL BOARDS:**

A. Reviewer, American Review of Respiratory and Critical Care Medicine (formerly the American Review of Respiratory Disease).

B. Reviewer, Human Pathology.


**INVITED LECTURES/SEMINARS:**

1. Co-Director, Short Course on Closed Lung Biopsy Interpretation, USCAP meeting, Toronto, Canada, March, 1995.

VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFERRED JOURNALS:


SUBMITTED PUBLICATIONS:


ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:

THOMAS S. FRANK, M.D.
ASSOCIATE PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL RESPONSIBILITIES:

A. General surgical pathology.
B. Gynecologic pathology (consultation cases).
C. Immunohistology and Molecular Analysis (intramural and consultation).
D. Weekly Interdisciplinary Gynecologic Oncology Tumor Board.

II. TEACHING ACTIVITIES:

MEDICAL STUDENT

A. Sequence Coordinator, M2 Course: Oncology.
B. M2 medical student lectures:
   1. Neoplasia (five hours), September 1994.
   2. Gynecology (three hours), March 1995.
D. Pathology 630 lecture (one hour), October 1994.
E. Preceptor, M4 Student Elective (Molecular Alterations in Adenocarcinoma of the Cervix), March 1995.

HOUSE OFFICER

A. Lecturer, Pathology House Officer Didactic Conferences in Gynecologic Pathology and Molecular Diagnostics (five hours).
B. Gynecologic Pathology Consultation Conferences for Pathology House Officers.
C. Monthly Pathology-Gynecology teaching conference for house officers in OB-GYN.

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:

A. Development of a Human Breast Cancer Cell-Tissue Bank And Database, DOD Grant, 9/1/94-8/30/98 (Co-investigator, 15% effort).
B. Genetic Markers In Gynecologic Malignancy, Harris Foundation.
C. Value of ultrasound, CT, and MR in ovarian cancer staging, Radiology Oncology Diagnostic Imaging Group, NIH Grant 1 UO1 CA59400-01, 12/1/92-11/30/95 (co-investigator, 3% effort).
D. Director, UMCCC Tissue Procurement Core (5% effort).

PROJECTS UNDER STUDY:
A. Genetic alterations in epithelial malignancies of endometrium, cervix, and ovary.
C. Identification of microorganisms (including bacteria and DNA and RNA viruses) in paraffin-embedded tissues using molecular analysis.

IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:
A. Director, Immunohistology Laboratory.
B. Director, Preserved Tissue Analysis (Molecular Diagnostics for Anatomic Pathology Specimens).

UNIVERSITY:
A. Member, University of Michigan Comprehensive Cancer Center.
B. Member, Kughn Clinical Research Center.

REGIONAL AND NATIONAL:
A. Molecular Pathology Test Committee, American Board of Pathology.
C. Organizing Committee, Association for Molecular Pathology.
C. Organizer, Annual Symposium: Molecular Diagnostics in Pathology.
D. Editorial Board, Diagnostic Molecular Pathology.
E. Member, American Association for the Advancement of Science.
F. Member, American Society of Clinical Pathologists.
G. Member, A. James French Society.

V. INVITED LECTURES/SEMINARS:
1. Invited lecture, "Introduction to Molecular Oncology", Workshop on Molecular Diagnostics in Pathology (Sponsored by Universities Associated for Research and Education in Pathology), Bethesda, Maryland, November, 1994.

VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:


ARTICLES SUBMITTED FOR PUBLICATION:

2. Frank T.S., Svoboda S.M. and Hsi E.D.: Comparison of methods for extracting DNA from paraffin sections for non-isotopic PCR.
ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFERRED JOURNALS:


I. **CLINICAL ACTIVITIES:**
   
   A. Director, Pathology Data Systems.
   B. Director, Phlebotomy Services and Central Distribution.
   C. Staff supervision of the Autopsy Service.

II. **TEACHING ACTIVITIES:**

   **DEPARTMENTAL:**
   
   A. Co-Director of a laboratory section, Pathology 600.
   B. Teaching and supervision of five Pathology house officers participating in two-week Pathology Data Systems (PDS) rotations throughout the year.

   **MEDICAL SCHOOL/HOSPITALS:**
   
   A. Program Director of the Thirteenth Annual Symposium on Automated Information Management in the Clinical Laboratory at the Towsley and Power Centers, June 7-9, 1995. Symposium attracted 310 registrants, a 50% increase over the previous year, and 41 vendors.
   B. Two hours of programming from the June symposium were packaged as a teleconference for 53 training programs in pathology in the U.S. and Canada. Approximately teniduals per remote site participated for a total teleconference audience of about 530.

III. **RESEARCH ACTIVITIES:**

   **PROJECTS UNDER STUDY:**
   
   A. Development of a project called the “virtual department of pathology informatics” with educational offerings in pathology informatics for all house officers in the pathology training programs in the U.S. and Canada. Information technologies such as video and audio transmission across the Internet and web publishing will be integrated into the activities of the virtual department as they mature. As part of this activity, a teleconference was offered as a real-time simulcast from the June symposium. Another teleconference directed to pathology house officers around the country is now being planning for October 23, 1995, in cooperation with MLabs. MLabs will be the local
sponsor of the conference as part of their own educational activities. Activities of the virtual department are being coordinated with Medical Center Information Technology (MCIT) and with the University of Michigan Academic Outreach Program (AOP).

B. Grant of $5,000 from the Ameritech Foundation through the Consortium for Research on Telecommunications Policy to study Community Health Information Networks (CHINs) with Professor Will Mitchell, Department of Corporate Strategy, University of Michigan Business School.

IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:

A. Chairman, Internal Review Committee for the Department of Pathology. Final report delivered to the Dean of the Medical School on November 17, 1994.

B. Clinical Laboratory Directors Committee.

HOSPITAL:

A. Chief Information Officer Management Team (CIOMT), University of Michigan Medical Center.

B. Co-Director, Medical Center Data Warehouse Project.

UNIVERSITY:

A. Executive Committee, Center for Statistical Consultation and Research (CSCAR), The University of Michigan, 1991-1996.

REGIONAL AND NATIONAL:

A. Council on Medical Informatics of the American Society of Clinical Pathologists (ASCP).

B. College of American Pathologists (CAP) Committee on Informatics.

C. American Board of Pathology, Informatics Test Committee.

D. Guest Editor of a Pathology Patterns (AJCP) supplement on informatics to be published in April, 1996.

E. Editorial Advisory Board, Clinical Laboratory Management Review.


V. OTHER RELEVANT ACTIVITIES:

INVITED LECTURES AND SEMINARS:


5. (1) Integration of Laboratory Information, a component of a workshop entitled Laboratories and the Electronic Medical Record. (2) The Politics of Running an LIS. Two lectures delivered at the Spring Meeting of the College of American Pathologists (CAP), Orlando, Florida, April 22 and 25, 1995.

6. (1) Upstream and Downstream Integration: The Laboratory Perspective. (2) Regionalizing Laboratory Information: Taking It On the “CHIN.” Two lectures delivered at the Thirteenth Annual Symposium on Automated Information Management in the Clinical Laboratories, Ann Arbor, Michigan, June 7-8, 1995.

VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:


ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN NON-REFEREED JOURNALS:

1. Friedman, B.A. and Mitchell, W.: Community health information networks (CHINs) and their relationship to telemedicine. A chapter in a book on telemedicine edited by Rashid Bashshur, Ph.D.


DONALD A. GIACHERIO, PH.D.
ASSISTANT PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:
   A. Director, General Chemistry Laboratory.
   B. Daily sign-out and interpretation of electrophoresis results.
   C. Direct operation of blood gas-electrolyte analyzers and coagulation testing meters in the Emergency Room and operating rooms of Main and Mott Hospitals.
   D. Direct work group overseeing the quality assurance program for bedside blood glucose testing.
   E. Planning group for establishment of alternate site testing and near the patient testing programs.
   F. Technical Director for laboratories at U-M Medical Group off-site clinics.

II. TEACHING ACTIVITIES:
    MEDICAL SCHOOL/HOSPITAL:
       A. Medical School:
          1. Developed Chemistry Lab presentations for the M4 Laboratory Medicine Elective.
       B. Pathology House Officers:
          1. Lecturer, Clinical Pathology Rounds (two lectures).
          2. Coordinator, Pathology House Officer rotation through General Chemistry Lab and Section of Chemistry.
          3. Review daily sign-out and interpretation of electrophoresis results.
          4. Review of selected topics in Clinical Chemistry.
       C. Medical Technologists:
          1. Program Director, Continuing Education Series for Medical Technologists.
       D. Postgraduate:
          1. Doctoral Thesis Committee for Michael Ducey, Chemistry Department, University of Michigan.

III. RESEARCH ACTIVITIES:
    PROJECTS UNDER STUDY:
       A. Evaluation of assays for Troponin T and Troponin I as early markers for myocardial injury.
       B. Development of an HPLC assay for iohexol and validation of plasma iohexol clearance as an indicator of glomerular filtration rate.
       C. Evaluation of portable instruments for the measurement of prothrombin time in alternate laboratory testing sites.
       D. Evaluation of the accuracy and precision of the Ektachem 950IRC chemistry analyzer.
       E. Evaluation of immuno-rate methods for the determination of digoxin and phenytoin on an automated chemistry system.
       F. Evaluation of methods for the direct measurement of LDL-cholesterol.
G. Evaluation of interference in serum chemistry analyses following administration of the experimental hemoglobin based oxygen carrier HBOC-201.

IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:

A. Quality Assurance Committee.
B. Director, Chemistry Laboratory.
C. Director, Point of Care Testing Services.
D. Coordinator, Chemistry Section Continuing Education Program.

MEDICAL SCHOOL/HOSPITAL:

A. Glucose Monitoring/Bedside Testing Work Group.
B. East Medical Campus Laboratory Services Program Planning Group.

REGIONAL AND NATIONAL:

A. Executive Committee, Michigan Section, AACC.
B. Lipids and Lipoprotein Division Member, AACC.
C. Pediatric Clinical Chemistry Division Member, AACC.
D. Consultant, Parke-Davis.
E. Consultant, Selective Technologies Inc., Ann Arbor, MI.

V. OTHER RELEVANT ACTIVITIES:

INVITED LECTURES/SEMINARS:


VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:

2. Annesely, T.A., Hunter, B.C. and Giachero, D.A.: Stability of Tacrolimus (FK506) and Cyclosporin G in whole blood. Therapeutic Drug Monitoring, Accepted for publication.

ARTICLES SUBMITTED FOR PUBLICATION:

PAUL W. GIKAS, M.D.
EMERITUS PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:

A. Occasional coverage of nephropathology service for Drs. K. Johnson and P. Killen.
B. Autopsy service, attending pathologist, 4/3-4/6/95.

II. TEACHING ACTIVITIES:

A. Renal and Urinary Tract Sequence for M-2 students, 18 hours, Fall Term 1994.
B. Pathology Lab Section for M-1 students, ten contact hours, Winter term 1995.

III. RESEARCH ACTIVITIES:

None.

PROJECTS UNDER STUDY:

None.

IV. SERVICE ACTIVITIES:

DEPARTMENTAL:

A. Member, Advisory Committee on Appointments, Promotion and Tenure.

MEDICAL SCHOOL/HOSPITAL:

A. Assistant Dean for Medical School Admissions.

REGIONAL AND NATIONAL:

A. National Collegiate Athletic Association (NCAA) Drug Testing Appeals Committee.
B. NCAA Drug Testing Crew Chief.
C. NCAA Committee on Competitive Safeguards and Medical Aspects of Sports.
D. Chairman, Board of Directors, Public Citizen, Inc. (Ralph Nader, Initial Chairman and Founder).
V. OTHER RELEVANT ACTIVITIES:

Retirement Furlough. 1/1/94-12/31/94.

VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS

None.
THOMAS J. GIORDANO, M.D., Ph.D.
ASSISTANT PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 AUGUST 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:

A. General Surgical Pathology - four months.
B. Endocrine Surgical Pathology, Departmental and Outside Consultation Services - 12 months.
C. Genitourinary Surgical Pathology - backup during Dr. Wojno absence.
D. M-Labs Surgical Pathology Consultation - 12 months.

II. TEACHING ACTIVITIES:

MEDICAL SCHOOL/HOSPITALS:

A. Medical Students:
   1. Component II Endocrine Sequence - two lectures on Endocrine Pathology.
   2. Endocrine Pathology Laboratories - preparation of course materials.
B. House Officers:
   1. General Surgical Pathology - four months.
   2. Endocrine Surgical Pathology - 12 months as needed.
   3. Consultation Conferences - four.
C. Interdepartmental:
   1. Endocrine Conference, Department of Surgery - monthly.

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:

A. Principal Investigator, University of Michigan Comprehensive Cancer Center, John and Suzanne Munn Endowment ($10,000) "Differential Gene Expression in Adrenal Cortical Neoplasms."
B. Principal Investigator, University of Michigan Schembechler Adrenal Cancer Fund ($20,000) "Differential Gene Expression in Adrenal Cortical Neoplasms."

PROJECTS UNDER STUDY:

A. Principal Investigator, "Differential Gene Expression in Adrenal Cortical Neoplasms."
B. Principal Investigator, "p53 Mutational Analysis of Adrenal Cortical Neoplasms."
C. Principal Investigator, "Thyroglobulin Expression in Anaplastic Thyroid Carcinoma."
D. Co-Investigator, "Comparative DNA Analysis of Adrenal Cortical Neoplasms," with Dr. Samir Hanash, Department of Pediatrics.
E. Co-Investigator, "Cytogenetics of Adrenal Cortical Carcinoma," with Dr. Thomas Glover, Department of Human Genetics.
F. Co-Investigator, "Pathology of Multiple Endocrine Neoplasia, Type 1," with Dr. Norman Thompson, Department of Surgery.
G. Co-Investigator, "Histologic-Radiologic Correlation of Adrenal Cortical Adenomas," with Dr. Melvin Korobkin, Department of Radiology.
H. Co-Investigator, "Clinicopathologic Correlation of 131-I Therapy of Papillary Thyroid Carcinoma," with Dr. James Sisson, Department of Internal Medicine.
I. Co-Investigator, "Histologic-Radiologic Correlation of Pulmonary Metastases of Papillary Thyroid Carcinoma," with Dr. James Sisson, Department of Internal Medicine.
J. Co-Investigator, "Pitfalls in the Surgical Treatment of Sporadic Insulinoma," with Dr. Norman Thompson, Department of Surgery.

IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:

A. House Officer Candidate Interviews.

REGIONAL AND NATIONAL:

A. College of American Pathologists, Molecular Pathology Committee (term expired 12/94).

V. OTHER RELEVANT ACTIVITIES:

A. Consultant, U.S. Surgical Corporation.

VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN PEER REVIEWED JOURNALS:


ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFERRED JOURNALS:

2. Few, J, Thompson, NW, Simeone, D, and Giordano, T.: Riedel's thyroiditis; treatment with tamoxifen. (Submitted to the Western Surgical Association).
JOEL K. GREENSON, M.D.
ASSISTANT PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:

A. General surgical pathology - four and one-half months.
B. Gastrointestinal and hepatic pathology consultation services - six months.
C. Liver transplant pathology - six months.

II. TEACHING ACTIVITIES:

MEDICAL SCHOOL/HOSPITALS:

A. Medical Students:
   1. Pathology 600 - Laboratory Instructor (25 contact hours).
   2. GI Pathology Sequence, assisted Dr. Appelman (10 contact hours).
   3. Preceptor for M-4 rotation (20 contact hours).
B. Dental Students:
   1. Pathology 630-631 one full class lecture (1 contact hour).
C. House Officers:
   1. Surgical pathology diagnosing room instruction for house officers - four and one-half months.
   2. Two didactic lectures on gastrointestinal pathology - May, 1993.
   3. Gastrointestinal and hepatic pathology tutoring - six months.
   4. Four consultation conferences.
D. Interdepartmental:
   1. Liver biopsy conference - one hour per month.
   2. Multidisciplinary GI tumor board - every other week.

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:

A. Co-investigator R01CA66560-01 ($5,180,000) "Staging Breast Cancer with Positron Emission Tomography", 5% salary support, Richard L. Wahl, M.D. Principle investigator.
PROJECTS UNDER STUDY:

A. Focal active colitis study with Rob Stern and Jeff Barnett from the Division of Gastroenterology.
B. Pancreatic carcinoma study with Margaret Anderson and Henry Appelman.
C. Study of growth kinetics of hyperplastic polyps with Rob Stern and Andrew Flint.
D. Study of recurrent hepatitis C in liver transplant biopsies with Tom Frank, and Bob Merion from the Division of Transplantation Surgery.
E. Study of mini-microabscess disease in liver transplant patients with Henry Appelman, Tom Frank, and Grahame Macdonald, Division of Gastroenterology
G. Study of MALT lymphomas arising in Helicobacter pylori gastritis with Eric Hsi and Charlie Ross.
H. Study of LOH of the DCC gene in Dukes B colon cancers with Richard Boland and John Carruthers, Division of Gastroenterology.
I. Study of colorectal carcinoma metastases with collaborators at Ohio State University.
J. Study of ishemic colitis with Caroline Reilly.
K. Study of small bowel stromal tumors with Joseph Tworek and Henry Appelman.
L. Study of cytokines in experimental colitis model with Dan Remick.

IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:

A. Director, Surgical pathology fellowship program
B. Co-Coordinator, Surgical Pathology Staff Service Rotations.

REGIONAL AND NATIONAL:

A. Reviewer, Cancer.
B. Reviewer, Archives of Pathology and Laboratory Medicine.
C. Reviewer, Gastroenterology.
D. Reviewer, Digestive Diseases and Sciences.
E. Reviewer, American Journal of Pathology.
F. Reviewer, Liver Transplantation and Surgery.
G. Member, Training Programs Committee, Gastrointestinal Pathology Society.

V. OTHER RELEVANT ACTIVITIES:

INVITED LECTURES/SEMINARS:

1. Invited Speaker, Medical Grand Rounds, "An Update on GI Pathology", Marion General Hospital, Marion, Ohio, August, 1994.
2. Visiting Professor, "GI Pathology", University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma, October, 1994

VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:


ARTICLES SUBMITTED FOR PUBLICATION IN PEER-REVIEWED JOURNALS:


BOOK/CHAPTERS IN BOOKS:


ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:


JOHN T. HEADINGTON, M.D.
PROFESSOR OF PATHOLOGY AND DERMATOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:
   A. Dermatopathology, private consultations.
   B. Dermatopathology, M-Labs.
   C. Dermatopathology, UMH.
   D. Dermatopathology, tutorials.
   E. Autopsy call.

II. TEACHING ACTIVITIES:
   A. Medical Students: (second year):
      1. Dermatopathology lectures.
   B. Pathology and Dermatology House Officers:
      1. Dermatopathology.
   C. Dermatology House Officers:
      1. Clinical Dermatology.

III. RESEARCH ACTIVITIES:

PROJECTS UNDER STUDY:
   A. Pigmented Neurocristic Hamartomas.
   B. Hair loss in utero.
   C. Atlas: The Histology of Alopecia.

IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:
   A. Consultant, Pigmented Lesion Clinic.

MEDICAL SCHOOL/HOSPITAL:
   A. Director, Dermatopathology Unit.

REGIONAL AND NATIONAL:
   A. Board of Directors, National Alopecia Areata Foundation.

INVITED LECTURES AND SEMINARS:

5. Cutaneous Vasculitis. The University of Texas Medical Branch at Galveston, Texas, April, 1995.

V. PUBLICATIONS:

KATHLEEN P. HEIDELBERGER, M.D.
PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:
A. Surgical Pathology reading, six weeks.
B. Pediatric Necropsies, daily, twelve months.
C. Pediatric Consultation Cases, daily, twelve months.
D. Adult Necropsy Service, ten weeks.
E. Continued to organize and maintain the Michigan Cardiac Registry, twelve months.
F. Teratology Unit, histology, as necessary, approximately 40 cases per year.
G. Children's Cancer Study Group, coordinate pathological material and data necessary for all children registered in national tumor protocols. (Collaborating investigator, NCI #2-U10-CA-02971-33, CSG, R. Hutchinson, M.D., P.I.).

II. TEACHING ACTIVITIES:
A. M2: Pathology 600, two hours with class as part of Congenital Heart Sequence of new curriculum.
B. M4: Pathology clerkship mentor, five students.
C. House Officers in Pathology, six weeks in surgical reading rooms.
D. House Officers in Pathology, gross and microscopic supervision of most pediatric necropsies, twelve months, and adult cases, ten weeks plus on-call weekends.
E. Lecture on Pediatric Necropsy Pathology in Orientation for new House Officers in Pathology.
F. Gross Necropsy Conference, one hour/week, twelve months.
G. Supervised Pediatric Hematology Fellows (one) for AP elective period.
H. Conferences: Faculty, house staff and students:
   1. Pediatric Cardiology Death Conference, monthly, twelve months.
   2. Pediatric Tumor Conference, twice monthly, twelve months.
   4. Pediatric Liver-GI Conference, twice monthly, twelve months.
   5. Pediatric General Surgery Conference monthly, twelve months.

III. RESEARCH ACTIVITIES:
A. Continued study of effects of various congenital heart defects on the pulmonary vasculature.
B. Ongoing study with pediatric cardiologists and thoracic surgeons of effects of various stents and therapeutic manipulations on different stenotic vessels.
C. Histopathological component of lung changes associated with various cardiopulmonary therapeutic support mechanisms.

PROJECTS UNDER STUDY:
A. Review of the predictive value of pre-ECMO lung biopsy in determining survival and recovery of pulmonary function (Group study, pathologists, surgeons, pediatricians).
B. Continuing correlation of histopathologic classification of neuroblastoma cell/tumor maturity with different tissue gene expressions.
C. Study of myocardial ventricular fibrosis in various congenital heart defects, with pediatric cardiologists. (Manuscript submitted).
D. Review of predictive value of heart biopsies for death in pediatric transplant patients.

ONGOING RESEARCH:

A. Co-investigator, with Robert Bartlett, Principal Investigator (NIH); study to further develop and research life support systems (Extra Corporeal Life Support Systems).
B. Co-investigator, with Ramiro Hernandez, Principal Investigator (Radiological Diagnostic Oncology Group), Correlative study of pediatric solid tumors - pathology and radiologic imaging.

IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:

A. Departmental ACAPT.
B. Interviewing fellowship candidates for Surgical Pathology.
C. Interviewing residency candidates for Pathology.

MEDICAL SCHOOL/HOSPITAL:

A. Executive Committee for Mott/Women's/Holden/Psychiatric Hospitals.
B. Interviewing Pediatric Cardiology fellowship candidates.
C. University of Michigan, Office of the Provost and Executive Vice President for Academic Affairs: Appointed Senior Faculty Panelist - Career Development Fund for Women Faculty.

REGIONAL AND NATIONAL:

A. Member, CAP Council on Anatomic Pathology's Autopsy Committee. (Completed 12/31/94).
B. Appointed member, Nominating Committee, Society for Pediatric Pathology.
C. Member, Abstract Review Board, US and Canadian Academy of Pathology.

VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:


114


ABSTRACTS BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFERRED JOURNALS:


SAMUEL P. HICKS. M.D.
PROFESSOR EMERITUS OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994- 30 JUNE 1995

I. CLINICAL ACTIVITIES:
   A. With C. J. D'Amato, examine, describe, prepare gross and microscopic reports of many of the brains sent to the Department for consultation as well as some brains from autopsies in the Department. Many of the brains are from patients with various forms of dementia and nervous system diseases and some are from cases of developmental disorder.

II. TEACHING ACTIVITIES:
   A. Occasional review of autopsy cases with residents.

III. RESEARCH ACTIVITIES:
   A. Dr. Hicks received the Meritorious Contributions to Neuropathology Award from the American Association of Neuropathologists in 1994, the intent of the award being to express "their admiration and gratitude for his excellent contributions to our discipline, some of which are truly classics in the field."

IV. PUBLICATIONS:

   None.
KENT J. JOHNSON, M.D.
PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:
   A. Immunopathological evaluation of skin and renal biopsies.
   B. Director, Morphology Core.
   C. Renal pathology.
   D. Autopsy coverage.

II. TEACHING ACTIVITIES:
   A. Lecturer Genitourinary Pathology - Second year pathology course.
   B. Lectures on Renal Pathology - Nephrology Fellows.
   C. Lectures on Renal and Skin Immunopathology - Pathology Residents.
   D. Lectures on Genitourinary Pathology - Dental Pathology Course.
   E. Laboratory Instructor - Second year Pathology Course.

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:
   A. Principal Investigator, "Oxidants and Protease Interaction in Acute Lung Injury", National Institutes of Health, $834,625/five years.
   B. Principal Investigator, "Oxidants and Glomerular Injury", Project V, Renal Center Grant. National Institutes of Health, $246,585/five years.
   E. Co-Investigator, "DNA Methylation and SLE", with Bruce Richardson, Rheumatology, National Institutes of Health.

PENDING SUPPORT:
   A. Co-Investigator, "Aging, Anesthesia and Influenza Infection", with Paul Knight, Anesthesiology, and Dan Remick, Pathology, National Institutes of Health.
PROJECTS UNDER STUDY:

A. Pathogenesis of IgG and IgA immune complex lung injury.
   1. Role of oxygen radicals.
   2. Role of proteases.
   3. Role of terminal components of the complement system.
B. Oxidant and protease interaction in inflammation.
C. Pathogenesis of aspiration pneumonitis.
D. Pathogenesis of viral pneumonitis.
E. Pathogenesis of pancreatitis and pancreatitis induced ARDS.
F. Adhesion molecules and cytokines in inflammation.
G. Cyclosporin-induced nephrotoxicity.

IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:

A. Director, Immunopathology Fellowship Program.
B. Renal Pathology Conference - Biweekly.
C. Space Utilization Committee.
D. Stobbe Funds Committee.

REGIONAL AND NATIONAL:

A. Associate Editor - Laboratory Investigation.
B. Reviewer for the following journals:
C. Consultant/Grant reviewer for the Veteran's Administration.
D. NIH NHLBI Study Section.

V. INVITED LECTURES AND SEMINARS:

1. Visiting Professor, SUNY Buffalo, NY, Department of Anesthesiology.

VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:


ARTICLES SUBMITTED FOR PUBLICATION:


BOOKS AND CHAPTERS IN BOOKS


ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:


W. JOHN JUDD, F.I.B.M.S., M.I.BIOL.
PROFESSOR
DEPARTMENT OF PATHOLOGY
ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:

A. Director, Blood Bank Reference Laboratory.
B. Consultant, Veteran's Administration Medical Center, Ann Arbor.

II. TEACHING ACTIVITIES:

A. Clinical Pathology Grand Rounds:
   1. Program Director.
   2. Presented lecture entitled: “Automation in the transfusion service”.

B. Anatomical Pathology Conferences:
   1. Program Coordinator.

C. Core-Lecture Series in Blood Banking for 1st-year Pathology House Officers:
   1. Program Coordinator.
   2. Presented lectures on:
      a. Pretransfusion testing.
      b. Prenatal/perinatal testing.
      c. Immune hemolysis.

D. Clinical Pathology Case Study Conference:
   1. Program Coordinator.
   2. Participant.

E. Hematology/Oncology Fellows:
   1. Provided instruction in immunohematology to Dr. Melissa Baird (ten contact hours).

F. Pathology Residents:
   1. Residency Training Review Committee.
   3. Provided instruction in immunohematology to house-officers during their Blood Bank Rotation (100 contact hours).

G. Current Topics in Blood Banking Conference, Towsley Center for Continuing Medical Education:
   1. Program Director - Planned and coordinated the June, 1995 Current Topics in Blood Banking Symposium and Preconference Workshops.
   4. Moderated morning session on Transfusion Management.

H. Clinical Pathology M-4 Elective:
   1. Member, Coordinating Committee.
   3. Presented talks on pretransfusion testing, immune hemolysis and prenatal/perinatal testing.
III. RESEARCH ACTIVITIES:


IV. SERVICE ACTIVITIES:

DEPARTMENTAL:

A. Blood Bank Daily Rounds.


C. Monthly Clinical Pathology Faculty Meetings.

REGIONAL/NATIONAL:

A. Michigan Association of Blood Banks:
   1. Chairman, Advanced Lectures in Blood Banking Program - coordinated a series of 60 lectures, two full-day workshops and a two-day review session for technologists seeking Certification as a Specialist in Blood Banking.
   2. Member, Annual Meeting Program Committee.

B. American Association of Blood Banks:
   1. Chairman, AABB Press Oversight Committee.
   2. Member, Awards Committee.

C. Member, Editorial Board, Transfusion.

D. Reviewer of articles submitted for publication in Transfusion and Immunohematology.

V. OTHER RELEVANT ACTIVITIES:

HONORS AND AWARDS:


INVITED LECTURES:


VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN PEER-REVIEWED JOURNALS:


BOOKS/CHAPTERS IN BOOKS:


ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFFERRED JOURNALS:

I. CLINICAL ACTIVITIES:

A. Director of Molecular Diagnostics.
B. Director of Clinical Chemistry Section.
C. Interpretation and sign-out of protein electrophoretic analyses (Immunology Laboratory).

II. TEACHING ACTIVITIES:

A. Lectures to Medical Students in M4 Laboratory Medicine Elective.
B. Lectures to House Staff on Block B.
C. Lectures to Pathology House Staff and Faculty at Clinical Pathology Rounds.
D. Research advisor to undergraduate: Ms. Lisa Passmore (Chemistry). Research advisor to Medical Student: Mr. Neil Bavikatty.

III. RESEARCH ACTIVITIES:

PROJECTS UNDER STUDY:

A. Identification of genes activated by mineralocorticoid hormones.
B. Regulation of the mineralocorticoid receptor expression.
C. Development of technologies for the Molecular Diagnostics Laboratory.

SPONSORED SUPPORT:

A. American Heart Association (Michigan Chapter) 7/1/95-6/30/96, $27,600, "Identification of mineralocorticoid response genes". Principal Investigator.
B. Michigan Phoenix Memorial Project. 7/1/95-6/30/96, $4,900 "Identification of mineralocorticoid response genes". Principal Investigator.

IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:

A. Director, Molecular Diagnostics Laboratory.
B. Director, Clinical Chemistry Section.
C. Interviewer, Pathology Resident Applicants.
MEDICAL SCHOOL/HOSPITAL:
A. Member, Committee on Laboratory Planning for East Medical Campus.
B. Member, Patient Care Information Systems (PCIS) Committee.

REGIONAL AND NATIONAL:
A. Member, Program and Finance Committee, Academy of Clinical Laboratory Physicians and Scientists (ACLPS).
   1. Editor of ACLPS Newsletter.
   2. Chair, ACLPS Taskforce on networking.
   3. Founding Member, and Newsletter Editor, Association for Molecular Pathology
B. Member, AACC, ASHG, CAP, ACLPS.
C. Organizer of the November, 1994 symposium on Molecular Pathology for the Michigan Society of Pathologists.
D. Manuscript Reviewer, Clinical Chemistry.
E. Organizer of the Internet newsgroup "MxDIAG-L", dedicated to Molecular Pathology.

INVITED LECTURES AND SEMINARS:
2. "Applications of DNA Diagnostics in the Clinical Laboratory". Ohio Society of Clinical Laboratory Sciences, Toledo, Ohio, October, 1994.
5. "Sherlock Holmes meets DNA". (Forensic applications of DNA testing). University of Michigan Medical Center Community Relations Public Talks (with two other speakers), April, 1995.

ARTICLES, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFERRED JOURNALS:

EDITORIAL:


ABSTRACTS:

PAUL D. KILLEN, M.D., PH.D.
ASSISTANT PROFESSOR AND
ASSISTANT RESEARCH SCIENTIST
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:
   A. Board Certification, Anatomic Pathology.
   B. Autopsy Pathology.
   C. Diagnostic Renal Biopsy Service.

II. TEACHING ACTIVITIES:
   A. Pathology 600 - Pathology Laboratory for Medical Students. (Approximately 60 contact
      hours).
   B. M2 Pathology Lecture - Renal Sequence (60 hours).
   C. Co-Coordinator - Renal Sequence (40 hours).
   D. Gross Pathology Conference.
   E. Renal Pathology Conference.
   F. Clinical Pathology Conference (one hour).
   G. Renal Pathology for Nephrology Fellows (nine contact hours).
   H. Undergraduate Students (two).
   I. Dissertation Committees (two).
   J. Post Doctoral Fellows (six).

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:

A. Principal Investigator, "Collagen IV Gene Transcription in cpk/cpk Mice", NIH-RO1-
   DK44848, (25% Effort) $143,000/first year, 9/30/91-9/29/95.
B. Principal Investigator, Project VI, "TGF-β Induced Collagen IV Gene Transcription",
   NIH-P50-DK39225, (10% Effort) $49,822/year, 8/1/92-7/30/97.
C. Co-Investigator, "Renal Fibrosis", NIH-RO1, (10% Effort) $198,213/first year, 4/1/93-
   3/30/98.
D. Co-Investigator, "Role of EDRF in the Juxtaglomerular Apparatus", NIH-RO1-DK40042,
   (10% Effort) $164,666/first year, 12/1/93-11/30/98.
E. Co-Sponsor, "Aldose Reductase Expression in Diabetes", NIH-Physician Scientist
   Award, $60,429/year, 4/1/93-3/30/98.
PROJECTS UNDER STUDY:

A. Structure and function of collagen IV.
B. Regulation of collagen IV gene expression.
C. Localization of nephron segment-specific genes by PCR.
D. Regulation/expression of hypertonicity stress proteins.

IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:

A. Postdoctoral candidate recruitment, Immunopathology Training Grant.
B. Anatomic Pathology Accessioning Committee.

MEDICAL SCHOOL/HOSPITAL:

A. Faculty recruitment - Department of Pathology.
B. Faculty recruitment - Department of Internal Medicine.
C. Curriculum development-M1 Pathology.
D. Curriculum development-M2 Urinary System.

REGIONAL AND NATIONAL:

A. Planning Committee, Genetic Basis of Renal Disease. NIDDK, NIH.
B. Ad hoc reviewer, Division of Extramural Activities, NIDDK, NIH.
C. Ad hoc Reviewer, Juvenile Diabetes Foundation.
D. Reviewer:
   1. Laboratory Investigation.
   5. Journal of Biological Chemistry.

VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:


ARTICLES SUBMITTED FOR PUBLICATION:


ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:


STEVEN L. KUNKEL, Ph.D.
PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1993 - 30 JUNE 1994

I. CLINICAL ACTIVITIES:

None.

II. TEACHING ACTIVITIES:

A. Epidemiology 570.
B. Member, Pathology Graduate Program Committee.
C. Member, Molecular Pathogenesis Training Program (Microbiology).
D. Member, Immunopathology Postdoctoral Training Program (Pathology).
E. Member, Operating Committee, Systems and Integrative Biology Training.
F. Member, Experimental Immunopathology Training Program (Pathology).
G. Member and Co-Director, Pulmonary Cellular and Molecular Biology Training Program.
H. Member, Graduate Teaching Award Review Committee.
I. Supervised the following postdoctoral fellows and graduate students: fellows, Drs. Tsuyoshi Kasama, Dan Smith, Glenn VanOtteren, John Orens, Nick Lukacs; graduate student, Rob Smith.
J. Undergraduate students: Marc Milia, Gannon Dudlar, Kolby Keefer, Laural Goldstein, Rick Dwyer, Janet Sherman, Christi Shaklee.
K. Doctoral Thesis Committee Member/Orals Committee for the following graduate students: Jami Foreback, Jin Liao, Jeffrey Ruth, Ron Allen, Rob Smith, Fran Wolber, Jerry Caldwell.

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:

A. Principal Investigator, "Macrophage/MonocyteSignals in Lung Granuloma Formation", National Institutes of Health, HL-RO1-35276.
C. Principal Investigator for Section II, "Inflammatory Cells and Lung Injury", National Institutes of Health, Program Project HL-31963.
D. Co-Investigator, "The Role of TNF and ICAM-1 in Lung Allograft Rejection", National Institutes of Health, HL-50057.
E. Co-Investigator, "Cytokine Networks Regulating Inflammation of Pulmonary Fibrosis", National Institutes of Health, HL-46487.

PROJECTS UNDER STUDY:

A. Regulation of macrophage signals that dictate immune responsiveness.
B. Regulation of macrophage gene expression.
C. Macrophage-lymphocyte interactions in the initiation, maintenance, and resolution of chronic inflammation.
D. Role of cytokines in tumorgenesis.

IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:

A. Operating Committee Graduate Program.
B. Space Utilization and Research Committee.
C. Interview candidates for Residency/Graduate Program.
D. Divisional Director of General Pathology.
E. Member Self-Study Committee (Department of Pathology Review Committee).

MEDICAL SCHOOL/HOSPITAL/UNIVERSITY:

A. Member, Committee on Medical Student Research.
B. Medical School representative to University Senate Assembly.
C. Medical School Admission interview Committee.
D. Medical Scientist Training Program Interview Committee.
E. Chairman, Biomedical Research Council Committee.
F. Member, Biomedical Research Council.
G. Member, Michigan Cancer Center.
H. Institute of Gerontology Faculty Search Committee.
I. Pediatrics Faculty Search Committee.
J. Member, Dean's Immunology Task Force.
K. Interim Associate Vice-President for Research, University of Michigan.

REGIONAL AND NATIONAL

A. Section Editor, Journal of Immunology.
B. Associate Editor, American Journal of Pathology.
C. Associate Editor, American Journal of Respiratory Cell and Molecular Biology.
D. Associate Editor, Pathobiology.
E. Associate Editor, Shock.
F. Editorial Board, Mediators of Inflammation.
G. Co-Organizer, 1994 International Cytokine Conference Banff, Alberta Canada.
H. Member Program Committee, American Society of Investigative Pathology.

J. Grant Reviewer, The Arthritis Society.

K. Grant Reviewer, Veterans Administration.

L. Grant Reviewer, Canadian Cystic Fibrosis Foundation.

M. National Institute of Health Study Section, Respiratory and Applied Physiology, Ad Hoc.

N. National Institutes for Health Study Section, Tropical Medicine/Parasitology, Ad Hoc-Teleconference.

O. National Institute of Health Study Section, Oral Biology & Medicine I, Ad Hoc-Teleconference.

P. Scientific Advisory Council, American Lung Association.

V. OTHER RELEVANT ACTIVITIES:

INVITED LECTURES AND SEMINARS:


5. Visiting Professor, University of Oklahoma Health Science Center, Oklahoma City, Oklahoma, October, 1993.


10. Visiting Professor, University of Vermont, Department of Pathology, Burlington, Vermont, February, 1994.


13. Invited Faculty/Speaker, Opening of The University of Chicago Inflammatory Bowel Disease Center, Chicago, Illinois, April, 1994.

VI. PUBLICATIONS

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:


BOOKS AND CHAPTERS IN BOOKS


BOOKS EDITED


ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATION IN UNREFEREED JOURNALS.


JOHN B. LOWE, M.D.
ASSOCIATE PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:

None.

II. TEACHING ACTIVITIES:

A. Supervision of ten postdoctoral fellows (Aron Thall, Ph.D., Peter Smith, Ph.D., Yuko Natsuka, Ph.D., Shunji Natsuka, Ph.D., Petr May, Ph.D., E. Paul Scheidegger, M.D., Kazuhiro Yago, M.D., Daniel Legault, M.D., Steven Domino, M.D., Ph.D., and Hedwig Murphy, M.D., Ph.D.).

B. Lecturer - Postdoctoral Research Training Program.

C. Course Leader, Research Colloquium in Experimental Pathology - Pathology 850 - Genetics and Function of Oligosaccharides.

D. Lecturer - Biochemistry 576 - Membranes and Protein Targeting, 1994. "Mammalian glycosyltransferases and selectin ligand biosynthesis".

E. Member of three Ph.D. thesis committees (Kevin Gersten, Emma Masteller, and Akhilesh Pandey).

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:

A. "Oligosaccharide function during murine embryogenesis". Source of award: Howard Hughes Medical Institute.

B. Principal Investigator, "Molecular biology of human α1,3 fucosyltransferases", NIH GM47455 (25% effort), $72,856/year direct cost, $286,925/four years direct cost, 5/1/92 - 4/30/96.

C. Principal Investigator, "Molecular biology of the human H and Se blood group genes", NIH HL48859 (25% effort), $75,995/year direct cost ($276,544/four years direct cost), 8/1/92 - 6/30/96.

D. Program Project - Project #1 Principal Investigator, "Oligosaccharides as Anti-Inflammatory Agents", NIH AI33189 (15% effort), $125,665/year direct cost ($481,355/four years direct cost), 9/1/92 - 4/30/96.


G. Sponsor, Clinical Investigator Award "Structure and function of recombinant selectin ligands", Hedwig Murphy, 09/01/94 - 08/31/99.

H. Sponsor, Reproductive Scientist Development Program, "Cell surface molecules that mediate blastocyst implantation", Steven Domino, 07/01/94 - 06/30/95.

PROJECTS UNDER STUDY:

A. Structure and regulation of mammalian glycosyltransferase genes. Efforts are focused on the isolation and analysis of gene(s) for human and murine glycosyltransferases, using mammalian gene transfer techniques.

IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:

A. Resident Selection Committee.
B. Internal Review Committee.

REGIONAL AND NATIONAL:

A. Member, Editorial Board, Journal of Biological Chemistry.
B. Member, Pathobiochemistry Study Section, Division of Research Grants, National Institutes of Health.
C. Board of Directors, Society for Glycobiology.
D. Member, Scientific Advisory Board, The Ara Parseghian Medical Research Foundation (for Niemann-Pick disease type C).
E. Special Study Section for NHLBI - Transfusion Medicine Score, March, 1994.

V. OTHER RELEVANT ACTIVITIES:

A. Howard Hughes Medical Institute, Associate Investigator.

VI. INVITED LECTURES AND SEMINARS:


VII. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFERRED JOURNALS:


ARTICLES SUBMITTED OR IN PREPARATION:


6. Hiraïwa, N., Domino, S., Saunders, T, and Lowe, J.B.: Dominant pre-implantation lethality in mice directed by aberrant expression of an α(1,2)fucosyltransferase cDNA. In preparation.

BOOKS AND CHAPTERS IN BOOKS:


NICHOLAS W. LUKACS, Ph.D.
RESEARCH INVESTIGATOR
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:

None.

II. TEACHING ACTIVITIES:

A. "Immune mechanisms of Disease", Epidemiology 570, Course Instructor, Fall, 1994.
B. Supervised Undergraduate students: Christy Shaklee, Kolby Keifer, Laurel Goldstein, Harold Schok, and Drew Pulan.

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:

A. Principal Investigator, "Leukocyte recruitment in eosinophilic inflammation", American Lung Association Research Grant, $50,000, 7-1-95 to 6-30-97.
B. Principal Investigator, "Production of chemokines during Monocyte:Endothelial cell interactions", American Heart Association of Michigan Grant-in-Aid, $28,000, 7-1-95 to 6-30-96.

PENDING SUPPORT:

A. Principal Investigator, "Role of C-C chemokines in eosinophil airway inflammation", R-29 FIRST Award, National Institutes of Health.

PROJECTS UNDER STUDY:

A. Regulation of cytokine production during eosinophilic airway inflammation.
B. Role of mast cells in chronic inflammation.
C. Regulation of chemokine production during cell-to-cell interactions.
D. Role of chemokines in autoimmune responses.
E. Adhesion molecules in chronic inflammatory responses.
F. Role of stem cell factor (SCF) in acute and chronic inflammation.
IV. **ADMINISTRATIVE ACTIVITIES:**

**DEPARTMENTAL:**
None.

**REGIONAL AND NATIONAL:**

A. Reviewer for the following Journals:
   2. Journal of Immunology.
   4. Infection and Immunity.

V. **OTHER RELEVANT ACTIVITIES:**

**INVITED LECTURES/SEMINARS:**

2. The role of cytokines in eosinophilic airway inflammation. New approaches for the treatment of allergic diseases and asthma, Boston, Massachusetts, November 14, 1994.

VI. **PUBLICATIONS:**

**ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFERREED JOURNALS:**


BOOKS/CHAPTERS IN BOOKS


ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFFEREEED JOURNALS.


KENNETH D. MCCLATCHEY, M.D., D.D.S.  
PROFESSOR OF PATHOLOGY  
DEPARTMENT OF PATHOLOGY  

ANNUAL DEPARTMENTAL REPORT  
1 JULY 1994 - 30 JUNE 1995  

I. CLINICAL ACTIVITIES:  
A. Surgical Pathology, consultant on all head and neck pathology cases, 1983-present.  
B. Autopsy, 1983-present:  
   1. Consultant on forensic odontology cases.  
   2. Assistant Medical Examiner, Washtenaw County.  
C. Director of Clinical Microbiology/Virology Laboratory, 1978-present.  
D. Ann Arbor Veterans Administration Medical Center - monthly consultant, 1978-present.  
E. Associate Chief of Clinical Affairs, 1990-present.  
F. Staff, Oral Pathology Laboratory, School of Dentistry, 1973-present.  
G. Professor, Department of Otorhinolaryngology, 1991-present.  

II. TEACHING ACTIVITIES:  

MEDICAL SCHOOL/HOSPITAL:  
A. Pathology 630/580/631; Course Director, 1983-present.  
B. Otorhinolaryngology Pathology 856, Director, 1979-present.  

III. RESEARCH ACTIVITIES:  
A. Consultant, Impact of Follow-Up on Control of High Blood Pressure and Cholesterol.  
   Principal Investigator: Andrea Foote, Ph.D., Institute of Labor and Industrial Relations,  
   The University of Michigan, 1988-present.  
B. Co-Principal Investigator, "Screening of Papa Smears Using Fluorescently Labeled  
   Markers;" Principal Investigator, Daisy S. McCann, Ph. D., McCann Associates, Wayne,  
   MI, 1993-94.  

IV. ADMINISTRATIVE ACTIVITIES:  

DEPARTMENTAL:  
A. Director, Clinical Microbiology/Virology Laboratory, 1978-present.  

MEDICAL SCHOOL/HOSPITAL:  
A. Medical Liability Review Committee, 1992-present.  
B. Member, Patient Care Advisory Committee, The University of Michigan Hospitals, 1989-  
   present.  
C. Member, Technical Advisory Committee, State of Michigan, Department of Health,  
   Bureau of Laboratory and Epidemiological Services, 1987-present.  
D. Chairman, Standardization and Product Evaluation Committee (SPEC), The University of  
   Michigan Medical Center, 1991-present.  
F. Member, Executive Committee on Clinical Affairs, The University of Michigan Medical Center, 1990-1995.


H. Clinical Practice Work Group, University of Michigan, 1993-present.

I. Health Services Research Coordinating Committee, University of Michigan, 1993-present.

REGIONAL AND NATIONAL:

A. College of American Pathologists.
   1. Member, Standards Committee, 1986-present.

B. National Committee for Clinical Laboratory Standards.
   2. International Relations Committee, member, 1988-present.
   3. Committee on Standardization of the PAP Technique, chairman, 1988-present.
   4. Committee on Standardization of FNA Technique, Chairman, 1992-present.
   5. Area Committee on Alternate Site Testing, member, 1993-present.
   7. Member, Board of Governors.

C. American Society of Clinical Pathologists.
   1. ASCP Advisory Council, 1984-94.
   2. Contributor, Laboratory Management, Resident Examination, 1992-present.


   1. Committee F31 on Health Care Services, member, 1988-present.

INTERNATIONAL:

A. Secretariat, Commission on World Standards of World Association of Societies of Pathology, 1987-present.


V. OTHER RELEVANT ACTIVITIES:

INVITED LECTURES/SEMINARS:


VI. PUBLICATIONS

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS


ARTICLES SUBMITTED FOR PUBLICATION


BOOKS AND CHAPTERS IN BOOKS

1. Travers, E.M. and McClatchey, K.D.: Laboratory Management in, McClatchey, K.D., Clinical Laboratory Medicine, Williams & Wilkins, Baltimore, Maryland, 1994.
2. Contributor, Dybkaer, R., McQueen, M.J., Rej. R. and Wilde, C.E.: Continuous Quality Improvement in Clinical Laboratories, COLABIOCLI, Mexico City, Mexico, 1194.

ABSTRACTS, BOOK REVIEWS, LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:


I. CLINICAL ACTIVITIES:
A. Daily surgical neuropathology and electron microscopic neuropathology - four months.
B. Consultations on surgical neuropathology from other hospitals.
C. Weekly Brain Tumor Board, review of neurosurgical, neuroradiologic, neuropathologic and clinical-pathologic correlation - six months.
D. Diagnostic neuropathology consultant, Veterans Administration Hospital - four months.
E. Examination of autopsy neuropathologic material - staff rotation and consults to faculty.

II. TEACHING ACTIVITIES:

MEDICAL SCHOOL/HOSPITAL:
A. Neuroscience Sequence, Neuropathology for Second Year Medical Students.
B. House Officers:
   1. Individual daily instruction of Pathology House Officers over microscope.
   2. Review of neuropathologic postmortem material - staff rotation and consults to residents.
   3. Review all neurosurgically removed material in this hospital in CME-approved biweekly conference - six months.
   5. Invited presentations of neuropathologic observations at joint clinical conferences.
   6. Pathology Resident's monthly Neuropathology Conference - four months.
C. Two Pathology House Officers: Scott Silveira and Walter Henricks, and one Neurosurgery House Officer, Michael Polinsky: One month electives in neuropathology.
D. Teach laboratory techniques to Neurohistologists and Research Staff.

REGIONAL AND NATIONAL:
B. 33rd Faculty Annual AFIP Neuropathology Review, Armed Forces Institutes of Pathology, New Orleans, Louisiana.

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:

PROJECTS UNDER STUDY:

A. Glioma tissue marker potential diagnostic and prognostic value with Drs. Mila Blaivas, Thomas W. Glover, David Gordon, Harry S. Greenberg, Robert Jones, Larry Junck, Anthony A. Killeen, Hernando Mena, James S. Nelson, Donald Ross, Susan Sheldon, Myla Strawderman, Jeffrey M. Trent and Sharon W. Weiss. Submitted to NCI.
B. Growth, spread and antigenicity of ENU-induced gliomas in rats with Constance D’Amato and Dr. Terry Hood, submitted to J. Neuro-oncology.
C. Quantitative analysis of DNA in fresh and cultured cells of brain tumors, with Drs. Karin Muraszko, Donald Ross, William Chandler and James Varani.
D. Extracellular matrix products and plasminogen activators of gliomas with Drs. James Varani, Robert Sitrin, Dario Caccamo and Suzanne Fligiel.
E. Magnetic resonance diffusion and cross relaxation of brain tumors with Drs. James Brunberg, Thomas Chenevert and Brian Ross.
F. Characterization of Rosai-Dorfman disease in brain with Drs. Michael Boland and Karin Muraszko.
G. Combined ultrastructural and karyotypic analysis of the VX-2 tumor with Dr. Thomas E. Carey, submitted to Int. J. Cancer.
H. Viral vectors in glioma therapy with Drs. Julian Hoff, Brian Ross and Donald Ross.

IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:

A. Chief, Section of Neuropathology.
B. Member, Photography Committee.
C. Member, Immunoperoxidase Committee.

MEDICAL SCHOOL/HOSPITAL:

A. Organization and scheduling of Pathology, Neurology, Neuroradiology and Neurosurgery House Officer Neuropathology teaching conferences, individual instruction and consultation review.
B. Organization of call logistics, specimen handling, and schedules for coverage of diagnostic neuropathology by staff.
C. Supervision of Neurohistologists and Neuropathology Laboratories, and quality control of histologic preparations.
D. Interaction with Chiefs and Staff of other clinical services, particularly Neurosurgery, Neurology, Nuclear Medicine, Radiation Oncology, Neuro-oncology & Neuroradiology.
E. Quality control of microscopic, ultrastructural and immunodiagnostic neuropathology. This included scheduled twice monthly QA/QC meetings and various ad hoc reviews requested by faculty.

REGIONAL AND NATIONAL:

A. Primary Review Pathologist, Children’s Cancer Study Group CCG 9891 nationwide study of childhood low grade gliomas.
B. Reviewer for various pathology, neuroscience and neuro-oncology journals.
C. M-Labs Neuropathology Services.
V. OTHER RELEVANT ACTIVITIES:

PROFESSIONAL ORGANIZATIONS:

A. Faculty of Graduate Program of Department of Pathology.
B. Member of the University of Michigan Cancer Center.
C. Member, International Academy of Pathology, 1972-.
D. Member, Alpha Omega Alpha, Eta Chapter, 1972-.
E. Member, American Association of Neuropathologists, 1978-.
F. Member, Society of Neuroscience, 1983-.
G. Member, American Association of Pathologists, 1984-.
H. Member, Children's Cancer Study Group, 1985-.
Pathology Committee, 1989-.
I. Member, Histochemical Society, 1989-.
Councilor, 1994-.
J. Member, Constitution Committee, American Association of Neuropathologists, 1990-.

INVITED LECTURES/SEMINARS:
2. Chairperson, scientific session, Brain tumors, United States and Canadian Academy of Pathology, Toronto, Ontario, 1995.

VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:

BOOKS/CHAPTERS IN BOOKS:


ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:

A. REES MIDGLEY, M.D.
PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:

CLINICAL RESEARCH-RELATED ACTIVITIES:

A. The NIH proposal for studying the effects of clinical depression on human reproduction reported last year with a rating of 128 and 6.8 percentile has still not been funded. The NIMH is having particularly difficult times this year, but we have learned that it is likely that it will now be funded with funds released at year's end.

B. We have submitted a proposal to the NIA on endocrine changes associated with the menopause and aging of women. It was site visited and a decision is expected at the end of this month.

C. The system for generating protocols and bar-coded labels to facilitate analysis of samples for a large clinical study involving infertility has been improved and is being used extensively.

D. Working with a mathematician, Steve Pincus, we have demonstrated that a novel method for assessing regularity in time-series data, estimation of approximate entropy, can reveal important differences in patterns of secretion of gonadotropins in sheep. Based on these observations, we have developed a clinical protocol and obtained approval for using it by the IRB and with CRC facilities.

II. TEACHING ACTIVITIES:

A. Lectures:
1. Served as a primary instructor for a full semester four hours/week laboratory course for dental and health professional students, Pathology 630/631, Fall 1994.

B. Graduate Students:
1. Karen Heinze, Bioengineering - Doctoral Student transferred supported on NCIR Grant.
2. William Lemon, Bioengineering, supported on Cellular Biotechnology Training Grant.

C. Undergraduate Students:
1. Aiman Abbarah, Pre-Medical Student.
2. Jasmin Ghuznawi, Pre-Medical Student.
3. Mona Prasad, Pre-Medical Student.

D. Dissertation Committees:
3. David Mauger, Biostatistics, Current.

E. Worked with Visiting Scientist:
1. Bent G. Boving, Ph.D., Extramural Associate, Department of Embryology, Carnegie Institute of Washington.
III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:

A. NIH, P30 HD 18258, A.R. Midgley, Principal Investigator, Center for the Study of Reproduction, 04/01/94 - 03/31/99, $2,583,244, 15%, 04/01/95 - 03/31/96, $509,675.
B. NIH, U54-HD 29184-04, N.Reame, Principal Investigator, National Center for Infertility Research at Michigan, 09/01/91 - 08/31/96, $5,873,767, 40%, 09/01/94 - 08/31/95, $1,206,578.
C. NIH, 1RO1-MH 50030, E.Young, Principal Investigator, Stress and Reproductive Hormones in Depressed Women, 08/01/94 - 07/31.95, $661,569, 10%, 08/01/94 - 07/31/95, $200,215.
D. NIH, U01-AG 12495, A.R. Midgley, Principal Investigator, Menopause and Aging in Women: Central Laboratory, 10/01/94 - 09/30/99, $1,465,338, 20%, 10/01/94 - 09/30/95, $278,005.
E. NIH NIMH/NIDDK, E.Young, Principal Investigator, Stress and Reproductive Hormones in Depressed Women, 08/01/94 - 07/31/97, $661,569, 5%, 08/01/94 - 07/31/95, $200,215.
F. NIH, T32-HD 07048-20, D.Foster, Principal Investigator, Training Program in Reproductive Endocrinology, 07/01/90 - 06/30/95, $762,838, 5%, (no salary support), 07/01/94 - 06/30/95, $163,846.

PENDING:

A. NIH, T32-HD07048 (Renewal), D. Foster, Principal Investigator, Training Program in Reproductive Endocrinology, 07/01/95 - 06/30/00, $1,733,416, 5%, (no salary suppory), 07/01/95 - 06/30/96, Pending.
B. NIH, V.Padmanabhan, Principal Investigator, Physiologic Relevance of FSH Heterogeneity, 12/01/94 - 11/30/98, $458,782, 5%, 12/01/94 - 11/30/95, Pending.
C. NIH, E. Young, Principal Investigator, Cortisol Feedback in Duiurnal Rhythm of HPA Axis, 09/01/95 - 08/31/99, $659,179, 5%, 09/01/95 - 08/31/96, Pending.
D. NIH U01-AG 12495-S1, A.R. Midgley, Principal Investigator, Hormonal Predictors of Perimenopausal Morbidity-Central Laboratory (LAB), 10/01/94 - 09/30/99, $2,260,106, 20%, 10/01/94 - 09/30/95, $754,468, Pending.
E. Assisted in development of new SBIR grant applications which, if successful, will involve the University as a sub-contracto (Mathematician Entrepreneur Steve Pincus and Judith Erb of Innovation Associates).

SCIENTIFIC COLLABORATIONS:

B. Biostatistics; Morton Brown and Dan Normolle: development and implementation of a means for automating the collection of immunoassay data and organizing it in a distributed database for clinical hormone studies.
C. Electrical Engineering: Rich Brown: (with Mark Meyerhoff) NSF-funded project aimed at developing multisite, antibody-based solid state microelectrodes.
D. Nursing: Nancy Reame: joint involvement in exploring the applicability of our recently developed dimeric inhibin assay with samples from perimenopausal women.
E. Pediatrics: Vasantha Padmanabhan: co-investigator of a project in the NCIR grant and development of a new RO1 grant - concerning the regulation of pituitary gonadotropin secretion.

F. Psychology: Jacquelynne Eccles: Completing a long term, longitudinal study concerning hormones and behavior in adolescents.

G. Innovation Associates, Ann Arbor, Michigan, Judith Erb, Immunoassayist: assisted in development of a funded SBIR concerning the development of simplified immunoassays able to evaluate fertility and development of a second funded SBIR.

H. Massachusetts General Hospital: Pat Sluss, Reproductive Biologist: development of assays for inhibin, follistatin and activin.

I. Michigan State University, Animal Science: James Ireland, Reproductive Biologist: development of a solid state, two site chemiluminescence-based immunoassay for inhibin.

J. University of Wisconsin, Madison: Brian Goodman, a biomathematician, is collaborating with our laboratory to apply spectral analysis and convolutional algorithms to model stimulus-response relationships in our perfusion system.

K. Wayne State University, Obstetrics and Gynecology: Kamran Moghissi: Co-Associate Director of the NCIR grant and Key Investigator of one of its projects.

L. Wolpert Polymers, Inc., Southfield, MI 48037; Stephen M. Wolpert, Polymer Chemist formerly with Gelman Sciences and KMS Fusion. Helped him develop an SBIR focused on creating a novel affinity matrix-membrane for immunoassays, blotting experiments, etc.

M. Yale University: Steve Pincus, a mathematician associated with Yale, is collaborating with our laboratory to explore ways in which application of his measure of approximate entropy to reproductive hormones will be useful.

PROJECTS UNDER STUDY:

A. Neuroendocrine causation of infertility; mechanisms controlling pituitary gonadotropin secretion.

B. Dynamics and modes of regulatory communication among cells.

C. Development and utilization of a computer-controlled perfusion system for on-line analysis of cellular responses to pulsatile and other controlled signaling including the development and application of novel immunobiosensors and immunoassays.

D. Application of principles of cellular bioengineering to the growth and function of mammalian cells.

E. Development of novel biosensors and immunoassays.

F. Examination of the relationships between changes in hormones, behavior and peer reactions during pre-adolescent development of children.

IV. ADMINISTRATIVE ACTIVITIES:

MEDICAL SCHOOL/HOSPITAL:

A. Director, Center for the Study of Reproduction.

B. Associate Director, National Center for Infertility Research at Michigan (NCIR).

C. Director, Standards and Reagents Core Facility.

D. Director, Assay Development Core, NCIR.

E. Member, RSP Selection Committee.
UNIVERSITY:

A. Director, Reproductive Sciences Program.
B. Member, Executive Committee, University of Michigan Women's Health Initiative.
C. Member, Scientific Advisory Board, Child/Adolescent Health Behavior Research Center,
The University of Michigan, 1991-.
D. Member, Michigan Cancer Center, 1993-.
E. Interviewing candidates for Obstetrics/Gynecology, Internal Medicine, Institute of
Gerontology
F. Chair, Facilities Committee and Member, Local Arrangements Committee for 1994
Annual Meeting of the Society for the Study of Reproduction to be hosted by the
University of Michigan.
G. Chair, Research Grants Review Committee, Michigan Initiative for Women's Health,

REGIONAL AND NATIONAL:

A. Member, NIDDK Endocrinology Research Program Advisory Committee, 1986-.
B. Member, NIDDK Hormone Distribution Program Subcommittee, 1986-.
C. Member, NIH Reviewers Reserve, 1989-.

REPRODUCTIVE SCIENCES PROGRAM:

A. The Reproductive Sciences Program completed its five-year review this past year and the
response of the external review team and University administration was highly
complimentary.
B. Our NIH P30 Center was reviewed and refunded with the highest priority (1.0%) that we
have ever achieved. Six of our seven cores were judged to be Outstanding; the seventh
was judged as Excellent.
C. The University's Michigan Initiative for Women's Health, established through the
initiative of RSP, is now thriving under the co-chairship of Deborah Oakley and Mary
Fran Sowers. Dr. Timothy Johnson, Chair of Obstetrics and Gynecology, is participating
actively on its Executive Committee.
D. RSP is hosting two national meetings at the University in July, 1994: the biannual
Ovarian Workshop and the annual meeting of the Society for the Study of Reproduction.
The former will bring about 200 scientists to the University and the latter will bring about
1000.
E. Between these two meetings RSP is hosting a 25th Anniversary celebration with over 200
anticipated attendees.
F. RSP continued to manage increased regulatory compliance in areas of hazardous wastes
and radiochemical safety as mandated by Federal, State and University regulation.
G. RSP hosted its Eighth Annual RSP Poster Day, November 5, 1993 (36 posters presented
plus talk by former trainee, Mrinalini Rao).
V. OTHER RELEVANT ACTIVITIES:

INVITED LECTURES/SEMINARS:

5. U01 Perimenopausal Meeting, Bethesda, Maryland, October 9-11, 1994.
8. U01 Perimenopausal Meeting, Gaithersburg, Maryland, November 2-4, 1994.

RELEVANT ACTIVITIES:

A. Developing an immunoassay analysis system that will assist many investigators.
B. Implementing ELISA and chemiluminescence-based, solid state, two-site immunoassays in Standards and Reagents Core as a partial replacement for radioimmunoassays (and thereby reduction in usage of radioactive isotopies).

VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:


ARTICLES SUBMITTED FOR PUBLICATION:


ABSTRACTS, BOOK REVIEWS, LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:


RICHARD A. MILLER, M.D., Ph.D.
PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY
RESEARCH SCIENTIST
INSTITUTE OF GERONTOLOGY
RESEARCH SCIENTIST
ANN ARBOR V.A. MEDICAL CENTER

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. **CLINICAL ACTIVITIES:**

None.

II. **TEACHING ACTIVITIES:**

A. Graduate Students
   1. Responsible during the current academic year for teaching activities for the following:
      a. Thirteen sessions Pathology 850 (Miller).
   2. Program Director, “Experimental Immunopathology Training Grant.”
   3. Ph.D. Dissertation Committees, University of Michigan:
      b. Alex Greenwood.
      c. Lynn Billington.
   4. Ph.D. Dissertation Advisor:
      a. Michael Eisenbraum.
      b. Chris Kirk.
   5. Summer Rotations:
      a. George Kunz, Med I.
      b. Hershell Wallen, MSTP I.

B. Postdoctoral fellows:
   1. Jacek Witkowski, M.D., Ph.D.
   2. Michael Angell, Ph.D.
   3. Nathan Bining, Ph.D.
   4. William Telford, Ph.D.
   5. Gonzalo Garcia, Ph.D.

C. Assistant Research Scientist:
   1. R. Lee Mosley, Ph.D.

D. Visiting Research Scientist
   1. Igor Dozmorov, Ph.D.
III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:

A. Principal Investigator, "Activation Defects in Aging T Cells", NIH AG-09801 (15%), $158,814 direct costs/year, 8/1/90-7/31/95. MERIT award.

B. Principal Investigator, "Immune and Muscle Function Assays as Biomarkers of Aging", NIH AG-11067 (15%), $145,000 direct costs/year, 4/1/93 - 3/31/98.

C. Principal Investigator, "Aging Effects on IL-2 Secreting Helper T Cells", NIH AG-03978 (16%), $149,366 direct costs/year, 8/1/92 - 7/31/95.

D. Principal Investigator, "Genetic Control of Longevity in Mice", NIH AG-11687 (8%), $207,174 direct costs/year, 9/1/93 - 8/31/98.

E. Director, "Core Facility for Aged Rodents", NIH AG-08808 (15%), $64,627 direct costs/year, 9/1/94 - 8/31/99. (Component of Claude Pepper Older Americans Independence Center, J. Halter, Program Director).

F. Director, "Research Development Core", NIH AG-08808 (15%), $155,270 direct costs/year, 9/1/94 - 8/31/99. (Component of Claude Pepper Older Americans Independence Center, J. Halter, Program Director).

G. Project Director, "Prevention of Disease by Immunotonic Agents in Mice", NIH AG-08808 (5%), $50,235 direct costs/year, 9/1/94 - 8/31/99. (Component of Claude Pepper Older Americans Independence Center, J. Halter, Program Director).

H. Program Director, "Research Training in Immunopathology", NIH T32-AI-07413 (5%), $117,126 direct costs/year, 4/1/92 - 3/31/97.


J. Principal Investigator, "New T Cell Subsets in Aging Mice", Allied Signal Research Award, $50,000 direct costs/year, 1/1/95 - 12/31/96.

K. Course Director, "Summer Training Courses in Experimental Aging Research", NIH/NIA R13-AG12917 (0%), $29,358 direct costs/year, 4/1/95 - 3/31/98.

PENDING:

A. Principal Investigator, "Aging Effects on IL-2 Secreting Helper T Cells", NIH-AG-03978 (16%), $149,366 direct costs/year, 8/1/82 - 7/31/95. [Renewal Pending]

B. Principal Investigator, "Restriction Landmark Genome Scanning for Longevity Assurance Genes", R01-AG1168751 (0%), $23,162 direct costs requested/year, 7/1/95 - 6/30/96.

C. Principal Investigator, "T Cell Subsets Defined by P-glycoprotein in Aging Mice", NIH R01-AG03978 (5%), $177,177 direct costs requested/year, 12/1/95 - 11/30/98.

D. Principal Investigator, "Wild Derived Mouse Stocks: New Models for Aging Research", NIA R01-AG13711 (5%), $187,826 direct costs requested/year, 4/1/96 - 3/31/01.
IV. **ADMINISTRATIVE ACTIVITIES:**

**DEPARTMENTAL:**

A. Committee on Master Planning Analysis.
B. Graduate Education Committee.
C. Qualifying Examination Committee.
D. Research Colloquia, Course Coordinator.
E. Director, Experimental Immunopathology Training Program.

**MEDICAL SCHOOL/HOSPITAL:**

A. Geriatrics Center: Research Development Core Director.
B. Geriatric Center: Director, Core Facility for Aged Rodents.
C. Member, Geriatrics Center Research Operating Committee.
D. Associate Director for Research, Geriatrics Center.
E. Member, Dean’s Immunology Task Force.
F. Member, Cell and Molecular Biology Training Program.
G. Member, Rheumatology Training Program.
H. Co-Director, Breast Cancer in elderly Women Project, University of Michigan Cancer Center.

**REGIONAL AND NATIONAL:**

A. Member, National Advisory Council on Aging.
B. Publications Committee, Gerontological Society of America.
C. Board of Scientific Advisors, Buck Center for Research on Aging.
D. Fellow, Gerontological Society of America.
E. Board of Scientific Advisors, American Federation for Aging Research.
F. Chair, Biological Sciences, Gerontological Society of America.
G. Member, Council, Gerontological Society of America.

V. **OTHER RELEVANT ACTIVITIES:**

**EDITORIAL BOARDS:**

A. Aging: Immunology and Infectious Disease. (Section editor)
C. Journal of the American Geriatrics Society. (Section Editor)

**INVITED LECTURES/SEMINARS:**

2. Meeting Chair, Gerontology Society of America Annual Meeting, Atlanta, Georgia, November, 1994.
7. "Gerontology as Oncology", Symposium on "Consequences of Age Changes Explored at the Cellular and Subcellular Levels on Organismic Function", Volterra, Italy, May 7-12, 1995.

VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:

ARTICLES SUBMITTED FOR PUBLICATION


BOOKS/CHAPTERS IN BOOKS

RAJ S. MITRA, PH.D.  
ASSISTANT RESEARCH SCIENTIST IN PATHOLOGY  
DEPARTMENT OF PATHOLOGY  

ANNUAL DEPARTMENTAL REPORT  
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:

None.

II. TEACHING ACTIVITIES:

A. Member, Ph.D. Thesis Committee, College of Pharmacy.

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:

A. Principal Investigator, "Role of Keratinocytes in Cutaneous Inflammation/Immunity", Johns Hopkins Center for Alternatives to Animal Testing, 2/94-1/95.
C. Co-Investigator, "Role of Scatter Factor in AIDS-Kaposi's Sarcoma", (Peter Polverini, Principal Investigator), 7/1/94-6/30/99.

PROJECTS UNDER STUDY:

A. Studies on normal and psoriatic skin-derived dendritic cells.
B. Safety testing: Skin irritation and contact sensitization.
C. Modulation of apoptosis in cultured keratinocytes.

REVIEWER

A. NATO Advanced Study Institute.

IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:

None.
V. OTHER RELEVANT ACTIVITIES:

None.

VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:


BOOKS/CHAPTERS IN BOOKS:


ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:


R. LEE MOSLEY, Ph.D.
ASSISTANT RESEARCH SCIENTIST
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 AUGUST 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:

None.

II. TEACHING ACTIVITIES:

MEDICAL SCHOOL/HOSPITALS:

None.

III. RESEARCH ACTIVITIES:

A. Research proposal applications submitted:
   1. “Quantitation and Characterization of Post-Thymic T Stem Cells” submitted to
      Leukemia Society of America.
   2. “Frequency and Expansionary Potential of Post-Thymic T Stem Cells from Aged
      Mice” submitted to American Federation for Aging Research.
   3. “Frequency and Expansionary Potential of Post-Thymic Stem Cells from Aged
      Mice” submitted to Sandoz Foundation for Gerontological Research.

SPONSORED SUPPORT:

A. American Federation for Aging Research (AFAR); 1 year at $40,000; pending.

PROJECTS UNDER STUDY:

A. Enumeration and Identification of Post-Thymic T Stem Cells.
B. Frequency and Expansionary Potential of Post-Thymic T Stem Cells from Aged Mice.
C. Age-Related Effects of Mucosal T Lymphocytes.

IV. ADMINISTRATIVE ACTIVITIES:

None.
V. OTHER RELEVANT ACTIVITIES:

INVITED LECTURES/SEMINARS:

A. None.

VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:


ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:


I. CLINICAL ACTIVITIES:

None.

II. TEACHING ACTIVITIES:

None.

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:

A. NHLBI Clinical Investigator Development Award KO8 HL03181-01: Structure and Function of Recombinant Selectin Ligands, 09/01/94-08/31/99, $402,916.

PROJECTS UNDER STUDY:

A. Structure and function of recombinant glycoproteins.
B. Endothelial cell expression of selectin ligands.
C. Function and mechanism of generation of endothelial cell superoxide.
D. Endothelial cell signal transduction.
I. **CLINICAL ACTIVITIES:**

A. Cytopathology - 26 weeks.
B. Director, Cytopathology Laboratory - full time.
C. Consultation Service, Department of Pathology: Cytopathology, pulmonary pathology and gynecologic pathology - 12 months.
D. Necropsy service - on call coverage.
E. Consultant, Breast Care Center - 12 months.

II. **TEACHING ACTIVITIES:**

A. Pathology residents - supervision and teaching during cytopathology rotation and when covering necropsies.
B. Pathology residents - biweekly cytopathology conferences.
C. Senior medical students during pathology electives.
D. Sophomore medical students: Instructor, Pathology 600 laboratory.

III. **RESEARCH ACTIVITIES:**

A. Cytopathology, with particular reference to serous fluids.

**PROJECTS UNDER STUDY:**

A. Curschmann's spirals in bronchial aspirates.

IV. **ADMINISTRATIVE ACTIVITIES:**

**DEPARTMENTAL:**

A. Director and Co-Director, Cytopathology Laboratory.
B. Advisory Committee on Appointments and Promotions.

**REGIONAL AND NATIONAL:**

B. Associate Editor, Acta Cytologica.
C. Editorial Board, Cytopathology.
D. Editorial Consultant, Diagnostic Cytopathology.
E. Chairman, Publications Committee, International Academy of Cytology.
F. Membership Committee, International Academy of Cytology.
G. Budget and Finance Committee, American Society of Cytology.
H. Chairman, Awards Committee, American Society of Cytology.
V. OTHER RELEVANT ACTIVITIES:

INVITED LECTURES AND SEMINARS:


HONORS AND AWARDS:

None.

VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:


BOOKS/CHAPTERS IN BOOKS:

None.

ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:

None.
BRIAN J. NICKOLOFF, M.D., PH.D.
ASSOCIATE PROFESSOR OF PATHOLOGY AND DERMATOLOGY
DEPARTMENT OF PATHOLOGY
DEPARTMENT OF DERMATOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:
A. Dermatopathology, University of Michigan Hospitals.
B. Dermatopathology, M-Labs.
C. Dermatopathology, Private Consultations.
D. Dermatology, Melanoma Clinic.
E. Immunopathology Laboratory.
F. MSTP Clinical Phase Mentorship Panel.
G. Cutaneous Oncology Program Scientific Director.

II. TEACHING ACTIVITIES:
A. Pathology and Dermatology House Officers Lecture Series.
B. Clinical Pathology Orientation Lecture and Laboratory.
C. Five Week Medical Student (Year 2) Research Elective.
D. Year One Medical Student Dermatopathology Lecture Series.
E. Dermatology Grand Rounds - Dermatopathology presentations.
F. Ten Week Undergraduate Student Research Elective.
G. Immunopathology Lecture Series.
H. Department of Pathology Graduate Course and Dissertation Committee.

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:
D. "Regulation of Macrophage Angiogenic Activity", NIH RO-1 (10% effort), $155,000 Annual Direct Costs, June 1995 - June 1999.

Total Annual Direct Costs = $695,858.

PROJECTS UNDER STUDY:
A. Role of gamma interferon in modulating adherence reactions between resting and activated mononuclear leukocytes and keratinocytes.
B. Characterization of gamma interferon receptor on normal and psoriatic keratinocytes.
C. Role of endothelial cell adhesion molecules (ICAM-1, ELAM-1, VCAM-1) in cutaneous leukocyte trafficking.
D. Role of factor XIII a positive dermal dendrocytes in AIDS-related psoriasis.
E. Dissection of cytokine networks in psoriasis, allergic contact dermatitis to poison ivy, and mycosis fungoides.
F. Role of Scatter Factor/C-met in Kaposi's Sarcoma.
G. Role of CD28/BB-1/B7 in Psoriasis.
H. Role of Bcl-x in Psoriasis.

IV. ADMINISTRATIVE ACTIVITIES:
A. Scientific Director: Cutaneous Oncology Program - Cancer Center.

REGIONAL AND NATIONAL:
A. Member, General Medicine A Study Section, National Institutes of Health.
B. Ad-hoc Reviewer, University of Michigan Multipurpose Arthritis Center.
C. Ad-hoc Reviewer, University of Michigan Department of Surgery.

V. OTHER RELEVANT ACTIVITIES:

EDITORIAL BOARDS:
A. American Journal of Dermatopathology.
B. Journal of Cutaneous Pathology.
C. Autoimmunity Forum In Dermatology.
E. Journal of Dermatological Science.
F. American Journal of Pathology.

OTHER:
A. Journal of Investigative Dermatology, Reviewer.
B. Journal of Cutaneous Pathology, Reviewer.
C. American Journal of Pathology, Reviewer.
D. American Journal of Dermatopathology, Reviewer.
E. Archives of Dermatology, Reviewer.
H. Journal of Cellular Physiology, Reviewer.
I. British Journal of Dermatology, Reviewer.
J. New England Journal of Medicine, Reviewer.
K. Journal of National Cancer Institute, Reviewer.
L. Journal of Clinical Investigation, Reviewer.
M. Journal of Dermatological Science, Reviewer.
N. Journal of Immunology, Reviewer.
O. Journal of Experimental Medicine, Reviewer.
P. Nature, Reviewer.

INVITED LECTURES/SEMINARS:
3. Invited Speaker, "Professional and Non-Professional Antigen Presenting Cells in the Skin", Department of Pathology, Division of Experimental Immunology, Zurich, Switzerland, July 17, 1994.


5. Invited Speaker, "Inflammation - A Dermatological Perspective", International Meeting of the European Academy of Dermatology and Venereology-Skin Therapy Update, Crete, Greece, October 17, 1994.

6. Invited Speaker, "Targeting Co-Stimulatory Molecules B7-1, B7-2, and B7-3 Expressed by Immunocytes in Psoriasis", Inflammation Research Association: Novel Approaches to Immunoregulatory Therapy, San Diego, California, November 11, 1994.

7. Invited Speaker, "Role of Professional and Non-Professional APC’s in Skin Disease with Emphasis on Co-Stimulatory Molecules B7-1, B7-2, and B7-3", Department of Pathology, Harvard Medical School, Boston, Massachusetts, December 14, 1994.

8. Invited Speaker, “Keratinocytes as Initiators of Inflammation and Immunologic Antigen Presenting Cell”, Center for Alternatives to Animal Testing Symposium on In-Vitro Approaches to Contact Dermatitis, Baltimore, Maryland, March 4, 1995.


VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:


189


BOOKS/CHAPTERS IN BOOKS:


ABSTRACTS, BOOK REVIEWS, LETTERS TO THE EDITOR, ARTICLES PUBLISHED IN UNREFEREED JOURNALS:


GABRIEL NUÑEZ, M.D.
ASSISTANT PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:
   A. Autopsy Service (two weeks and one weekend on-call).

II. TEACHING ACTIVITIES:
   A. Supervised Dr. Maribel Gonzalez-Garcia, Dr. Ramon Merino, Dr. Didier Grillot and Dr. Philip Simonian (Postdoctoral Fellows).
   B. Supervised Mary Benedict (graduate student) and Eric Humke (graduate student).
   C. Supervised Eric Humke (graduate student).
   D. Laboratory Instructor, Pathology 630/631. Full semester, two hours/week.
   E. Speaker, Undergraduate, UROP program (one lecture).
   F. Speaker, Molecular Diagnostic, Department of Pathology (one lecture).

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:
   A. Principal Investigator, "Regulation and Function of the Bcl-2 Gene during Thymus Development", National Institutes of Health, $150,000 (total direct costs), 1/1/93-12/31/95.
   B. Principal Investigator, "Regulation and Function of Bcl-2 in Germinal Centers", American Cancer Society, $313,368 (total direct costs), 7/1/93-6/30/96.
   D. Principal Investigator, "Genetic Regulation of Apoptotic Cell Death", National Institutes of Health, $725,000 (total direct costs) 8/1/94-7/31/99.
   E. Principal Investigator, Research Career Development Award, "Genetic Regulation of Apoptotic Cell Death", National Institutes of Health, $280,000 (total direct costs) 8/1/94-7/31/99.

PENDING SUPPORT:
   A. Principal Investigator, “Bcl-xs Mediated Apoptosis of Kaposi’s Sarcoma Cells,” National Institutes of Health, $2,282,648 (total direct costs), 9/01/95 - 8/31/00.

PROJECTS UNDER STUDY:
   A. Functional characterization of Bcl-2 and Bcl-x genes during lymphoid development.
   B. Molecular interactions between Bcl-2 family members.
   C. Regulation and role of Bcl-2 and Bcl-x in neuroblastoma.
IV. **ADMINISTRATIVE ACTIVITIES:**

**DEPARTMENTAL:**

A. Interviewer, faculty, postdoctoral, and graduate student candidates for research fellowships.
B. Member, Cultural Diversity Assessment Steering Committee, University of Michigan, Ann Arbor, Michigan.

**MEDICAL SCHOOL/HOSPITAL:**

A. Member, Molecular and Cellular Biology Program.
B. Member, University of Michigan Cancer Center.
C. Member, Transgenic Core Facility Committee, Multipurpose Arthritis Center.
D. Member, Faculty Search Committee, Rheumatology Division.
E. Reviewer, Departmental Grants.
F. Interviewer, MSTP Candidates.
G. Committee Member, Suil Kim, Graduate student, M.D./Ph.D., Training Program, Ph.D.
H. Committee Member, Charlene Ford, Graduate Student, Immunology Program, Preliminary Oral Examination.
I. Christine Hodges, Molecular and Cellular Biology Program, Preliminary Oral Examination.

V. **OTHER RELEVANT ACTIVITIES:**

**EDITORIAL BOARDS:**

A. Reviewer for the following journals: American Journal of Pathology, Blood, Journal of Immunology, Oncogene, Journal of Cell Biology, Laboratory Investigation, Cancer Research.
B. Ad Hoc Reviewer: Research grants, National Institute of Health.

**INVITED LECTURES AND SEMINARS**

**UNIVERSITY OF MICHIGAN**

3. Lecturer, Molecular Diagnostics Course, M-Labs, 1994.

**NATIONAL AND INTERNATIONAL**

10. Invited Speaker, Danish Cancer Society, Copenhagen, Denmark, March 7, 1995.

VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:


195

**ARTICLES SUBMITTED FOR PUBLICATION:**


**ARTICLES SUBMITTED FOR PUBLICATION:**

I. **CLINICAL ACTIVITIES:**

A. Director, Blood Bank and Transfusion Service, University Hospitals.
B. Diagnosis of surgical specimens from University Hospital patients.
C. Diagnosis of surgical specimens from M-Labs.
D. Diagnosis of consultation breast cases from pathologists elsewhere in the United States.
E. Medical coverage of Transfusion Service.
F. Medical coverage of Necropsy Service (Quality Control Review).
G. Member, University of Michigan Breast Care Center.

II. **TEACHING ACTIVITIES:**

**MEDICAL SCHOOL/HOSPITALS:**

A. Lectures on breast pathology and transfusion medicine to sophomore class (five contact hours).
B. Laboratory Course for sophomore medical students (Pathology 600) six hours (two weeks).
C. Daily case review with pathology house officer assigned to Blood Bank.
D. Weekly lecture/discussion with Pathology, Hematology and Pediatric Hematology house officers.
E. Lecture-Discussion (two) on Transfusion Medicine to senior student elective course in Laboratory Medicine.
G. Lectures on Transfusion Medicine presented to Pathology and Hematology/Oncology House Officers.
H. Seminars and lectures on Pathology of Breast to Pathology House Officers.
I. Lectures on Transfusion Medicine to Pharmacology and Therapeutics senior student elective course. February 10, 1995.
J. Planning committee for curriculum in hematology for sophomore medical students.
K. Lecture, Pathology of the Breast, to Dental Pathology Course.
L. Presentation of consultation slide conferences (four) on pathology of the breast to pathology house officers.

**UNIVERSITY:**

A. Doctoral committee for Midori Koga, candidate for Doctor of Musical Arts in Piano, School of Music.
III. **RESEARCH ACTIVITIES:**

**PROJECTS UNDER STUDY:**

A. Rapid 4D MRI of Gad-DTPA enhancement for breast lesion characterization (Grant DAMD 17-94-J-4381 from U.S. Army medical research acquisition activity ($605,849/4 years) (T. Chenevert, Principal Investigator, with members of Department of Radiology).

B. New Ultrasound Methods for Cancer Diagnosis and Treatment (3-5 years at 5% effort).

C. Microvascular and Structural Imaging of Breast Cancer (3-5 years at 3% effort).


IV. **ADMINISTRATIVE ACTIVITIES:**

**DEPARTMENTAL:**

A. Director, Transfusion Medicine Program.

B. Director, Training Program in Blood Banking/Transfusion Medicine.

**MEDICAL SCHOOL/HOSPITAL/UNIVERSITY:**

A. Transfusion Committee, Chairman.

B. Breast Care Center.

C. Bone Marrow Homotransplantation Task Force.

D. AIDS Task Force.

E. Hospital Quality Assurance Committee.

F. Task Force on Medical Center Governance, Medical Center Clinicians' Group.

G. Hematology Sequence Advisory Committee, M-2 year.

H. Medical School Grievance Review Committee.

I. University of Michigan Senate Assembly.

**REGIONAL AND NATIONAL:**

A. American Association of Blood Banks:
   1. Transfusion Practices Committee.
   2. Institutional Dues Structure Committee.
   3. Transfusion Medicine Research Strategies Committee.

B. American Society of Clinical Pathologists.

C. College of American Pathologists:
   1. Task Force on Breast Cancer, Chairman.

D. United States and Canadian Academy of Pathology:
   1. Abstract Review Board.

E. Michigan Society of Pathologists.

F. Southeastern Michigan Region Red Cross Blood Program:
   1. Board of Directors.
   2. Medical Advisory Committee.

G. Consultant, Veterans Administration Hospital, Ann Arbor.


V. **OTHER RELEVANT ACTIVITIES:**

**EDITORIAL BOARDS:**

A. Associate Editor, Transfusion.
B. Editorial Board, American Journal of Surgical Pathology.
C. Editorial Board, American Journal of Clinical Pathology.
D. Editorial Board, Archives of Pathology and Laboratory Medicine.
E. Reviewer, Cancer.
G. Reviewer, Blood.
H. Reviewer, Cancer Research.
I. Reviewer, Journal of Clinical Oncology.

INVITED LECTURES/PAPERS/SEMINARS:

2. Borderline Breast Lesions. Lecture and Workshop to 3rd annual M-Labs symposium, Department of Pathology, University of Michigan, October 1, 1994.
7. Presentation of Grand Rounds on Transfusion Medicine to Department of Anesthesiology, February 2, 1995.

VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:


ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:

I. CLINICAL ACTIVITIES:

A. Autopsy Service.

II. TEACHING ACTIVITIES:

A. Hong-Yi Zhang, M.D., Ph.D., Postdoctoral Fellow.
B. Kai Zhang, M.D., Postdoctoral Fellow.
C. Jonathan Yang, Undergraduate Research Opportunities Program.

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:

B. Principal Investigator, “Myofibroblasts in pulmonary fibrosis”, NIH, RO-1, HL 52285, (25% effort), 1994-1998 (years 01-04), (Total direct costs: $906,614).
D. Co-investigator, “Regulation of IL-8 gene expression”, (D. G. Remick, Principal Investigator), NIH, RO-1 DK 43455, (5% effort), 1995-1999, (Total direct costs: $839,199).
E. Co-investigator, Project 1, “Cytokine networks regulating inflammation of pulmonary fibrosis”, (G. B. Toews, Principal Investigator), SCOR NIH, P-50 HL 46487, SCOR in Occupational and Immunologic Lung Diseases, Project 1, (5% effort), 1992-1996, (Total direct costs: $828,155).

PROJECTS UNDER STUDY:

A. Lung macrophage/monocyte, recruitment and activation during lung injury and fibrosis.
B. Cytokine regulation of fibroblast function - in terms of chemotaxis, collagen metabolism and proliferation in fibrotic lesions of lung, kidney and skin.
C. Regulation of α-smooth muscle actin expression and myofibroblast phenotype.
D. Regulation of production of fibrogenic mediators and cytokines by pulmonary endothelial cells, fibroblasts and keratinocytes.
E. Production of monocyte chemotactic factors by alveolar macrophages and fibroblasts and endothelial cells, and its regulation by bleomycin and cytokines.
F. Regulation of cytokine gene expression in fibrotic tissues.
G. Mechanism of eosinophil recruitment and regulation of cytokine expression by this cell.
IV. **ADMINISTRATIVE ACTIVITIES:**

**DEPARTMENTAL:**

A. Member, Departmental Research and Space Advisory Committee.
B. Member, Graduate Program Committee.

**MEDICAL SCHOOL/HOSPITAL:**

A. Member, Medical Scientist Training Program Operating Committee.

**REGIONAL AND NATIONAL:**

A. Member, Lung Biology and Pathology Study Section, National Institutes of Health.
B. Reviewer for the following journals:
   5. Journal of Immunology.

V. **OTHER RELEVANT ACTIVITIES:**

**INVITED LECTURES AND SEMINARS:**


VI. **PUBLICATIONS:**

**ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:**


BOOKS/CHAPTERS IN BOOKS:


ABSTRACTS, BOOK REVIEWS, LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:

2. Gharaei-Kermani, M., McGarry, B., and Phan, S.H.: Lung transforming growth \( \beta_1 \), \( \beta_2 \), and \( \beta_3 \) expression in bleomycin-induced pulmonary fibrosis. FASEB J., 1995.
CARL L. PIERSON, PH.D.
ASSISTANT PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:

A. Associate Director, Clinical Microbiology/Virology Laboratories.
B. Director, UMMC Ypsilanti Pediatrics Health Care Center Laboratory.
C. Director, UMMC Ypsilanti Family Practice Health Care Center Laboratory.
D. Coordinator, Infectious Disease Microbiology Laboratory rounds.
E. Technical Consultant, M-Labs.

II. TEACHING ACTIVITIES:

A. Coordinator, Pathology House Officer Microbiology rotation.
B. Lecturer, Clinical Pathology Grand Rounds.
C. Lecturer, Pathology PTH CLNL - 101.
D. Coordinator, Clinical Microbiology In-Service Program.
E. Lecturer, M-Labs Educational Program.
F. Virology rotation for Ghada Khalife, M.D.

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:

A. "Candida Vaginosis Study", National Institutes of Health, Principal Investigator: Barbara Reed, Department of Family Practice.
B. "MRL Quinolone Study", MRL Reference Laboratory, Franklin, Tennessee.
C. "Viral Serology Study", Gull Laboratories, Salt Lake City, Utah.
E. "Synercid - Vancomycin-resistant enterococci", Rhone-Poulenc, Collegeville, Pennsylvania.
G. Changes in the In Vitro Susceptibility of the Bacteroides fragilis Group", Merck, Sharp and Dohme, West Point, Pennsylvania.

PROJECTS UNDER STUDY:

A. PCR for detection of Pneumocystis carinii.
B. PCR for detection of herpes simplex virus in CSF.
C. PCR for detection of *Chlamydia trachomatis* in male urine.
E. Detection of *Ureaplasma urealyticum* in lung aspirates from infants with chronic pulmonary disease.
F. Comparative evaluation of the E-Test for anaerobe susceptibility.
H. Epidemiology of vancomycin-resistant *Enterococcus faecium* using PFGE.
I. Recovery of bacteria from sterile body fluids using the BacT/Alert.
J. Effective selection of antimicrobics.
K. Effect of antifungal agents on the detection of yeasts in the BacT/Alert.
L. Recovery of non-tubercular AFB from patients with cystic fibrosis.

IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:

A. Clinical Pathology Laboratory Director's Committee.
B. Test Utilization Committee.
C. UMMC Health Care Centers Laboratory Committee.
D. Chair, Clinical Microbiology/Virology Senior Staff Meeting.

MEDICAL SCHOOL/HOSPITAL:

A. Hospital Infection Control Committee.
B. Pharmaceutical & Therapeutics Committee (antimicrobics).
C. Committee for Restricting Antimicrobial Usage (ad Hoc).

REGIONAL/NATIONAL:

A. President, Michigan Branch of the American Society for Microbiology.
B. Executive Board, South Central Association for Clinical Microbiology.
C. Co-Chair, Tri-County Clinical Microbiology Association.
D. Co-Chair, Michigan Microbiology Laboratory Director's Association.

V. OTHER RELEVANT ACTIVITIES:

PROFESSIONAL ORGANIZATIONS:

A. American Society for Microbiology.
B. European Congress for Clinical Microbiology and Infectious Diseases.
C. Infectious Disease Society of America.
D. Michigan Infectious Disease Society.
E. South Central Association for Clinical Microbiology.
F. Tri-County Microbiology Association.
INVITED LECTURES/SEMINARS:

1. "Emergence of penicillin-resistant Streptococcus pneumoniae and vancomycin-resistant enterococci at the University of Michigan", Michigan Infectious Disease Society, Lansing, Michigan.
3. "Testing variables in antimicrobial susceptibility testing", Metropolitan Hospital In-service Program, Cleveland, Ohio.

VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:


ARTICLES SUBMITTED FOR PUBLICATION:


BOOK/CHAPTERS IN BOOKS:

None.

ABSTRACTS, BOOK REVIEWS, LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:

RODOLFO F.H. RASCHE, M.D.
CLINICAL ASSISTANT PROFESSOR II IN PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

OVERVIEW:

I continued with the same level of activity (65%) towards the M-Labs Program. At the end of this period, we concluded our selection of four new people. We continue to see a steady growth of CP revenues from new and existing clients as well as from an increased activity in AP consults. The M-Labs Symposium for pathologists continues to be successful, the sixth coming up October 14, 1995. In order to get enough input into our outreach activities from our lab directors an advisory group was started in April. My M-Labs-related activities also include signing out PAP smears from our clients and a marketing plan was started jointly with the Cytopathology group in order to increase their number of outside cases. Outside of my M-Labs activities, I continue to help cover autopsies in the Department.

I. CLINICAL ACTIVITIES:

A. Reading surgicals for M-Labs' clients (Albion and Addison Hospitals and selected offices). This activity is predominantly performed by E.M. Silverman, M.D. Reporting on consultation cases from our clients.
B. Cytopathology: reviewing and verifying cases from the University of Michigan Health Service and other M-Labs clients.
C. Autopsy coverage at the University Hospitals five weeks a year and six week-ends a year.
D. Pathologist, on site coverage for Albion and Addison Community Hospitals.

II. TEACHING ACTIVITIES:

A. Read out autopsies with house officers.
B. Organize and lecture at the MLabs Symposium, a one day-long event with lectures and case presentations for pathologists. Discussions also include Managed Care and Utilization. Fifth symposium held on May 6, 1995.
C. In-service teaching to laboratory staffs at Albion Community Hospital and the University of Michigan Health Service.

III. RESEARCH ACTIVITIES:

None.

IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:

A. Associate Director, M-Labs Program. Participate in planning, marketing and implementation.
B. Organize advisory group (directors of laboratories) to assist MLabs activities.
C. Problem solving with lab directors and supervisors.
D. Communication forums with laboratory staff.
OTHER:

A. Director of Laboratory, University of Michigan Health Service.
B. Medical staff member at Albion and Addison Hospitals.
C. Monthly colposcopy meeting with Gynecology staff at the University of Michigan Health Service.

V. OTHER RELEVANT ACTIVITIES:

A. Continued enhancement of the MLabs version of the Spectrum, a newsletter sent to our clients and their medical staff.
B. Inspector for College of American Pathologists Inspection and Accreditation Program.
C. Fellow, College of American Pathologists.
D. Started a QA program for pathologists with AP faculty approval.
E. Participated in a week-long conference on networking, managed care and legal issues, sponsored by the Mayo Clinic.
DANIEL G. REMICK, M.D.
ASSOCIATE PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT

1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:

A. Director, Autopsy Service.
B. Supervision of Autopsies (2.5 months).
C. Coordinator of Senior Staff Autopsy Call Schedule.
D. Deputy Medical Examiner for University Hospitals (16 weeks).
E. Forensic Pathology (16 weeks).
F. Director, Electron Microscopy Service.

II. TEACHING ACTIVITIES:

A. Coordinator, Biweekly Pathology Gross Conference.
B. Lectures to Pathology House Officers in Anatomic and Clinical Pathology.
C. Lecturer, Pathology 600 Course.
D. Pathology 600, Provided written critiques of student autopsy write-ups (200).
E. Laboratory Instructor, Histopathology Laboratory for M1 students.
F. Mentor - Fourth Year Medical Student Clerkship.
G. Transplant Journal Club, two presentations.
H. Directed research of Allan Olson, M.D. (Department of Pediatrics), Jorge Rodriguez, M.D. (Department of Surgery); House Officers - Devina Prakash (Pediatrics) Postdoctoral fellows, Gordon Wollenberg, D.V.M., Ph.D., Lorelie Villarete, Ph.D.; Graduate students - Jami Foreback, Medical Students - Sunir Garg.

III. RESEARCH ACTIVITIES:

PROJECTS UNDER STUDY:

A. Regulation of gene expression of soluble mediators of inflammation using the following models:
   1. Endotoxin-stimulated human whole blood.
   2. Endotoxin injection in mice.
   3. Cecal ligation and puncture.
B. Toxic effects of immunomodulators.
C. Pathophysiology of septic shock.
D. Quantitation of mediators in septic shock.
E. Cloning, sequencing, and expressing cytokines including mTNF, hTNF, mIL-6, hIL-8, MCP, JE.
F. Oxidant regulation of IL-8 gene expression.
G. Mechanisms of nosocomial pneumonia, and association with IL-8.
H. Immunopathology of inflammatory bowel disease.

SPONSORED SUPPORT:

B. Principal Investigator, "The Effects of IL-10", $31,500, 1994-96.
C. Principal Investigator, "Hepatic Ischemia-Induced TNF and Multi-Organ Injury", DK42455.
D. Sponsor, Medical Research Council of Canada Training Fellowship, Gordon Wollenberg, D.V.M., Ph.D., recipient.
E. Principal Investigator, "Correlation of Cytokine Levels with APACHE III Scores", $3000, 1994.
F. Principal Investigator, "Regulation of IL-8 gene expression: four years, GM50401 $870,822, 1995-1999.
G. Burroughs Wellcome Travel Fund, $3,890.00, 1995.

IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:

A. Director - Autopsy Service.
B. Director, Electron Microscopy Service.
C. Interviewer - Candidates for faculty, house officer, postdoctoral, and graduate student positions.
D. Funeral Director's Tea, January 1995.
E. Co-ordinator of call schedule, autopsy service.

MEDICAL SCHOOL/HOSPITAL:

A. Member, Medical School Admissions Committee.
B. Member, Michigan Cancer Center.
C. Reviewer, Biomedical Research Council grants.
D. Reviewer, Department of Surgery grants.

REGIONAL AND NATIONAL:

A. Co-Chair, Michigan Department of Public Health Postmortem Examination Workgroup.
B. Member, Executive Committee, Dementia Subcommittee, Chronic Disease Advisory Committee to the Michigan Department of Public Health.
C. Member, Dementia Subcommittee, Chronic Disease Advisory Committee to the Michigan Department of Public Health.
D. Deputy Medical Examiner for Washtenaw County.
E. Member, Executive Committee, Michigan Association of Medical Examiners.
F. Secretary, Michigan Association of Medical Examiners.
G. Member, Michigan Association of Medical Examiners, Shock Society, American Association of Immunologists, A. James French Society, American Society of Investigative Pathologists, United States-Canadian Academy of Pathology.

V. OTHER RELEVANT ACTIVITIES

A. Reviewer, Veterans Administration Merit grants.
B. Editorial Board: Shock
C. Reviewer:
   1. Laboratory Investigation.
   2. Journal of Immunology.
   5. Immunology and Infectious Diseases.
   8. Infection and Immunity.
  10. Shock.
  12. Journal of Immunology.

INVITED LECTURES/SEMINARS

1. Invited speaker “Update on Cytokines”, American Society of Clinical Pathology, October, 1994
9. Invited participant, Washtenaw County Medical Examiner’s Roundtable Discussion.
VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:


ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:


BOOKS AND CHAPTERS IN BOOKS


CHARLES W. ROSS, M.D.
ASSISTANT PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:
   A. Director, Clinical Flow Cytometry Laboratory.
   B. Diagnostic Surgical Pathology, Hematopathology.
   C. Clinical Hematology Laboratory.
   D. Clinical Molecular Diagnostics Laboratory.
   E. Hematopathology Consultation Cases (including M-Labs and Veterans Administration Hospital).

II. TEACHING ACTIVITIES:
   A. Medical Students and Dental Students:
      1. Lecturer, M2 Hematology Sequence.
      2. Laboratory Instructor, M2 Hematology Sequence.
      3. Lecturer, Dental School Pathology 630.
      4. Histopathology Laboratory Instructor, M1 Histology Course.
      5. Instructor, hematology portion of clinical pathology rotation, M4 clerkship in general pathology.
      6. Lecturer, Hematology Sequence, M4 clerkship in clinical pathology.
      7. Instructor, Hematology Sequence, summer program for minority M1 students.
   B. House Officers:
      1. Sign-out of bone marrow biopsies, aspirates, blood smears, and body fluids in Hematology Laboratory.
      2. Sign-out of lymph node biopsies and review of hematopathology consultation material.
      5. Hematopathology case conferences/bimonthly.
   C. Hematopathology teaching:
      1. Leukemia conference/biweekly.
      2. Lymphoma conference/weekly.
   D. Clinical Pathology Grand Rounds (two lectures).
   E. Clinical Pathology Case Conference/weekly.

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:
   A. Co-investigator, "The role of stromal dendritic cells in cutaneous B cell lymphoma;.
      University of Michigan Cancer Center Grant, March 1, 1994 through February 28, 1995.
PROJECTS UNDER STUDY:
A. Immunophenotyping in acute and chronic leukemias.
B. Phenotyping and genotyping of lymphomas.
C. Detection of immunoglobulin gene rearrangements by the polymerase chain reaction.
D. Effects of radioimmunotherapy in B-cell lymphoma.
E. Detection of infectious agents in lymphoid lesions by polymerase chain reaction.

IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:
A. Director, Clinical Flow Cytometry Laboratory.
B. Coordinator, CP resident teaching program.
C. Immunohistochemistry Utilization Committee.

REGIONAL/NATIONAL:
A. Member, Southwest Oncology Group Lymphoma Review Panel.
B. Ad hoc manuscript reviewer, American Society of Clinical Pathology.
C. Ad hoc manuscript reviewer, Blood.

V. OTHER RELEVANT ACTIVITIES:

INVITED LECTURES/SEMINARS:

VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:
ARTICLES SUBMITTED FOR PUBLICATION:


BOOKS AND CHAPTERS IN BOOKS:


ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREEED JOURNALS:


NATHANIEL H. ROWE, D.D.S., M.S.D.
PROFESSOR OF PATHOLOGY AND DENTISTRY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:
   A. Intradepartmental:
      1. Oral Pathology Service Clinic, University Hospitals, Department of Dentistry and
         Oral Surgery.
      2. Oral Pathology Biopsy Service Rotation, School of Dentistry.
      3. Dental Faculty Associates, School of Dentistry.
   B. Interdepartmental:
      1. Oral Pathology, clinical consultations on an as needed basis, the University of
         Michigan School of Dentistry Clinics.
      2. Consultant to Veterans Administration Hospital, Ann Arbor, Michigan.

II. TEACHING ACTIVITIES:

   FALL TERM, 1994:
   A. Oral Pathology, Course 516, to Freshmen Dental Students (course director).
   B. General Pathology Lab, Course 631, to Sophomore Dental Students.
   C. Oral Pathology, Course 824, to Senior Dental Students.
   D. Dental Hygiene, Course 220, to Sophomore Dental Hygiene Students.
   E. Graduate Perio Seminar, to Graduate Periodontal Students.

   WINTER TERM, 1995:
   A. Oral Pathology, Course 624, to Sophomore Dental Students.
   B. Oral Pathology, Course 625, to Sophomore Dental Students.
   C. Dental Hygiene, Course 293, to Dental Hygiene Students.
   D. Dental Hygiene, Course 313, to Dental Hygiene Students.

III. RESEARCH ACTIVITIES:

   SPONSORED SUPPORT:
   A. Project Director, "Oral Famiciclovir in the Treatment of Experimentally Induced Herpes
      Simplex Labialis", (15%), SmithKline Beecham Pharmaceuticals, total direct costs
      $180,000.00, 12/01/92-01/01/95.

IV. ADMINISTRATIVE ACTIVITIES:

   SCHOOL OF DENTISTRY COMMITTEES:
   A. Human Subjects Committee, School of Dentistry.
REGIONAL, NATIONAL AND INTERNATIONAL COMMITTEES:

STATE OF MICHIGAN:

A. Member, Ad Hoc Committee on Regulated Medical Waste Training Standards, Michigan Department of Public Health.
B. Member, Mercury Pollution Prevention Task Force, Michigan Department of Natural Resources.
C. Member, Council of Michigan Dental Specialty Presidents.
D. Member, Specialty Ad Hoc Committee, Michigan Board of Dentistry.
E. Member, State of Michigan Dental Specialty Task Force.
F. President, Michigan Society of Oral Pathology.
G. Member, AIDS Speaker's Bureau, Michigan State Medical Society.
H. Member, Advisory Committee, Special Office on AIDS Prevention and the Disease Surveillance Section, Michigan Department of Public Health.
I. Member, Tobacco-Free Michigan Action Coalition, Michigan Department of Public Health.
J. Consultant, Committee on Cancer and Infection Control, Michigan Dental Association.
K. Member, Special Committee on Health and Hazard Regulation, Michigan Dental Association.
L. Member, Research Screening Committee, Delta Dental Fund.
M. Member, Michigan Coalition on Smoking or Health.
N. Member, Coalition for Access to Health Care.
O. Consultant in Oral Pathology, U.S. Veteran's Administration Hospitals.

NATIONAL:

A. Civilian Professor and Consultant, Office of the Surgeon General, United States Army.
B. Member, Science Information Committee, American Association for Dental Research.
C. Chairman, Council on Dental Therapeutics, American Dental Association.

INTERNATIONAL:

A. External examiner in Oral Pathology, University of Malaysia, Kuala Lumpur.

V. OTHER RELEVANT ACTIVITIES:

EDITORIAL BOARDS:

A. Manuscript Consultant and Reviewer:

HONORS AND AWARDS:

CONTINUING EDUCATION:

B. “Diagnosis and Management of Soft Tissue Diseases”, Composite Study Club, Cleveland, Ohio, April, 13, 1995.
C. “Current Issues in Oral Pathology as They Relate to Dental Practice”, Brighton Dental Study Club, Brighton, Michigan, April 27, 1995.

VI. PUBLICATIONS:

None.

VII. MISCELLANEOUS:

PROFESSIONAL MEETINGS ATTENDED:

G. Various component Dental Societies, Michigan and Ohio.

VII. OFFICES IN PROFESSIONAL SOCIETIES:

BERTRAM SCHNITZER, M.D.
PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:

A. Director, Clinical Hematology Laboratory.
B. Director, University of Michigan Health Services Laboratories.
C. Diagnostic Surgical Pathology, Hematopathology (12 months).
D. Diagnostic Hematopathology Consultant, Veterans Administration Hospital.
E. Diagnostic Hematopathology of M-Labs clients.
F. Consultant for external and transfer Hematopathology cases.
G. Review of Southwest Oncology Group (SWOG) cases (circa 150/year).
H. Review of lymphoma cases entered into Children's Cancer Study Group protocols.

II. TEACHING ACTIVITIES:

MEDICAL SCHOOL/HOSPITALS:

A. Daily sign-out of bone marrow biopsies and aspirates.
B. Daily review of blood smears and body cavity and joint fluids in the Hematology Laboratory.
C. Daily review of in-house and consultation hematopathology cases and correlation with flow cytometry data and immunoperoxidase studies.
D. Daily review of outside consultation cases.
E. House Officer Conferences in Hematopathology. (Clinical Pathology Grand Rounds).
F. Biweekly House Office Hematopathology Conference.
G. Monthly lectures to house officers on acute leukemias and lymphomas.
H. Dental student lecture in Hematopathology.
I. Sophomore Medical student lectures in Hematopathology.
J. Sophomore Medical student laboratory sessions in Hematopathology.

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:
None.

IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:

A. Diagnostic Surgical Pathology, Hematopathology.
B. Diagnostic Clinical Pathology, Hematology.

MEDICAL SCHOOL/HOSPITALS:

A. Hematology Laboratory.
B. University of Michigan Health Service Laboratories.
REGIONAL AND NATIONAL:

A. Society for Hematopathology, Executive Committee (past President).
B. Southwest Oncology Group
   1. Lymphoma Subcommittee.
   2. Leukemia Subcommittee.
C. Children's Cancer Study Group: Review of in-house cases of lymphoma cases.
D. Regional Center Review Pathologist, Southwest Oncology Group.
E. Member, Review Panel for Lymphomas, Southwest Oncology Group.
F. Member, Hematology Council, American Society of Clinical Pathologists.
G. Member, Hematology Workshop Review Committee, American Society of Clinical Pathologists.
H. Member, Quality Management Hematopathology Expert Review Panel, American Society of Clinical Pathologists.
I. Chairman, Nominating Committee, Society for Hematopathology.

V. OTHER RELEVANT ACTIVITIES:

EDITORIAL BOARD:

A. Human Pathology. Designated reviewer.

INVITED LECTURES/SEMINARS:


VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:


BOOKS AND CHAPTERS IN BOOKS:


ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:


SUZANNE M. SELVAGGI, M.D.
ASSOCIATE PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994- 30 JUNE 1995

I. CLINICAL ACTIVITIES:

A. Cytopathology - Six months.
B. Gynecologic Pathology (transfer cases) - 12 months.
C. Consultation service, Department of Pathology:
   1. Cytopathology and Gynecologic Pathology - 12 months.
D. Necropsy Service - One week.

II. TEACHING ACTIVITIES:

A. Medical Students:
   2. Reproductive sequence lecture: Gynecologic Pathology, April 6, 1995.
B. Residents and Cytopathology Fellow:
   1. Sign-out; gynecologic and non-gynecologic cytology cases.
   2. Instruction in the performance and interpretation of fine needle aspirates.
   4. Lecture-Obstetric/Gynecologic Pathology- one hour.
   5. Consult Case Conference - 1/year.
C. Other Education Activities:
   1. Cytotechnologists-Cytopathology conferences - three/year.
   2. Gynecologic Oncology Tumor Board Conference-bimonthly.
   3. Obstetric/Gynecologic Colposcopy/Pathology Conference-monthly.

III. RESEARCH ACTIVITIES:

PROJECTS UNDER STUDY:

A. Cervical atypia in women with SLE treated with intravenous Cyclophosphamide (in conjunction with Dr. J. McCune, Dept. of Internal Medicine/Rheumatology).
B. Genital infections as risk factors for low grade squamous intraepithelial lesion progression (in conjunction with Dr. Barbara Reed, Dept. of Family Practice).
C. The significance of annual vaginal smears in females post hysterectomy for benign gynecologic disease (in conjunction with Dr. Micheal Fetters, Department of Family Practice.)
D. Cytologic features of atypical glandular cells of undetermined significance (AGUS) on cervical smears.

IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:
A. Co-Director, Cytopathology Laboratory.
B. Member, Resident Selection Committee.
C. Member, Internal Departmental Review Committee.
D. Member, Laboratory Services Program Planning Group, East Medical Campus.

MEDICAL SCHOOL/HOSPITAL:
A. Member, Quality Assurance/Quality Control Committee.
B. Member, M II Curriculum Committee-Reproduction Sequence.

REGIONAL AND NATIONAL:
A. Reviewer, Diagnostic Cytopathology.
B. Member, Cytopathology Committee, College of American Pathologists.
C. Member, Standards of Practice Committee, Papanicolaou Society of Cytopathology.
D. Member, Ovarian Cancer Task Force Committee, College of American Pathologists.
E. Member, Cervical Cancer Advisory Committee, Michigan Department of Public Health, Lansing, Michigan.

V. OTHER RELEVANT ACTIVITIES:

INVITED LECTURES/SEMINARS:
1. Squamous and Glandular Cell Atypia of Undetermined Significance, Guest Speaker; School of Cytotechnology, Henry Ford Hospital and Wayne State University, Detroit, Michigan, October 25, 1994.
3. Fine Needle Aspiration Cytology of Cystic Ovarian Lesions, Guest speaker; School of Cytotechnology, Henry Ford Hospital and Wayne State University, Detroit, Michigan, November 30, 1994.
5. ASCUS and Pitfalls in the Cytologic Diagnosis of Squamous Lesions of the Cervix, Guest Speaker; The Delaware Valley Society of Cytology, Wayne, Pennsylvania, April 22, 1995.

VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFERRED JOURNALS:


ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:


JACOB N. SHANBERGE, M.D.
CLINICAL PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:

A. Chief, Hemostasis and Coagulation Laboratory, William Beaumont Hospital, Royal Oak, Michigan.
B. Hematopathology, Bone Marrow Service, William Beaumont Hospital, Royal Oak, Michigan.
C. Clinical Consultant, Problems in Bleeding and Thrombosis, William Beaumont Hospital, Royal Oak, Michigan.

II. TEACHING ACTIVITIES:

B. Periodic lectures to ICU residents on blood component therapy, William Beaumont Hospital.
C. Clinical Pathology Grand Rounds, Vascular Abnormalities, University of Michigan.
D. Coagulation conferences for pathology residents, William Beaumont Hospital.
E. Seven lectures for Medical Technology Students - Coagulation and Hemostasis, William Beaumont Hospital.
F. Participated in Clinical Pathology Elective for Senior Medical Students - three didactic lectures on Approach to Bleeding Disorders plus case presentations and discussions, University of Michigan.
G. Weekly conferences on Coagulation, Thrombosis and Component Therapy for Blood Bank Residents, University of Michigan.

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:

A. Co-Investigator, "Protamine filter for extracorporeal heparin removal," University of Michigan College of Pharmacy, NIH-NHLBI HL-38353 (5%), $204,000, 01/01/95-12/31/95.

IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:

A. Administrator, Afternoon and Night Shifts of Clinical Laboratories, William Beaumont Hospital.

V. OTHER RELEVANT ACTIVITIES:

PROFESSIONAL ORGANIZATIONS:

A. College of American Pathologists, Member of FFP, Platelet and Cryoprecipitate Administration Practice Guideline Development Task Force.
B. Member, Transfusion Committee, William Beaumont Hospital.

VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:

SUSAN SHELDON, Ph.D.
ASSISTANT PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:
A. Clinical Cytogenetics Laboratory.

II. TEACHING ACTIVITIES:
A. Pathology house officers:
   1. Instruction in genetics and cytogenetics.
   2. Weekly review of bone marrow and relevant peripheral blood cases with house
      officers on Hematopathology rotation.
B. Medical Genetics fellows and medical students:
   1. Instruction in cytogenetics as it relates to both genetic and acquired disease.
C. Hematology/Oncology fellows:
   1. Instruction in cytogenetics as it relates to hematologic disease.
D. Clinical Pathology Grand Rounds, two lectures.
E. Pediatric Genetics Rounds, weekly participant, one lecture.
F. Leukemia Conference, biweekly.
G. Genetic Counseling graduate students:
   1. Two lectures.
   2. Individual tutorials.
H. Clinical Pathology M4 elective: eight hour lecture/laboratory.
I. Pathology Graduate Course, two lectures.

III. RESEARCH ACTIVITIES:

PROJECTS UNDER STUDY:
A. Role of the use of growth factors and mitogens for cytogenetic examination of
   hematologic malignancies in a clinical laboratory.
B. Use of growth factors to elaborate expression of a Philadelphia chromosome.
C. Use of intercalating agents to enhance resolution of chromosome bands.
D. Correlation of ploidy with expression of differential function.
E. Role of chromosome abnormalities in eosinophilia.
F. Fluorescence in situ hybridization for identification of marker chromosomes.
G. Fluorescence in situ hybridization as "interphase cytogenetics".

IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:
A. Director, Clinical Cytogenetics Laboratory.

REGIONAL AND NATIONAL:
A. Planning Committee, Cytogenetics Technologist Program, Eastern Michigan University.
V. OTHER RELEVANT ACTIVITIES:

INVITED LECTURES AND SEMINARS:

None.

VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:


ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:


EUGENE M. SILVERMAN, M.D.
CLINICAL ASSOCIATE PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:

A. Surgical Pathology Coverage of M-Labs cases, including most cases from:
   1. Albion Community Hospital, Albion, Michigan (including frozen sections).
   2. University of Michigan Health Service, non-dermatology cases, Ann Arbor, Michigan.
   3. Addison Community Hospital, Addison, Michigan.
   4. Other various clients including numerous satellite sites and University acquired practices.

B. Autopsy Coverage for Albion Community Hospital, Albion, Michigan, and Addison Hospital, Addison, Michigan.

C. Rotation with other staff pathologists:
   1. Coverage at the University Hospitals of weekend and weekday autopsy call.

D. Perform bone marrow aspiration and biopsies at Albion Community Hospital, Albion, Michigan.

E. Review peripheral blood smears at Albion and Addison Community Hospitals.

F. Clinical Pathology consults at Albion and Addison Community Hospitals and other M-Labs clients.

G. Surgical Pathology "Quickie" Anatomic Pathology consults for a growing list of pathologists at M-Labs client hospitals.

II. TEACHING ACTIVITIES:

A. Supervise residents in gross cutting of M-Labs cases and review microscopic material with residents in all interesting cases.

B. Read out some M-Labs and University of Michigan autopsies with residents.

C. In-service teaching to laboratory staffs at Addison and Albion Community Hospitals.

III. RESEARCH ACTIVITIES:

A. Investigation of hepatic fatty change in exogenous obesity and following gastric exclusion surgery.

B. Investigation of malacoplakia of the endometrium and vasitis nodose.

IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:

A. Director, M-Labs:
   1. Participate in planning, marketing, and implementation of M-Labs programs.
   2. Prepared plan for M-Labs expansion for presentation to University Hospitals. Planned and executed implementation of the expansion upon funding.
   3. M-Labs has experienced a 22% increase in net revenues from billings to clients for clinical pathology services and a 100% increase in net revenues from billings to patients for clinical pathology services. The number of M-Labs surgical
pathology cases has also increased by 22%. And, we will get another major client hospital beginning September, 1995.

4. Worked with a group of Michigan hospital laboratories to form Great Lakes Laboratory Network, which will have the capability to negotiate for statewide and, eventually, regional managed care contracts for laboratory services. M-Labs personnel now work in key committees of this group.

5. Developed a plan for provision of outpatient laboratory services by M-Labs to M-Care, employing a network of hospital laboratories. The network will distribute capitated revenues based on the relative volumes and complexities of testing of participant providers. Developed knowledge (through attendance at conferences and reading) in managed care with assistance from a medical technologist from our department. We have analyzed M-Care's historical outpatient laboratory utilization data and compared them with the Department of Pathology's costs to estimate an appropriate capitation rate. We have developed a listing of patient centers for the proposed M-Labs/M-Care Network of laboratory providers. This network will include M-Labs client hospitals currently in the proposed service area as well as other M-Care participating hospitals. Negotiations are currently underway with M-Care regarding service and quality issues as well as preliminary financial discussions.

B. Director, Laboratory at Albion Community Hospital, Albion, Michigan.
C. Chairman, Tissue/Transfusion Committee, Albion Community Hospital, Albion, Michigan.
D. Chairman, Infection Control Committee, Albion Community Hospital, Albion, Michigan.
E. Director of Laboratories, Addison Community Hospital, Addison, Michigan.
F. Chair, Tissue Transfusion and Infection Control Committees, Addison Community Hospital, Addison, Michigan. 9/92 -
G. Plan and review Laboratory QA and CQI at Albion and Addison Community Hospitals.
H. Review Quality Control of Clinical Pathology tests at Albion and Addison Community Hospitals.

V. OTHER RELEVANT ACTIVITIES:

None

VI. PUBLICATIONS:

I. CLINICAL ACTIVITIES:

A. 33% Neuropathology Service.

II. TEACHING ACTIVITIES:

A. Graduate students:
   1. Responsible during the current academic year for teaching activities for the following:
      a. Neuropathology 858 - six hours.
      b. CME accredited Conferences.
         Brain Conference - 40 hours.
         Neuromuscular Conference - 12 hours.
         Neuropath Conference for house staff - 16 hours.

2. Andrew Merry: Pfizer Clinical Research Fellowship, $32,000, 5/1/94-4/30/95.

B. Undergraduate students:
   1. Neuropathology (NSB 600) - 12 hours.

C. Fellows:
   1. Hiroshi Ito: Pfizer Clinical Research Fellowship, $32,000, 5/1/94-4/30/95.

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:

A. Sima, A.A.F. (PI, 40% effort), Tennekeon, G. and Rutkowski J.L., "Pathology of the Node of Ranview in Diabetic Neuropathy", RO1-DK 43884-04, National Institutes of Health, $1,472,882 for five years, 4/1/91-3/31/96.

B. Sima, A.A.F. (Co-Investigator, 5% effort), "Molecular Elements, Neurocircuits and Mental Illness", Watson, S. (PI), National Institute of Mental Health. $5,166,343 for five years, 12/1/91-11/30/96.

C. Co-Investigator, (5% effort), "Luteotrophic Actions of Insulin-like Growth Factor I", Keyes, L. (PI), National Institutes of Health, $404,922, 7/1/92-6/30/95.

D. Sima, A.A.F. (Co-Investigator, 10% effort), Greene, D.A. (PI), Michigan Diabetes Research and Training Center, National Institutes of Health, $1,250,000/annual, 5P60 DK20572-17, 12/1/92-11/30/97.


G. Sima, A.A.F. (Co-Investigator, 20% effort), Gilman, S., PI, Michigan Alzheimer's Disease Research Center, National Institutes of Health, $16,133,663, 06/01/94-05/31/99.
H. Sima, A.A.F. (Principal Investigator, 20% effort), Neuropathology Core, Michigan Alzheimer's Disease Research Center, National Institutes of Health, $225,027/year, 10/01/94-09/30/99.

I. Sima, A.A.F. (Principal Investigator, 10% effort), "Diffuse Lewy Body Disease (DLBD)", Michigan Alzheimer's Disease Research Center, National Institutes of Health, $105,600/year, 10/01/94-09/30/99.

J. Sima, A.A.F. (Principal Investigator), "Morphometric and NCV Evaluation of the Effect of Nimodipine on Diabetic Neuropathy in the Spontaneously Diabetic BB/W Rat", Miles Research, $50,000, 11/01/93-10/31/95.

K. Sima, A.A.F. (Co-Investigator, 5% effort), Project III "Histological Visualization and Assessment", of "Center for Neural Communication Technology", Anderson, D.J. (PI), National Institutes of Health, $204,280/year, 04/01/94-03/31/99.

IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:

A. CERAD representative, Michigan Dementia Program.

MEDICAL SCHOOL/HOSPITAL:

A. Member, Executive Committee, Michigan DRTC.
B. Director, Image Analysis Core, Michigan DRTC.
C. Director, Animal Core, Michigan DRTC.
D. Director, Neuropathology Core, MADRC.
E. Member, Executive Committee, MADRC.

REGIONAL/NATIONAL, INTERNATIONAL:

A. Member, Medical Advisory Board, Juvenile Diabetes Foundation International, New York, New York.
B. Executive Committee, Lessons from Animal Diabetes, Jerusalem, Israel.
C. Member, Council on Diabetic Complications, American Diabetes Association, New York, New York.
E. Member, Specialty Committee Neuropathology, Royal College of Physicians and Surgeons of Canada, Ottawa, Canada.
G. Scientific Advisor, Endocrinology Section FDA, Rockville, Maryland.
H. Member, Executive Committee, Wyeth Ayerst Inc.
I. Member, Executive Committee, Pfizer Pharmaceuticals.
J. Awards Committee, American Association of Neuropathologists.
K. Scientific Advisor, Hoffman-LaRoche, Basel, Switzerland.
M. Member, Executive Committee, International Diabetes Federation, Neuropathy Symposia, Kobe, Japan.
V. OTHER RELEVANT ACTIVITIES:

EDITORIAL BOARDS:

A. Diabetes Research and Clinical Practice.
B. Lessons from Animal Diabetes.
C. International Diabetes News.
D. International Journal of Diabetes (Regional Editor, North America).
E. Journal of Diabetic Complications.
F. Diabetes/Metabolism Review, Consulting Editor.
G. Ad hoc Reviewer for 29 journals (Neuropathology and Diabetes).
H. Study sections:
   1. Medical Research Council of Canada.
   2. Juvenile Diabetes Foundation International.

VI. INVITED LECTURES/SEMINARS:

5. Tokyo Metropolitan Diabetes Center, Tokyo, 1993.
9. Department of Medicine, Jikei University, Tokyo, Japan, 1994.
10. Department of Medicine, Shiga University, Shiga, Japan, 1994.
11. Department of Medicine, University of Buenos Aires, Argentina, 1994.
12. Department of Medicine, University of Oslo, Oslo, Norway, 1994.
14. Department of Medicine, University of Nagasaki, Nagasaki, Japan, 1994.

VII. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:

ARTICLES SUBMITTED FOR PUBLICATION:


5. Rosenblatt, D.E., Murphy, S. and Sima, A.A.F.: Comparison of protease mexin 1 immunolabelling of neuritic plaques with other staining methodologies. Submitted for publication.


**BOOKS/CHAPTERS IN BOOKS:**


**ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATION IN UNREFEREED JOURNALS:**


TIMOTHY P. SINGLETON, M.D.
ASSISTANT PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 AUGUST 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:
   A. Sign-out hematologic biopsies, peripheral blood smears and body fluids that are sent for differential counts.
   B. Quality control in immunohistochemistry laboratory.

II. TEACHING ACTIVITIES:
   A. Medical students, first two years:
      1. Lecture, Lymphoproliferative Disorders.
      2. Laboratory, Hematology.
   B. Medical students, last two years:
      1. Elective in pathology, laboratory session.
      2. Elective in pathology, review biopsies at sign-out.
   C. Residents and fellows in pathology and other departments:
      1. Review of biopsies at sign-out.
      2. Bimonthly unknown conference in hematopathology.
   D. Pathologists:

III. RESEARCH ACTIVITIES:
   A. Directing research immunohistochemistry.

IV. ADMINISTRATIVE ACTIVITIES:
   A. Assistant Director, Hematology Laboratory.
   B. Assistant Director, Immunohistochemistry Laboratory.
V. PUBLICATIONS:

ARTICLES PUBLISHED OR SUBMITTED FOR PUBLICATION IN PEER-REVIEWED JOURNALED:


ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:


3. Anderson, M., Sheldon, S., Singleton, T., Ross, C. and Schnitzer, B.: Demonstration of a t(2;5) is important in the diagnosis of Ki-1 anaplastic large cell lymphoma (ALCA) with unusual features. Presented at International Academy of Pathology, 1995.


JAMES E. SMOLEN, PH.D.
ASSOCIATE PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:
None.

II. TEACHING ACTIVITIES:

MEDICAL SCHOOL/HOSPITAL:
A. Pathology 850 - Spring Term.

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:
None.

PROJECTS UNDER STUDY:
A. Degranulations and Fusion in Neutrophils.

IV. ADMINISTRATIVE ACTIVITIES:

MEDICAL SCHOOL/HOSPITAL:
A. Admissions Committee.

REGIONAL AND NATIONAL:
A. Member, New York Academy of Sciences.
B. Member, American Society for Cell Biology.
C. Member, American Federation for Clinical Research.
D. Member, American Association of Pathologists.
E. Member, American Society of Hematologists.
F. Member, American Association for the Advancement of Science.
G. Veterans Administration - Infectious Diseases Merit Review Board.

V. OTHER RELEVANT ACTIVITIES:

EDITORIAL BOARDS:
A. Reviewer:
   2. Blood.
   3. European Journal of Hematology.
VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REVIEWED JOURNALS:

LLOYD M. STOOLMAN, M.D.
ASSOCIATE PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:

A. Flow Cytometry Diagnostic Service - interpretation of cell surface marker studies and cellular DNA analyses in the evaluation of hematologic disorders, primary and secondary immune deficiencies and autoimmune processes.

B. Autopsy service.

II. TEACHING ACTIVITIES:

A. Research supervisor for undergraduate, graduate, postdoctoral and research-track investigators:

1. Francis Wolber, Ph.D. candidate in Experimental Pathology (July, 1992 - present) - Ms. Wolber's thesis project focuses on the role of adhesion receptors in the recruitment of mononuclear leukocytes during the development of angiocrine pneumonitis in a murine model of chronic inflammation. Her study is based on *in vitro* modeling from this laboratory showing, for the first time, that the β1-integrin VLA-4 initiates the binding of lymphocytes to activated endothelium at physiologic levels of linear-shear stress without assistance from other adhesion receptors. This finding challenged the prevailing view that members of the selectin family must initiate contact before the integrins can act.

2. Vennay Reddy (Sept. 1992 - Aug. 1995) and Jan Lui (Sept. 1994-Aug. 1995), undergraduate students- projects focus on development of basic and advanced laboratory skills including immunostaining, operation of flow cytometer, data analysis and automated morphometric analysis. My laboratory provides instruction to one-two undergraduates/year willing to commit summers and five-ten hours per week during the school year. Eight undergraduate students have participated over the last eight years. These students enter the lab with no experience in bench research. They concentrate on development of laboratory skills and work together with the senior staff on ongoing projects. All graduates have either gone on to medical school or begun careers in research laboratories.

3. Neil Faulkner (summer, 1995), MD., Ph.D. student- Mr. Faulkner's project is based on recently completed studies by Randall Knibbs (see below) which identified the enzyme (fucosyl transferase) which regulates the synthesis of ligands for the selectins on the surface of T-cells. These ligands are essential for the recruitment of T-cells into sites of inflammation particularly in the skin. As a consequence, inhibition of synthesis may provide a novel, T-cell sparing approach to immunosuppression. Mr. Faulkner will determine whether the function of the enzyme, and thus the induced synthesis of selectin ligands, can be blocked through anti-sense inhibition of translation in an in vitro model system.

4. Randall Knibbs, Ph.D., Research Scientist (January, 1994-present) - Dr. Knibbs recently completed studies on the molecular regulation of selectin-ligand synthesis in T-cell. This investigation identified a member of the fucosyl-transferase family, termed Fuc-T7, as the rate limiting step in the synthesis of selectin ligands during antigen-driven T-cell proliferation. The selectin ligands
are essential for the recruitment of T-cells into sites of chronic inflammation thus contribute to the pathophysiology of numerous chronic inflammatory diseases. T-cells are unique in that these ligands are synthesized only in response to antigen-driven proliferation. As a consequence, the discovery of a rate limiting enzyme provides a novel target for T-cell sparing immunosuppression. Dr. Knibbs will next focus on the structure of the carbohydrate portion of the selectin ligands on T-cells.

B. Co-director, Hematology Sequence in Component II - designed/administered pathology component of sequence and co-directed course with Roland Hiss, M.D. (Department of Internal Medicine). Fall, 1993 was the inaugural flight of this sequence. As a consequence, the co-directors devoted many hours to extensive revision of content, structure, laboratories and examinations. The sequence received one of the highest ratings (both student and faculty) for any sequence in Component II.

C. Laboratory Instructor, Component II - joined group of ten pathology instructors as permanent faculty in the course. We are currently the only instructors in any department with teaching activities throughout the entire 2nd year curriculum. The group provides sequence-specific laboratory instruction, general reviews at intervals throughout the year and quality-control for laboratory examinations in all sequences.

D. Section leader, Hematopathology Section of Component II - several sequences use specialists to cover pertinent laboratories. This is in addition to serving as an instructor in the general pathology laboratories of Component II.

E. Lecturer, Experimental Pathology (Pathology 580 and 581).

F. Daily sign-out of cases in flow cytometry and hematopathology with pathology residents and medical students (one week per month).

G. Attending, Autopsy Service (one week per year).

H. Preceptor, Senior medical student (M4) elective in Pathology (one month).

I. Speaker, Rheumatology, Nephrology, Hematology/Oncology and Cancer Center Research Seminars.

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT (80% of allowed salary):

A. Principal Investigator, project 4- "Leukocyte-Microvascular Adhesive Interactions in Rheumatoid Arthritis", NIH, P50AR41703 (SCOR in Rheumatoid Arthritis; Josef Holoshitz, M.D., program director), 25% effort, $398,269; 30 September 1992 - 31 August 1995.

B. Principal Investigator, project 3- "Selectin Binding Sites on Leukocytes and Inflamed Venules", NIH, PO1AI33189 (Oligosaccharides as Anti-inflammatory Agents; PA Ward, Program Director), 20% effort, $347,950; 1 September 1992- 31 August 1996.

C. Co-Principal Investigator, (J. Curtis, Principal Investigator), project 4- "Mechanisms of Lymphocyte Recruitment to the Lungs", NIH, P50HL46487 (SCOR in Pulmonary Fibrosis; G. Toews, M.D., Program Director), 15% effort, $650,000; 1 December 1991 - 31 November 1996.

D. Principal Investigator, project 5- "Mononuclear Leukocyte Adhesion and Recruitment in Chronic Inflammatory Disease" - NIH, PO1, HL31963 (Inflammatory Cells and Lung Injury; PA Ward, M.D., Program Director), 20% effort, $500,000; 1 February 1994 - 29 January 1999.

PROJECTS UNDER STUDY:

A. Inhibition of selectin-ligand synthesis during T-cell activation: This projects builds on the discovery of a rate limiting enzyme in the synthesis of selectin ligands on T-cells.
Anti-sense approaches will be tested for their ability to inhibit this enzyme's activity and thus the synthesis of selectin ligands. In addition, proximal regulatory steps in the induction of enzyme activity will be identified. These studies will identify pathways critical to the recruitment of T-lymphocytes into sites of chronic inflammation thus potential targets for novel anti-inflammatory therapy.

B. Identification and structural characterization of selectin ligands on T-cells: Studies in this area have been hampered by the difficulty of collecting sufficient starting material for structural studies on authentic ligands. We have overcome this obstacle through the development of a growth protocol which allows the production of $>10^{11}$ human T-cells expressing high levels of functional ligands for the selectins. Viable lymphocytes from any source can be used with a 100-1000 fold increase in cell number achieved over two weeks. These ligands are indistinguishable from those on circulating T-cells. This growth protocol will permit, for the first time, detailed structural analysis of selectin ligands on human T-cells.

C. Utilization of endothelial adhesion receptors during recruitment of adoptively-transferred, ex vivo expanded lymphocytes into host tumors: This project builds on the discovery that the protocols used to expand vaccine-derived and tumor-infiltrating lymphocytes prior to infusion into patients dramatically alter the prevalence and function of adhesion receptors used by the infused cells to gain access into tissues. We have now determined that current protocols generate cells which require expression of adhesion molecules in the selectin family for optimal recruitment. However, studies in animal models show virtually no induction of these molecules in the vascular beds of experimental tumors. If this is true in human neoplasms then a “mismatch” between the adhesion molecules on the infused cells and the adhesion molecules expressed on the vasculature in the tumor bed may account for the poor recruitment of cells into tumors during adoptive immunotherapy. Future studies will determine the expression of adhesion molecules in the vasculature of human tumors and use animal models to determine whether augmentation of selectin expression in the tumor bed will enhance recruitment of adoptively transferred cells.

IV. ADMINISTRATIVE ACTIVITIES:

A. Co-Director Flow Cytometry Laboratory - manage the development and maintenance of the analytic systems. This system was designed to meet the needs of both the clinical laboratories and research investigators.

B. Co-Director, Hematology Sequence in Component II - responsible for design and implementation of pathology component of this sequence.

C. Co-Chair, Selectin Workshop, International Congress of Immunology, San Francisco, California, 1995.

V. OTHER RELEVANT ACTIVITIES:

INVITED LECTURES/SEMINARS:

EDITORIAL BOARDS:
A. Journal of Clinical Investigation.
B. Journal of Laboratory Investigation.
C. American Journal of Pathology.
D. Journal of Immunology (Associate Editor).
E. Journal of Experimental Medicine.
F. Journal of Biological Chemistry.
G. Nature.

VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFERRED JOURNALS:


MANUSCRIPTS SUBMITTED/IN PREPARATION FOR PUBLICATION:


ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:


DENISE SULAVIK, M.D.  
LECTURER  
DEPARTMENT OF PATHOLOGY  
ANNUAL DEPARTMENTAL REPORT  
1 JULY 1994 - 30 JUNE 1995

I.  **CLINICAL ACTIVITIES:**
A. Diagnostic Surgical Pathology, Hematopathology.
B. Clinical Hematology Laboratory.
C. Clinical Flow Cytometry Laboratory.
D. Hematopathology Consultation Cases (including M-Labs).

II.  **TEACHING ACTIVITIES:**
A. House Officers:
   1. Sign-out of bone marrow biopsies, aspirates, blood smears and body fluids in
      Hematology Laboratory.
   2. Sign-out of lymph node biopsies and review of hematopathology consultation
      material.
B. Medical Students:
   1. Laboratory instructor, M4 Clerkship in Clinical Pathology.
C. Hematopathology Teaching:
   1. Lymphoma conference/weekly.

III.  **RESEARCH ACTIVITIES:**

PROJECTS UNDER STUDY:
A. Histomorphologic, flow cytometric and cytogenetic variances of blasts in a treated acute
   lymphoblastic leukemia.

IV.  **ADMINISTRATIVE ACTIVITIES:**
None.

V.  **OTHER RELEVANT ACTIVITIES:**
None.

VI.  **PUBLICATIONS:**
None.
GERD O. TILL, M.D.
PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:
   A. None.

II. TEACHING ACTIVITIES:
   A. General Pathology for Dental Students and Graduate Students (Lecture Path 630/580).
      Lectures on inflammation and wound healing.
   B. Aresh Monem - Pharm. D. - Research.
   C. Hagen Schmal - Medical Student - Research.
   D. Dorothy Pao - Undergraduate Student - Research.
   E. Minh Nguyen - Undergraduate Student - Research.

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:
   A. "Role of Cytokines and Adhesion Molecules in Thermal Injury", (NIH GM-48477),
      Principal Investigator.
   B. "Lung Injury Produced by Oxygen Metabolites", (NIH GM-29507), Co-Principal
      Investigator with Dr. P.A. Ward.
   C. "The Effect of Bradykinin Antagonists on CVF-Induced Lung Injury", Scios Nova Inc.,
      Palo Alto, California, Principal Investigator.

PENDING SUPPORT:
   A. None.

PROJECTS UNDER STUDY:
   A. Role of leukocytes, inflammatory mediators, and adhesion molecules in thermal trauma-
      related cell and tissue injury.
   B. Pathomechanisms of ocular ischemia-reperfusion injury.
   C. Functional responses of retinal pigment epithelial (RPE) cells in vitro.
   D. Role of bradykinin in experimental acute lung injury.
IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:

A. Interviewed candidates for faculty and postdoctoral positions.
B. Interviewed candidates for Medical Scientist Training Program.
C. Participation in undergraduate research program.

MEDICAL SCHOOL/HOSPITAL:

A. Interviewed candidates for faculty positions.
B. Consultant for clinical research programs.
C. Reviewer of intra-departmental grant proposals.

REGIONAL AND NATIONAL:

A. Member of the Honors and Awards Committee of the American Shock Society.

V. OTHER RELEVANT ACTIVITIES:

EDITORIAL BOARDS:

A. Member Editorial Advisory Board Immunobiology.
B. Reviewer for the following scientific journals:
   3. Cardiovascular Research.
   9. Laboratory Investigation.
   10. Shock.

INVITED LECTURES/SEMINARS:

1. Invited speaker at the Fifth International Workshop on Intensive Care and Emergency Medicine, Schloss Wilhelminenberg, Vienna, Austria, December 8-10, 1994.
2. Invited speaker at the Fifth Vienna Shock Forum, Vienna, Austria, May 7-11, 1995.
VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREEED JOURNALS:


BOOKS AND CHAPTERS IN BOOKS:

ABSTRACTS, BOOK REVIEWS, LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:


JAMES VARANI, PH.D.
PROFESSOR OF MICROBIOLOGY AND IMMUNOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1993 - 30 JUNE 1994

I. CLINICAL ACTIVITIES:
   A. None.

II. TEACHING ACTIVITIES:
   A. Lecturer, Pathology 581.
   B. Member, Dissertation Committee of Douglas F. Gibbs (Pathology).
   C. Member and Co-mentor, Dissertation Committee of Mr. Zwehi Song (Biological Chemistry).
   D. Member, Dissertation Committee of Mike Model (Biophysics).
   E. Member, Dissertation Committee of Mr. Todd Kroll (Pharmacology - M.D./Ph.D.).
   F. Mentor for students who worked in my laboratory over the past year including one postdoctoral fellow, five undergraduate students, two graduate students and one high school student.
   G. Mentor, 1993 Minority Student Research Opportunities Program.

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:
   A. Principal Investigator, "Small Bead Microcarriers", NIH CA61616, 7/1/93-12/31/93.
   B. Principal Investigator, "Peptide-coated Microcarrier for Enhanced Adhesion", NIH, CA58154, 9/1/92-3/30/95.
   C. Co-Investigator, "Protease-Oxidant Interactions in Lung Inflammation", NIH HL42607, 7/1/89-6/30/94.
   D. Principal Investigator on Project 10, "Retinoic Acid and Cells of the Skin", Johnson and Johnson Corporation, 7/1/91-6/30/2001.
   E. Principal Investigator, "Perfluorocarbon and Acute Lung Injury", Alliance Pharmaceutical Co., 7/1/94 -

PROJECTS UNDER STUDY:
   A. The development of substrates for optimum growth of cells in large-scale culture.
   C. The role of thrombospondin in the biology of human squamous carcinoma cells.
   D. Influence of retinoic acid on proliferation and matrix production by dermal fibroblasts and epidermal keratinocytes in monolayer culture and organ culture.
   E. Mechanisms of vascular cell injury in lung inflammation and kidney inflammation.
   F. Role of terminal α-galactosyl residues in cancer metastasis.
   G. Mechanisms of squamous epithelial cell invasion.
IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:

A. Member, Department of Pathology Advisory Committee on Appointments, Promotions and Tenure.
B. Member, Department of Pathology Space and Research Committee.
C. Member, Department of Pathology Graduate Program Committee.
D. Member, Department of Pathology Human Resource Committee.
E. Member, Department of Pathology Graduate Program Comprehensive Exam Committee.
F. Director, Pathology Research Seminar Series.

MEDICAL SCHOOL/HOSPITAL:

A. Member, Medical School Committee on Summer Research Opportunities.
B. Program Director, University of Michigan Cancer Center Program on Tumor Cell Metastasis and the Extracellular Matrix.
C. Member, University of Michigan Cancer Center Basic Research Committee.
D. Member, Cancer Biology Research Training Grant Scientific Steering Committee.
E. Member, Department of Dermatology Research Training Grant Steering Committee.

REGIONAL AND NATIONAL:

A. Editorial Board of Invasion and Metastasis.
B. Manuscript Reviewer for:
   5. Experimental Cell Research.
   7. Journal of Immunology.
   10. Laboratory Investigation.
   11. Invasion and Metastasis.

C. Grant reviewer for:
   1. The Medical Research Council of Canada.
   2. Veterans Administration.
   3. The Johns Hopkins Center for Alternatives to Animal Research.

V. OTHER RELEVANT ACTIVITIES:

INVITED LECTURES/SEMINARS:

1. Invited Speaker, Department of Microbiology and Immunology University of North Dakota, Grand Forks, North Dakota, September 15, 1993.
2. Invited Speaker, First International Conference on Advanced Pharmaceutical Substance Screening, Vienna, Austria, November 29-December 3, 1993.
3. Invited Speaker, Division of Hematology and Oncology, Department of Medicine, Emory University, February 8, 1994.

PATENTS:
1. Combination Peptide Microcarriers for Enhanced Cell Attachment, Pending.
2. Organ-Cultured Skin for Assessment of Toxicological/Pharmacological Effects, Pending.

VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:


**BOOKS AND CHAPTERS IN BOOKS:**


ABSTRACTS, BOOK REVIEWS, LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:

I. CLINICAL ACTIVITIES:

A. These have been chiefly related to administrative responsibility for all clinical service functions of the Department.

B. Autopsy Service.

II. TEACHING ACTIVITIES:

A. Graduate students:
   1. Responsible during the current academic year for teaching activities for the following:
      a. Beatrice Beck-Schimmer, M.D., Postdoctoral Fellow.
      b. Michael J. Eppinger, M.D., Postdoctoral Fellow.
      c. Hangjun Duan, Pathology Graduate Student.
      d. Kimberly E. Foreman, Ph.D.
      e. Jami Foreback, Pathology Graduate Program Student (MSTP student) (mentor).
      f. Teletha Gipson, Ph.D., Postdoctoral Fellow.
      g. Elizabeth Schmid, M.D., Postdoctoral Fellow.
      h. Ralph C. Schimmer, M.D., Postdoctoral Fellow.
      i. Hagen Schmal, M.D., Postdoctoral Fellow.
      j. Thomas Shanley, M.D., Postdoctoral Fellow.
      k. Roscoe Warner, Ph.D., Postdoctoral Fellow.
      l. UROP Undergraduate Students.
      m. Morgan Althoen, Medical Student.
      n. Ankit Patel, Medical Student.
      o. Gregory S. Shannon, Honors Student.
   2. Indirect supervision of four Research Scientists.

B. Undergraduate students:
   1. Lecture, College Honors Seminar 250, March 29, 1994, three hours.

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:

A. Principal Investigator, "Lung Immunopathology" (Training Grant), NHLBI-NIH-HL-07517 (5%), $288,584/year ($2,693,183/ten years), June 1, 1986 - May 31, 1996.


C. Principal Investigator, "Inflammatory Cells and Lung Injury", NHLBI-HL-31963 (29%), Section I - $183,141, Core A - $36,462/year ($1,010,734/five years), March 1, 1989 - February 28, 1994.

E. Principal Investigator, "Oligosaccharides as Inflammatory Agents" NIH-AI33189-01 (Core - 10%; Administrative Core - 5%), $449,661/year ($2,192,155/four years), September 1, 1992-June 30, 1996.

PENDING:

A. Co-Investigator, "The Role of Cytokines and Adhesion Molecules in Thermal Injury", (5%), $178,772/year ($1,384,651/five years).

IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:

A. Chief, Section of General Pathology.
B. MSP Executive Committee.
C. Pathology Associates.

MEDICAL SCHOOL/HOSPITAL:

A. Dean's Cabinet, 1993--.
B. Advisory Committee for the Howard Hughes Medical Institute, 1984--.
C. Clinical Council, 1993--.
D. Conflict of Interest Committee, 1993--.
E. Dean's Advisory Council, 1985--.
F. Geriatric Center Executive Committee.
G. Howard Hughes Medical Institute Dean's Advisory Committee.
H. Internal Medicine Advisory Committee for the University of Michigan George M. O'Brien Renal and Urologic Center, 1991--.
I. Michigan Eye Bank Research Review Committee, 1980--.
J. Presidential Initiatives Fund, The University of Michigan, March, 1987--.
K. Undergraduate Research Opportunity Program, University of Michigan, 1992--.
L. University of Michigan Cancer Center Executive Committee.

REGIONAL AND NATIONAL:

A. American Association for Advancement of Science.
B. American Association of Immunologists.
C. American Association of Pathologists.
   1. Nominating Committee, 1985-present.
   2. Executive Committee, Intersociety Pathology Council and Universities Associated for Research and Education in Pathology, Inc.
   3. Representative to the Universities Associated for Research and Education in Pathology, 1988-89.
   5. Future Directions Committee, 1989--.
D. American Board of Pathology, effective January 1, 1988:
   1. Vice-President, 1995
   2. Trustee, 1980--.
      Vice-Chairman.
   4. Anatomic Pathology Examination Committee, 1988--.
5. By-Laws Committee, 1988--.
6. Examination Evaluation Committee, 1988--.
7. Professional Qualification/Competence Committee, 1988--.
8. ABP/ABPRF Research Committee, 1989--.
9. Residency Review Committee for Pathology.
11. Planning and Development Committee, 1992--.
12. Test Committee for Molecular Pathology, 1993--.

E. American Federation for Clinical Research.
F. American Heart Association, Cardiopulmonary Division.
G. American Lung Association.
H. American Society for Clinical Investigation.
I. American Pathology Foundation.
K. Association of American Physicians.
L. Association of Pathology Chairmen.
M. Center for Alternatives to Animal Testing, Johns Hopkins University.
N. A. James French Society of Pathologists, 1988--.
O. Health Policy Agenda for the American People, Advisory Committee.
P. Institute of Medicine, July 1, 1990.
Q. United States and Canadian Academy of Pathology, Inc.
R. Michigan Society of Pathologists.
S. Michigan Thoracic Society, 1988--.
T. National Research Council
   1. Institute of Laboratory Animal Resources.
   2. Committee on Human Rights, Correspondent.
U. The Oxygen Society, 1988--.
W. Society of Medical Consultants to the Armed Forces:
X. Universities Associated for Research and Education in Pathology, Inc., Board of Directors.

V. OTHER RELEVANT ACTIVITIES:

EDITORIAL BOARDS:

A. American Journal of Pathology, Editorial Board, 1982--.
B. American Review of Respiratory Diseases, Consulting Editor, 1977--.
C. Archives of Pathology and Laboratory Medicine, Reviewer, 1973--.
D. Arthritis and Rheumatism, Consulting Editor, 1975--.
E. Biological Signals, Consulting Editor.
F. Clinical Immunology and Immunopathology, Consulting Editor, 1977--.
G. CRC Critical Reviews in Free Radical Research, Advisory Board, 1986--.
H. CRC Critical Reviews in Toxicology, Advisory Board, 1986--.
I. Experimental Cell Research, Consulting Editor, 1980--.
J. Experimental Lung Research, Consulting Editor, 1980--.
K. Human Pathology, Consulting Editor, 1980--.
L. Infection and Immunity, Editorial Board, 1978--.
M. Journal of Clinical Investigation, 1982--.
N. Journal of Critical Care, Editorial Board.
O. Journal of Experimental Cell Research, Consulting Editor.
P. Journal of Experimental Lung Research, Consulting Editor.
Q. Journal of Experimental Pathology, 1986--.
R. Journal of the Reticuloendothelial Society, Consulting Editor.
S. Laboratory Investigation, Editorial Board, 1981--.
T. Toxicologic Pathology, Editorial Board, 1988--.

INVITED LECTURES/SEMINARS:

10. Invited Lecturer, "Cytokines, Adhesion Molecules and Inflammatory Lung Injury", Osaka University Medical School, Osaka, Japan, November 22-23, 1994.
17. Visiting Professor, "Regulation of Lung Inflammation", Department of Pathology Research Seminar, University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma, March 24, 1995.
18. Co-Chair Symposium with Dr. Charles N. Serhan, "The Role of Reactive Lipids and Nitrogen Metabolites in Inflammation", at the Experimental Biology '95 Meeting in Atlanta, Georgia, April 12, 1995.
19. 1995 Ecker Lecturer, "Role of Complement and Cytokines in Endothelial Injury", Department of Pathology, Case Western Reserve University, Cleveland, Ohio, April 18, 1995.

VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:


68. Ward, P.A.: Oxidant damage. Submitted to the Task Force on Allergy and Immunology, National Institutes of Health.

BOOKS/CHAPTERS IN BOOKS:


ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:


JEFFREY S. WARREN, M.D.
ASSOCIATE PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:

A. Director, Division of Clinical Pathology/Clinical Laboratories, May 1993-present.
B. Director, Clinical Immunopathology Laboratory; September 1989-present.

II. TEACHING ACTIVITIES:

A. "Current Topics in Immunopathology" series: pathology residents, M4 students; (25 contact hours).
B. Clinical Pathology Grand Rounds:
   1. "The Inflammatory Response" (1/6/95).
C. Immunopathology journal club: EMU medical technology students, medical technologists, pathology residents (one hour; biweekly, September-June).
D. Immunopathology signout: pathology residents, M-4 medical students, EMU medical technology students (3x/week; 26 weeks/year).
E. M-4 Laboratory Medicine Elective; 4th year medical students, four week block; (eight contact hours).
F. M-1 Histopathology sequence; 1st year medical students; (12 contact hours).
G. Supervision of Research activities for:
   1. Kenneth Kilgore, Ph.D. (postdoctoral fellow); (1/1/94-present) (supported by American Heart Association of Michigan Fellowship).
   2. Joseph Shen (interflex student); (5/10/93-7/30/93) (sponsored by American Heart Association of Michigan summer fellowship); (5/10/94-8/15/94) (sponsored in Student Biomedical Research Program).
   3. Brigitt Casselman (Undergraduate, University of Michigan); (5/1/94 - 4/30/95).
   4. Anu Malani (Undergraduate, University of Michigan); (9/1/94-5/30/95).
   5. Kirk Wahtera (Undergraduate, University of Michigan); (10/1/94-4/30/95).
   6. Joseph Stratton (Undergraduate, University of Michigan); (12/15/94-4/30/95).
   7. Douglas Allen (Undergraduate, University of Michigan); (9/1/94-present).
   8. Valary Evans (Undergraduate, University of Michigan); (9/1/94-present), (sponsored in Howard Hughes Medical Institute Student Fellowship Program).
   9. Jennifer Beyer (Undergraduate, Texas Technical University); (5/1/95-present).
   10. Vipul Maheswara (Undergraduate, University of Michigan); (6/15/95-present).
H. Preliminary Examination Committees:
   1. Michael Gralinski, Department of Pharmacology, University of Michigan Medical School (9/15/94).
   2. James Park, Department of Pharmacology, University of Michigan Medical School (6/2/95).

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:

A. Principal Investigator, "Monocyte Chemoattractant Protein 1 in Pulmonary Granulomatosis", NIH (RO1-HL48287), (40% effort), $470,623; direct costs, 4/1/92-

B. Co-Investigator. "Monocyte Chemoattractant Protein 1 in Corpus Luteum", NIH (RO1-HD33478), (10% effort), $651,215; direct costs. Landis Keyes, Ph.D., Department of Physiology, University of Michigan, Principal Investigator (Submitted 7/1/95).

PROJECTS UNDER STUDY:

A. Pathogenesis of endotoxic shock in mice with homozygous C5 deficiency.
B. Role of neutrophil-derived mediators in MCP-1-mediated pulmonary granulomatous vasculitis.
C. Modulation of proinflammatory endothelial cell functions by the membrane attack complex (MAC).
D. Monocyte activation by ANCA.
E. Role of MCP-1 in luteolysis (collaboration with Landis Keyes, Ph.D., Department of Physiology, University of Michigan Medical School).
F. Role of MCP-1 in PAN-induced interstitial nephritis (collaboration with Allison Eddy, M.D., Department of Pediatrics, University of Toronto, Canada).
G. Pathogenesis of extrinsic allergic encephalomyelitis (collaboration with Joan Berman, Ph.D., Department of Neurology, Albert Einstein, NY).
H. Ischemia-reperfusion injury in perinatal rat brain (collaboration with Faye Silverstein, M.D., Departments of Pediatrics and Neurology, University of Michigan Medical School).
J. MCP-1 in arterialized vein grafts (collaboration with John Hoch, M.D., Department of Surgery, University of Wisconsin, Madison, WI).
K. P-selectin antagonists in glucan-induced granulomatous vasculitis (collaboration with Mark Anderson, Ph.D., GlycoMed Corp., Alameda, CA).
L. MCP-1 antagonists in granulomatous vasculitis (collaboration with Kurt Jarnagin, Ph.D, Roche Bioscience, Palo Alto, CA).
M. Role of MCP-1 in peripheral nerve regeneration (collaboration with Marina Mata, M.D., Department of Neurology, University of Pittsburgh, PA).

IV. ADMINISTRATIVE ACTIVITIES:

MEDICAL SCHOOL:

B. Chairman, East Medical Campus Laboratory Program Planning Committee, 1994-1995.
C. Clinical Contracting Strategic Advisory Group, University of Michigan Medical Center, 1994-present.
D. Dean's Advisory Committee (ad hoc substitute for Dr. Ward), 1994-present.
E. Incentive Task Group, advisory to Medical Service Plan Executive Committee, 1995-present.

DEPARTMENTAL:

A. Interviewer of Pathology Residency Candidates, 1989-present.
B. Interviewer of Pathology Graduate Program Candidates, 1990-present.
C. Selection Committee for Pathology Residents, 1991-present.
D. Coordinator for Revised Resident Training in Clinical Pathology, 1992-present.
E. Preclinical Advisory Program, 1992-present.
F. Chairman, Laboratories Communications Committee, 1993-present.
G. Chairman's Advisory Committee, 1993-present.
I. Chairman, Department of Pathology Quality Assurance Committee, 1993–present.
J. Chairman, Utilization Management Committee, Department of Pathology, 1995–present.

REGIONAL AND NATIONAL:

A. Ad hoc referee for:
   2. Laboratory Investigation.
   3. Human Pathology.
   5. Lung.
   8. Pediatric Research.
   10. American Review of Respiratory Disease.
   16. Clinical Immunology and Immunopathology.
   18. Journal of Immunology.
   20. Reviews of Infectious Diseases.
   22. Experimental Lung Research.
   24. Clinical Infectious Diseases.
   27. Biological Signals.
   28. Metabolism.


D. Ad hoc reviewer: Special Emphasis Panel; Request for Applications "Mechanisms of Post Bone Marrow Transplantation Injury"; National Institutes of Health (NHLBI); Bethesda, MD; April 5–6, 1995.

V. INVITED LECTURES/SEMINARS:

4. "Clinical Immunopathology Laboratory Assays", Rheumatology Division, Department of Internal Medicine, University of Michigan, Ann Arbor, Michigan, December 17, 1994.
VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:


ARTICLES SUBMITTED FOR PUBLICATION:


BOOKS/CHAPTERS IN BOOKS:

ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFERRED JOURNALS:


LEE WEATHERBEE, M.D.
ASSOCIATE PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:

A. Chief, Pathology and Laboratory Medicine Service, Department of Veterans Affairs Medical Center, Ann Arbor, Michigan, and Outpatient Clinic, Toledo, Ohio.
B. Surgical Pathology, Department of Veterans Affairs Medical Center.
C. Autopsy Pathology, Department of Veterans Affairs Medical Center.
D. Cytopathology - occasional coverage, Department of Veterans Affairs Medical Center.

II. TEACHING ACTIVITIES:

A. Director of program for house officers at Department of Veterans Affairs Medical Center in surgical pathology, autopsy pathology, and electives.
B. Clinicopathologic conference - monthly, Department of Veterans Affairs Medical Center.
C. Department of Veterans Affairs Medical Center Tumor Board - weekly.
D. Dental Student lectures (three) in bone pathology.
E. Medical student - second year pathology laboratory.
F. Medical student - fourth year rotation at the Department of Veterans Affairs Medical Center.
H. Gross pathology seminar for house officers at University of Michigan.
I. Bone pathology seminars, University of Michigan.
J. Medical student - Musculoskeletal Sequence Coordinator, University of Michigan.

III. RESEARCH ACTIVITIES:

COOPERATIVE STUDIES:

A. Ongoing: With Environmental Epidemiology Service, Department of Veterans Affairs, Agent Orange and non-Hodgkin's lymphoma and Hodgkin's disease.

SPONSORED SUPPORT:

None.

IV. ADMINISTRATIVE ACTIVITIES:

MEDICAL SCHOOL/VETERANS AFFAIRS MEDICAL CENTER:

A. Overall responsibility for Department of Veterans Affairs Medical Center Pathology and Laboratory Medicine and for the laboratory at Department of Veterans Affairs Outpatient Clinic, Toledo, Ohio.
B. Executive Faculty, The University of Michigan Medical School.
C. Admissions Committee, The University of Michigan Medical School.
D. Clinical Executive Board, Department of Veterans Affairs Medical Center.
E. Dean's Committee, Department of Veterans Affairs representative.
F. Quality Assurance Board, Department of Veterans Affairs Medical Center.
G. Professional Standards Board, Department of Veterans Affairs Medical Center.
H. Radiation Safety Committee, Department of Veterans Affairs Medical Center.
I. Pharmacy and Therapeutic Committee, Department of Veterans Affairs Medical Center.
J. Resident Selection Committee, University of Michigan Department of Pathology.

REGIONAL AND NATIONAL:
A. Red Cross Medical Advisory Board, Southeastern Michigan Region.

V. OTHER RELEVANT ACTIVITIES:
A. Inspector for College of American Pathologists Inspection and Accreditation Program.
B. Deputy Medical Examiner, Washtenaw County.
C. Fellow, College of American Pathologists.

VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:
None.
BERNARD WEISS, M.D.
PROFESSOR OF PATHOLOGY OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:

None.

II. TEACHING ACTIVITIES:

A. Organizer and discussion leader of seminar on Ethics in Science - Cellular and Molecular Biology Training Program.
B. Supervision of three postdoctoral fellows and one graduate student.
C. Member, Program Committee - Cellular and Molecular Biology Training Program.
D. Program Committee, Graduate Program in Pathology.
E. Chairman, Examination Committee, Graduate Program in Pathology.
F. Member, dissertation committees for two graduate students.

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:

A. Principal Investigator, "Prevention and Repair of DNA Damage in Bacteria", National Science Foundation, DMB-8922562.
B. Principal Investigator, "Endonuclease V of Escherichia coli", National Institutes of Health, NIEHS, RO1 ES06047.

PROJECTS UNDER STUDY:

A. Alternate pathways of thymidylate metabolism.
B. A superoxide response regulation of Escherichia coli.
C. A DNA repair endonuclease of Escherichia coli.

IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:

A. Co-director, Graduate Training Program in Pathology.
V. OTHER RELEVANT ACTIVITIES:

EDITORIAL BOARDS:

A. Referee for the following journals:

1. Molecular and General Genetics.
2. Biochemistry.
3. Journal of Biological Chemistry
4. Molecular Microbiology.

VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:

SHARON W. WEISS, M.D.
PROFESSOR OF PATHOLOGY
DIRECTOR OF ANATOMIC PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:
   A. Surgical Pathology Service - 3.5 months.
   B. Consultant for Bone and Soft Tissue - 12 months.
   C. Secondary Consultant for Breast Pathology - 12 months.
   D. M-Labs Surgical Pathology Service - as needed.

II. TEACHING ACTIVITIES
   A. Sophomore Medical Class:
      1. Pathology 600 - lecture - two contact hours.
      2. Pathology 600 - laboratory section - 26 hours
   B. House Officers:
      1. Training in Surgical Pathology.
      2. Lectures - five hours.
      3. Surgical Pathology Consultation Conference - six hours.
   C. Hospital Conferences:
      2. Correlative Radiologic/Pathologic Bone Conference - bimonthly.
   D. Graduate Student:
      1. Responsible for training of Dr. Melanie Griem, February-March, 1995; Dr.
   E. Medical Student Advisor:
      1. Responsible for mentoring of Anneli Bowen (M4) and Stephen Mauger (M4).

III. RESEARCH ACTIVITIES

PROJECTS UNDER STUDY:

A. Epithelioid smooth muscle tumors of soft tissue.
B. Borderline vascular tumors.
C. Typical and atypical giant cell tumors.
D. Needle biopsy in the diagnosis of soft tissue tumors.
E. Fibromatosis and well-differentiated fibrosarcoma.
F. Angiosarcoma in children.
IV. **ADMINISTRATIVE ACTIVITIES**

**DEPARTMENTAL:**

A. Director, Division of Anatomic Pathology.
B. Chief, Surgical Pathology.
C. Member, Divisional Directors' Committee.
D. Member, Photography Committee.
E. Member, Program Committee, Residency Training Program.
F. Co-Director, Surgical Pathology Fellowship Program.

**UNIVERSITY:**

A. Member, Neurofibromatosis Center.
B. Member, University of Michigan Cancer Center
C. Member, Tissue and Invasive Procedures Committee.
D. Member, Musculoskeletal Core, Year II Curriculum.
E. Member, Operating Room Committee.
F. Member, Curriculum Policy Committee.
G. Member, Curriculum Policy Advisory Committee.
H. Member, Academic Appointments, Promotions, and Tenure Committee.

**REGIONAL AND NATIONAL:**

A. Chairman, WHO Committee for Classification of Soft Tissue Tumors.
B. US-Canadian Academy of Pathology:
   1. Director, US-CAP Diagnostic Pathology Course.
   2. Vice-President Elect.
C. Anatomic Pathology Test Writing Committee, American Board of Pathology.
D. Association of Directors of Anatomic Pathology.
E. Consultant in Pathology, National Institutes of Health.
F. Member, Michigan Society of Pathologists.
G. Member, Arthur Purdy Stout Society of Surgical Pathologists.
H. Ad hoc reviewer, Laboratory Investigation.
I. Ad hoc reviewer, American Journal of Pathology.
J. Editorial consultant, Human Pathology.

V. **OTHER RELEVANT ACTIVITIES**

**EDITORIAL BOARDS:**

A. Editorial Board, American Journal of Surgical Pathology.
B. Editorial Board, American Journal of Clinical Pathology.
C. Editorial Board, Seminars in Diagnostic Pathology.
E. Editorial Board, AFIP Fascicles (3rd Series).
F. Editorial Board, Modern Pathology.

INVITED LECTURES:

10. Visiting Professor, Kyushu University, Fukuoka, Japan.
17. Visiting Professor, "Fibrohistiocytic Tumors," Emory University School of Medicine, February, 1995.
18. Speaker, Soft Tissue Slide Seminar, Emory University School of Medicine, February, 1995.


VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:


SUBMITTED FOR PUBLICATION:

BOOKS AND CHAPTERS IN BOOKS:


ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR<

MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:

KIRK J. WOJNO, M.D.
ASSISTANT PROFESSOR OF PATHOLOGY
DEPARTMENT OF PATHOLOGY

ANNUAL DEPARTMENTAL REPORT
1 AUGUST 1994 - 30 JUNE 1995

I. CLINICAL ACTIVITIES:

A. Surgical Pathology Services-four months.
B. Surgical Pathology On-call-six weeks.
C. Immunoperoxidase Service-six months.
D. Consultant for Genitourinary Pathology.
E. Back-up Consultant for Endocrine Pathology.

II. TEACHING ACTIVITIES:

MEDICAL SCHOOL/HOSPITALS:

A. Sophomore Medical Class:
   1. Reproductive sequence - one lecture hour.
B. House Officers:
   1. Pathology Consult Conference - Occasional.
   2. Pathology Resident Series - Occasional.
C. Interdepartmental:
   1. GU Grand Rounds - Weekly.
   2. GU Pathology - Monthly.
   4. GU Oncology Conference - Weekly.
   5. GU Journal Club - Weekly.

III. RESEARCH ACTIVITIES:

SPONSORED SUPPORT:

A. Co-investigator, Analysis of 8P loss in Human Prostate Cancer, Principal
   Investigator, Jill Macoska, Ph.D. (5% effort).
B. Co-Investigator, Loss of Heterozygosity Involving Chromosome 13q14.3 in
   Sporadic Prostate Cancer. Small Grant Program, University of Michigan. $7500.
PROJECTS UNDER STUDY:

A. Evaluation of surrogate and point biomarkers as prognostic indicators in prostate cancer. (Bcl2, Her2nu, P53, Angiogenesis. PP32, Ki67, PC-2, Pth-LP, Tib-166, Gp78, etc.)
B. Fractal analysis in prostate cancer.
C. Precursor lesions in prostate cancer, PIN, AAH.
D. Role of chromosome 13 and 17 loss in prostate cancer prognosis with Kathleen Cooney, M.D.
E. Role of Chromosome 8 and 10 loss in prostate cancer progression with Jill Macoska, Ph.D.
F. Role of BRCA-1 in prostate cancer progression with Kathleen Cooney, M.D.
G. Hereditary prostate cancer with K. Cooney.
H. Significance of free PSA measurements with Drs. England, Giacherio, and Oesterling.
I. Significance and utility of reverse transcriptase PSA PCR with Drs. Killen, Oesterling and Montie.
J. Significance of PSA glycotypes with Dr. Robbins.
K. Effects of "TUNA" on prostate tissue. Sponsored by Vita Med with Drs. Oesterling and Issa.

IV. ADMINISTRATIVE ACTIVITIES:

DEPARTMENTAL:

A. Co-Director, Immunoperoxidase Laboratory.

V. OTHER RELEVANT ACTIVITIES:

INVITED LECTURES/SEMINARS:


VI. PUBLICATIONS:

ARTICLES PUBLISHED OR ACCEPTED FOR PUBLICATION IN REFEREED JOURNALS:


ARTICLES SUBMITTED FOR PUBLICATION IN PEER-REVIEWED JOURNALS:


BOOK CHAPTERS


ABSTRACTS, BOOK REVIEWS, PUBLISHED LETTERS TO THE EDITOR, MISCELLANEOUS PUBLICATIONS IN UNREFEREED JOURNALS:


3. Renedo, D.E, Poy, E.L., Oesterling, J.E. and Wojno, K.J.: Clinical significance and distinction of adenosis from low grade adenocarcinoma of the prostate on TURP (Presented at the USCAP meeting in Toronto, Ont, May 1995.) (Accepted for publication Modern Pathol.)

4. Gaudin, P., Wojno, K.J., Oesterling, J.E. and Epstein, J.I.: The significance of high-grade PIN on TURP without adenocarcinoma. (To be presented at the USCAP meeting in Toronto, Ont, May 1995.) (Accepted for publication Modern Pathol.)

5. Cohan, R.H., Wilson, T., Wojno, K.J. and Korobkin, M.: Cystic renal masses: Accuracy of the Bosnial classification system revisited (To be presented at the 43rd UAR meeting, San Diego, CA, April 1995.) (Submitted for publication Amer J Radiol.)

6. Rozansky, T., Wojno, K.J. and Bloom, D.: Remnant orchiectomy analysis of fifty cases. (To be presented at the AUA 1995 Annual Meeting, Las Vegas, NV, April 1995.) (Submitted for publication Amer J Urol.)


SECTION REPORTS
DIVISION OF ANATOMIC PATHOLOGY

DEPARTMENT OF PATHOLOGY
ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

The past year witnessed many changes in our faculty. Most significantly, Dr. Bernard Naylor, Director of Cytopathology, retired after 40 years of service to the Department. Recruited to this Department during the tenure of Dr. A. James French, Dr. Naylor was the consummate diagnostic pathologist and teacher. Although his special areas of expertise were cytopathology and pulmonary pathology, his microscopic skills were so extraordinary that he often served as "the pathologist's pathologist" on any difficult or problematic case in the Department. His lectures and papers served as models of the quality to which we all aspire. Our Division thanks him for his years of inimitable service and the enrichment he brought to our professional lives. We are pleased that Dr. Suzanne Selvaggi has accepted the position as the new Director of Cytopathology and will be assisted in the Cytopathology Laboratory by Dr. Claire Michael (University of South Alabama). Our surgical pathology service reached its full complement of staff with the additions of Dr. Kenneth Devaney (Brown University), Kirk Wojno (Johns Hopkins Hospital), and Tom Giordano (Memorial Sloan-Kettering).

We remain committed to our educational and academic mission within the Division. Our faculty participates actively in both M-2 and M-4 teaching and was greatly honored when Dr. Andrew Flint won the Kaiser Permanente Award for preclinical teaching. Seven residents presented papers/posters at the annual USCAP meeting in conjunction with our faculty and one was singled out for the Stowell Orbison Award (Eric Hsi). Dr. Wally Henricks and Eric Hsi were also designated as winners of the first Murray Abell Award for resident research done in conjunction with anatomic pathology faculty. The Division hosted three visiting professors during this year. Dr. Ross Zumwalt (University of New Mexico) discussed the Hanta virus outbreak, while Dr. Victor Reuter (Memorial Sloan-Kettering) presented a lecture on bladder neoplasia and a slide seminar on testicular pathology. Dr. Karel Geboes, internationally known liver pathologist, joined us in the spring for both formal lectures and microscopic tutorials. Several trainees and pathologists joined us for periods of training: Dr. Gerson Paull (Emory University), Melanie Griem (University of Chicago), and Rose-Marie Caduff (Switzerland).

Our fellowship experiences continue to draw on both excellent internal and external candidates. Drs. Eric Hsi, Jeffrey Pearson, David Renedo, and Kathryn Lane distinguished themselves as surgical pathology fellows, while Dr. Akmal Mikhail performed in an outstanding fashion as the cytopathology fellow. As we enter into a new health care milieu and seek new ways to reduce expenditures, we are exploring new ways to format our fellowship experience.

Our faculty has renewed its efforts to improve our laboratory efficiency. Under the capable direction of Dr. Thomas Frank and assisted by Drs. Timothy Singleton and Kirk Wojno, the immunohistochemistry laboratory has completed its automation and has instituted a daily quality control process. It now provides the faculty with 24-48 hour turn-around-times. Aided by a computer support group with substantial contribution of time by Dr. Paul Killen, automatic re-queuing has finally been
realized for all anatomic pathology report verifications. Over the next year we will place a great deal on test utilization by ourselves and our clinical colleagues. We look upon this as a process which requires no only monitoring but, more importantly, education and consensus building as we devise practice guidelines.

Lastly, our Division and, indeed, entire Department was saddened by the death of Dr. Hendrix who succumbed in June to leukemia. "Sheriff Bob", as he was known to his friends and colleagues, had spent over 40 years in the Department and for many years directed the Autopsy Service. He was for many years the mainstay of our forensic expertise in the Department and provided invaluable assistance to Drs. Remick and Caplan in formalizing this program. The residents will remember him for his advice on court conduct and how brevity in speech is often an asset in this milieu. We all cherish the years he spent amidst us.

Sharon W. Weiss, M.D.
Division Director
AUTOPSY SERVICE

DEPARTMENT OF PATHOLOGY
ANNUAL DEPARTMENTAL REPORT
1 JULY 1994 - 30 JUNE 1995

I. TIMELY COMPLETION OF AUTOPSY REPORTS:

Autopsies are still not completed in a timely fashion, and this has resulted in a citation during the most recent CAP inspection. The evaluation of turn-around time for calendar year 1994 showed that the average time to completion of a case was 161 days, with 77% of cases requiring more than 90 days to completion and 39% requiring more than 180 days. Several steps have been implemented in order to decrease the turnaround time, and these will be closely followed. This represents the most frequent complaint about the autopsy service, and one that is being addressed in a most vigorous manner.

II. MORGUE RENOVATIONS:

We have examined several options for the renovation of the morgue, and the hospital has approved replacement of the entire cooler system. This will increase the storage capacity from 8 bodies to 15 bodies, and will help to relieve the congestion frequently observed in the morgue. The additional renovations for the morgue, including the establishment of a grieving room, has not yet been approved.

III. STATISTICS:

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<tr>
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<tbody>
<tr>
<td>Total U of M cases</td>
<td>322</td>
<td>420</td>
<td>488</td>
<td>499</td>
</tr>
<tr>
<td>M-Labs cases</td>
<td>8</td>
<td>5</td>
<td>3</td>
<td></td>
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<tr>
<td>Brain only on U of M patient</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brain harvested at outside hospital</td>
<td></td>
<td></td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Medical Examiner's Cases</td>
<td>58</td>
<td>101</td>
<td>159</td>
<td>211</td>
</tr>
<tr>
<td>In hospital</td>
<td>24</td>
<td>47</td>
<td>63</td>
<td>66</td>
</tr>
<tr>
<td>Outside cases</td>
<td>34</td>
<td>54</td>
<td>74</td>
<td>145</td>
</tr>
<tr>
<td>External examination only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autopsy rate (includes tetralogy)</td>
<td>35%</td>
<td>39%</td>
<td>47%</td>
<td>35%</td>
</tr>
</tbody>
</table>
Over half of the medical examiner cases from the hospital also include permission from the family for the performance of the autopsy.

Daniel G. Remick, M.D.
Director, Autopsy Service
This past year has brought several new developments to the division of Cytopathology. With the announcement of Dr. Naylor's retirement, an active search was conducted for a cytopathologist. Dr. Claire W. Michael an Assistant Professor from the University of South Alabama accepted the position and, in conjunction with Dr. Suzanne M. Selvaggi, will run the Cytopathology Laboratory. We extend a warm welcome to her.

An on-site review of the cytopathology fellowship program was conducted by the Accreditation Council for Graduate Medical Education. Our program was approved for three years and for two fellows, an increase over our usual one fellow per year. In the ninth year of our cytopathology fellowship, Dr. Akmal Mikhail completed his training with distinction and is eligible to take the examination for the Special Qualification in Cytopathology. Dr. Robert Stern is the new fellow.

Our recent laboratory inspection by the College of American Pathologists was a success. The CAP checklist for inspection of cytopathology laboratories was extensively modified to comply with the Federal regulations. Our laboratory staff under the direction of Ms. Belinda Davis did an excellent job in compiling the data needed for our review.

The division has continued to refine its computer program for the reporting of cervicovaginal cytology and will begin to develop a software package for non-gynecologic cytology in conjunction with Pathology Data Systems. Ms. Belinda Davis is working with representatives from Cerner to develop a working quality assurance/quality control software program for cervicovaginal cytology.

The cytotechnologists have been actively involved in the regional cytology society. Ms. Belinda Davis is the current President of the Michigan Society of Cytology and serves as a screener for the College of American Pathologists Cytopathology Committee. Drs. Naylor and Selvaggi continue to participate in a joint lecture series for the Wayne State University and Henry Ford Hospital programs of Cytotechnology and have presented several workshops and papers at various national meetings and cytology societies.
Gynecologic specimens numbered 31,913 and non-gynecologic specimens 5,603 of which 30% were fine needle aspirates. The increasing number of aspirates represents the main area of growth in cytopathology. It is anticipated that the demand for aspirates will continue to increase in the new health care era and with the opening of the Cancer Center.

Suzanne M. Selvaggi, M.D.
Director, Cytopathology Laboratory
DERMATOPATHOLOGY SERVICE

DEPARTMENT OF PATHOLOGY
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1 JULY 1994 - 30 JUNE 1995

The Dermatopathology Service receives diagnostic case material from six different sources: (1) UMMC (ID) cases; (2) outside contractual (MD) cases; (3) personal consultations (HE and NI) cases; (4) outside slides reviewed for referred patients (TD) cases; (5) miscellaneous intramural referrals (IE, IF, IS, ME, SC, TS) cases; (6) and informal consultations (intramural, VAH and MU).

Work load volume is as follows:

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<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HE</td>
<td>731</td>
<td>981</td>
<td>694</td>
<td>569</td>
</tr>
<tr>
<td>ID</td>
<td>5651</td>
<td>4255</td>
<td>4791</td>
<td>4759</td>
</tr>
<tr>
<td>MD</td>
<td>--</td>
<td>1347</td>
<td>1663</td>
<td>2240</td>
</tr>
<tr>
<td>TD</td>
<td>--</td>
<td>550</td>
<td>709</td>
<td>553</td>
</tr>
<tr>
<td>Misc.</td>
<td>--</td>
<td>--</td>
<td>71</td>
<td>218</td>
</tr>
<tr>
<td>Informal</td>
<td>300</td>
<td>225</td>
<td>254</td>
<td>106</td>
</tr>
</tbody>
</table>

Total Cases were 8,445. HE and NI cases declined slightly. ID cases remained the same. MD cases increased by about 25%. TD cases declined slightly but were representative of a much higher volume of difficult pigmented lesions. Miscellaneous lesions increased due to inclusion of routine diagnosis of eyelid lesions.

As noted for the previous year the workload in the Dermatopathology service continues to be significantly impacted by the growth of Cutaneous Oncology services. The number of patients being seen in the Melanoma Clinic increased this year to almost 400 and bi-weekly conferences including 15 to 20 patients or more are not exceptional. The Otolaryngology and Plastic Surgery services have also been contributing complex cases for microscopic study.

Dermatopathology teaching in the Department of Dermatology remains unchanged.

Correlative activities include participation in the Pigmented Lesion Clinics (bi-weekly), Cutaneous Lymphoma Conference (monthly), and Dermatology Grand Rounds (weekly).

Formal presentations were made to both the medical and dental students.

John T. Headington, M.D.,
Director, Dermatopathology Service
ELECTRON MICROSCOPY SERVICE

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The electron microscopy service continues to provide important diagnostic services to the University of Michigan. The facility provides high quality diagnostic work for the nephropathologists, neuropathologists, hematopathologists, and the general pathologists.

This past year there has been a continuing major effort to decrease the turnaround time required to complete specimens. Using the successful changes implemented last year, the turnaround time has consistently been within departmental guidelines (7 days for completion of prints for kidney, 14 days for all other cases).

The aging Zeiss microscope is in the process of being replaced. Funds have been requested from the hospital in order to purchase a new scope. The new electron microscope will have a digitizing camera interfaced with the scope, and a laser printer. This will further decrease turnaround time since most cases will be capable of analysis using the laser prints, rather than using the labor intensive process of printing the film images. The EM staff have already evaluated several electron microscopes, and have found the quality to be very satisfactory.

This following table is the analysis of the work volume in the EM laboratory for the 1994/1995 year. During the previous year, there were 472 biopsies processed, including 218 renal biopsies. Thus, we have had an increase of 59 total biopsies, and 38 renal biopsies.

<table>
<thead>
<tr>
<th></th>
<th>All Cases</th>
<th>Outside</th>
<th>Inside</th>
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<tbody>
<tr>
<td>Total cases</td>
<td>531</td>
<td>227</td>
<td>304</td>
</tr>
<tr>
<td>Brain</td>
<td>26</td>
<td>4</td>
<td>22</td>
</tr>
<tr>
<td>Buffy Coat</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Kidney</td>
<td>133</td>
<td>123</td>
<td>256</td>
</tr>
<tr>
<td>Muscle</td>
<td>64</td>
<td>109</td>
<td>173</td>
</tr>
<tr>
<td>Nerve</td>
<td>18</td>
<td>28</td>
<td>46</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>18</td>
<td>23</td>
</tr>
</tbody>
</table>

Daniel G. Remick, M.D.
Director, Electron Microscopy Service
NEUROPATHOLOGY SERVICE

DEPARTMENT OF PATHOLOGY
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The Laboratory of Neuropathology continues to have three interrelated functions: Laboratory diagnostic service, teaching and research. Dr. Samuel P. Hicks was on Active Emeritus status, and made significant contributions to the Autopsy Neuropathology Service. Dr. Mila Blaivas, Ms. Constance J. D'Amato, Dr. Paul E. McKeever, and Dr. Anders A.F. Sima also contributed to the Neuropathology Service.

CLINICAL ACTIVITIES:

The following examinations were completed with the support of our neurohistology, electron microscopy, general histology, immunohistology, and secretarial staff.

1. There were 744 neurosurgical cases including CNS, pituitary, muscle and nerve examined this year. 79 of these cases were from outside hospitals in consultation. A portion of these were part of an interdepartmental study of PET/BUDR and neuropathology funded by NIH. Approximately 300 surgical specimens required special neurohistologic procedures.

2. There were 395 brains histologically processed out of 499 autopsies. (Of the 395 brain cases, which is 79% of all autopsies, 61 ADRC and Michigan Dementia Network Program cases were processed in the Neuropathology Core Laboratory of the MADRC, plus an additional 12 received from other institutions.) An additional 16 brains were histologically processed from other institutions and hospitals. In addition to these a few cases were examined as outside consults on slides prepared elsewhere.

3. There were 242 muscle biopsies, nearly all with histochemistry, 173 with electron microscopy. There were 45 (27 internal, 18 external) peripheral nerve biopsies. There were 26 teased fiber preparations, 22 thick plastic sections and 48 had electron microscopy performed. The combination of nerve teasing, muscle histochemistry, electron microscopy and morphometry make the service regionally competitive for diagnostic consultation.

4. Faculty interpreted 257 cases in semithin or thin section from electron microscopy. The majority of these cases were nerve, pediatric muscle, and neurosurgical biopsy cases.

5. The ceroid service, buffy coat division, reported 1 case.

6. The Brain Tumor Board of the University of Michigan Cancer Center and Hospitals, supported weekly by a neuropathologist, reviewed neuropathology and clinical aspects of more than 130 difficult neuro-oncology cases.

7. One brain was examined for research purposes.

8. There are two neuropathology quality assurance meetings each month. Attendees include neuropathologists from nearby institutions.

TEACHING ACTIVITIES:

1. Medical Students: This year the neuropathology faculty taught in the eight week neuroscience sequence of our new 2nd year curriculum. There were ten hours of neuropathology taught: six hours of lecture and four hours in the laboratory.

2. House Officers, Graduate Students, Postgraduate and other students and faculty: These include periodic conferences with Neurology; twice monthly Continuing Medical Education (CME) accredited conferences where all biopsies are presented and interpreted; a weekly conference where abnormal brains are examined with all clinicians invited; monthly nerve and muscle biopsy conferences accredited for CME; individual instruction on autopsies and biopsy material;
Neuropathology 858, an 18 hour laboratory-lecture course; bimonthly conferences with Neuroradiology, conferences for neuromuscular disease and bi-weekly Neuropathology seminars for Neurosurgery and Neuroradiology House staff. Weekly seminars are provided to neurological and neurosurgical house staff on clinico-pathological correlations.

3. Two Neuromuscular fellows were instructed at conferences held weekly.
4. Electives: Two Pathology Residents, one Neurosurgery and one Neurology Resident chose elective rotations on the Neuropathology Service.

RESEARCH ACTIVITIES:

1. Dr. Hicks and Ms. D'Amato provided neuropathologic support for MADRC. Ms. D'Amato is Core Coordinator of the Diagnostic Neuropathology Unit of the Neuropathology Core of the MADRC. Ms. D'Amato is also Co-Investigator with Dr. Anders Sima on the MADRC Project: The Pathology of Diffuse Lewy Body Disease.

2. Dr. Blaivas and associates investigate: 1) ocular muscle (aging and botulinum effect), 2) musculature related to cleft palates in children 3) histology of animal model of rheumatoid arthritis, 4) histochemistry and morphometry of muscle in patients with hypertension and diabetes.

3. Dr. Sima's laboratory is investigating pathogenetic mechanisms involved in experimental and human diabetic neuropathies. In particular, the laboratory is focusing on the molecular, structural, and functional abnormalities of the nodal apparatus of myelinated fibers in diabetic nerve. The laboratory is also investigating trophic and immunological factors governing nerve fiber regeneration in diabetes. The Morphometric Imaging Core, directed by Dr. Sima, serves as an international reading laboratory for nerve biopsies obtained from several ongoing multicenter clinical trials of drugs designed to ameliorate and halt the progression of diabetic neuropathy.

4. Dr. McKeever and associates are determining the extent and cause of differences in gene product expression in brain tumor tissue versus cells in culture. These differences may result from a separate population of cells within brain tumors or from genetic instability in neoplastic cells. They are assessing the prognostic value of DNA content, specific chromosomal markers by in situ hibridization, and Ki-67, PCNA and BUdR labeling indices in brain tumor specimens in vivo and in vitro. He is studying receptor-ligand interactions and neuropathology of epilepsy with colleagues in Neurology.

5. Groups of the University of Michigan Cancer Center faculty and staff with clinical research interests in brain tumors, met and generated a number of project considerations from Pathology, Neurosurgery, Nuclear Medicine, Neuropathology, Neurology and Neuroradiology collaborations.

6. Collaboration with Neurology, Michigan State University, The State of Michigan Department of Public Health, the Alzheimer's Association, Henry Ford Hospital, and Beaumont Hospital has established a registry for Alzheimer's disease and other dementias and degenerative diseases.

Paul E. McKeever, M.D., Ph.D.
Chief
Neuropathology Section
IMMUNOHISTOLOGY AND MOLECULAR ANALYSIS LABORATORIES

DEPARTMENT OF PATHOLOGY
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The Immunohistology Laboratory offered over 75 different immunohistochemical stains for paraffin and frozen tissues and performed approximately 900 tests each month, or over 10,000 during the year. The laboratory has undergone several major changes in order to provide technically consistent service in a timely fashion. The requisition form and ordering procedures were completely revised to eliminate the need for separate requests for unstained slides and immunologic stains and to streamline billing. The number of unstained slides prepared by the hospital-based histology laboratory was standardized, eliminating substantial redundant effort. Most importantly, a policy was instituted that guaranteed a two-day turnaround time for all requests submitted by an early afternoon cut-off, reducing turnaround time and improving diagnostic test reporting. An increasingly diverse array of diagnostic tests was made available through increased utilization of programmable automated immunostainers, two of which are now located in the Immunohistology Laboratory. Several technical modifications were also instituted this year to improve service and efficiency. Analysis of estrogen and progesterone status in breast carcinomas was switched from a cumbersome technique performed weekly to a semi-automated method performed on a daily basis. Tissue freezing methods were revised to reduce artifact, and tissue pre-treatments were modified and standardized to improve efficiency and reduce error. Computerization finally arrived to the lab as well, as all records pertaining to antibody clones, titers, and methodologies were transferred to an active database. Weekly laboratory meetings were instituted to facilitate the many changes instituted this year and will continue to be held, and when of general interest the minutes of these meetings will be distributed by electronic mail.

In the future the Immunohistology Laboratory will seek to improve cost-effectiveness by reducing redundancy in its menu and further modifying the requisition to encourage efficient test ordering. The need for increased diagnostic frugality will be balanced with department’s academic mission through the establishment of a separate automated facility for the performance of projects, supported jointly by the Department of Pathology and the University of Michigan Comprehensive Cancer Center and co-directed by Drs. Frank and Singleton. In addition, we will seek to integrate nucleic acid analyses into the existing diagnostic laboratory. Such tests have been offered in a separate Molecular Analysis Laboratory, chiefly for investigation. This year the Molecular Analysis Laboratory supported several housestaff projects that were presented at national meetings and published in peer-reviewed journals. In addition, this laboratory performed almost fifty technically demanding, specialized nucleic acid analyses for diagnostic purposes on paraffin-embedded tissues including identification of DNA and RNA viruses (EBV, hepatitis B and hepatitis C, parvovirus, CMV), species determination of
mycobacteria, and resolution of suspected specimen mislabeling by genetic “fingerprinting” of paraffin embedded tissues. In the future we will seek to integrate these molecular diagnostic methods with existing immunohistologic testing.

Tom S. Frank, M.D.
Director
Immunohistology And Molecular Analysis Laboratories

Timothy P. Singleton, M.D. and Kirk J. Wojno, M.D.
Assistant Directors
Immunohistology Laboratory
SURGICAL PATHOLOGY SERVICE

DEPARTMENT OF PATHOLOGY
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The surgical pathology service remains an active University service despite the fact that growth has stabilized in recent years. Intramural accessions numbered 27,878 and intramural (personal) consultations 5,402 for a total volume of 33,280 representing a 1% increase over last year. Approximately 4,000 intraoperative (frozen section) consultations are provided yearly with an accuracy of over 98%. Several hundred STAT biopsies, largely on transplant patients, are requested requiring rapid turn-around-time and immediate interpretation by our faculty. Our service continues to administer the Tissue Procurement Core for the Cancer Center which annually distributes over 1,400 specimens to investigators throughout the Medical Center. This activity will soon occupy dedicated space within the Cancer Center with its impending opening in the next year.

Our service reached full staffing with the successful recruitment of Drs. Kenneth Devaney (Brown University), Tom Giordano (Memorial Sloan-Kettering), and Kirk Wojno (Johns Hopkins University) to provide expertise in orthopedic/otolaryngic, endocrine, and genitourinary pathology respectively. Four surgical pathology fellows completed their training: Drs. Eric Hsi, Jeffrey Pearson, Kathryn Lane (Duke Medical Center), and David Renedo (University of Vermont). This program continues to draw not only on our own residents but on an excellent pool of external candidates. We believe the strength of this program resides in the autonomy granted our fellows on the frozen section service, the exceptional instruction obtained on the various consultation services, and the opportunity to engage in a variety of research projects with the faculty. We were especially gratified that one of our surgical pathology fellows (Dr. Eric Hsi) won the Stowell Orbison Award for outstanding resident research for his clonality work on Helicobacter gastritis done in conjunction with Drs. Joel Greenson and Charlie Ross. Surgical pathology is an important part of the M-4 clerk rotation and the pathology elective for under-represented minority students. Our educational activities also include a daily Staff Consensus Conference which features discussions of problematic or interesting cases. A multiheaded scope linked to a video monitor offers the opportunity for all residents as well as visiting scientists to participate in this activity.

We continue to strive for ways to improve our efficiency in the surgical pathology laboratory. Important changes which have occurred in the past year relate to an expansion of template reporting for surgical pathology reports and automatic re-Queuing of reports so that a pathologist can verify all his/her reports from a single screen rather than searching through several screens. We continue to explore the possibility of consolidating our histopathology function and automate slide check-out and tracking. A major initiative of the coming year will be a study of utilization patterns by our clinical colleagues and
faculty. Through the formation of a number of working committees we will analyze the utilization and
turn-around-times of frozen sections, multiple biopsies, immunohistochemical stains, and specimen
blocking in an effort to devise more efficient means of processing cases.

Sharon W. Weiss, M.D.
Director, Surgical Pathology Service
DIVISION OF CLINICAL PATHOLOGY

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Despite a continuing, institution-wide mandate to maintain a stable budget, the Clinical Laboratories continued to provide excellent, full-spectrum service. The virtually flat cost per unit of activity provided by the Clinical Labs, in the face of rising overall health care costs, is a testimony to the professionalism of the staff and the management capabilities of the laboratory directors and senior laboratory personnel. In 1994-95 the Clinical Labs performed 3.2 million billable analyses. The Clinical Laboratories successfully completed the biannual on-site College of American Pathologists (CAP) inspection and, with the oversight of Clinical Laboratory personnel, the UMMC - acquired physician office practices and satellite facilities received COLA certification. The Divisional Quality Assurance Program, as a component of the Departmental Quality Assurance Program, continues to be at the forefront both within the University of Michigan Medical Center and among Clinical Laboratories located in tertiary care facilities throughout the United States. Maintenance of the delicate balance among quality service, cost effective testing, utilization control, and the research and development which characterizes an academic institution, will be a continuing challenge.

1994-95 was marked by three major initiatives. First, an organizational and funding framework was developed, in conjunction with the Division of Molecular Medicine (Internal Medicine), to provide for expanded activities in the area of molecular diagnostics. The clinical component of this bipartite laboratory, the Clinical Molecular Diagnostics Laboratory, is directed by Anthony A. Killeen, M.D., Ph.D., who joined the Department of Pathology faculty as Director of the Clinical Chemistry Section (Chemistry, Ligand Assay, Drug Analysis and Toxicology, Immunopathology, and Clinical Molecular Diagnostics) in September, 1993. Second, the Clinical Laboratories successfully garnered the resources necessary to meet the marked increase in bone marrow transplantation activity experienced in 1994-95. Integral to the programmatic demand was implementation of DNA-based high resolution class II antigen typing as a clinical assay. Augmentation of the capabilities of the Blood Bank, Tissue Typing, and Cytogenetics Laboratories was contributory to the approval of UMMC as a participant in the National Allogeneic Bone Marrow Transplantation Program. Finally, the Clinical Laboratories have responded to the institutional initiative to acquire broader primary care capabilities within the region. Specifically, nine medical practices and two UMMC satellite facilities that maintain on-site laboratory testing were added to the overall UMMC laboratory network. This activity was coupled with a robust expansion of on-site point-of-care testing and data handling activities. In preparation for the future, the Clinical Laboratories continue to support the growing M-Labs outreach program, forge strong collaborative relationships with local reference laboratories, and intensify our role in institutional utilization management.

Faculty and laboratory staff participated in a wide variety of intramural and extramural educational programs during 1994-95. For instance, the 26th annual Blood Bank/Transfusion Medicine course and the Laboratory Information Systems course were each attended by more than 200 registrants.
making them among the most visible courses of their kind in the United States. These courses, along with the M-Labs educational programs, are prominent examples of outreach activities. Evaluations from senior medical students enrolled in the third M4 Laboratory Medicine course were highly laudatory. The revised clinical pathology residency training format (July, 1993) which organizes pathology residents into teams that rotate through three blocks of clinical laboratories that are grouped according to relatedness of discipline, continues to meet with critical success. The continued high quality of trainees in the Hematopathology Fellowship program has enhanced the service, educational, and academic missions of the Hematopathology group and the Department. Certification of a Clinical Chemistry Fellowship was received from the ACGME. This fellowship will further enhance the service, academic, and educational missions of the Department.

The academic achievements of faculty members within the Clinical Pathology Division have been outstanding. As a group, the CP faculty had over 100 articles published in peer-reviewed journals. Most faculty members played highly visible leadership roles in national organizations, courses, symposia, as well as on editorial boards, examining committees, and research review study sections; an illustration of their high levels of recognition throughout the United States (see individual reports). Numerous faculty members received extramural funding that supported a variety of scholarly activities (see individual reports).

The Clinical Pathology Division is faced with numerous challenges in the future. In addition to its ongoing academic enterprises, educational issues, faculty diversity initiatives, leadership and development in quality assurance, and laboratory resource utilization in the context of the hospital cost efficiency program, the Division plans to greatly expand its clinical molecular diagnostics program, and, in cooperation with the M-Labs program, to optimize its position in the regional clinical laboratory market. Achievement of these objectives will require the continued commitment, professionalism, and hard work of the faculty, laboratory staff, administration, and house officers.

Jeffrey S. Warren, M.D.
Director, Clinical Pathology Division
PATIENT CARE:

Although efforts to contain blood utilization in University Hospital were intensified, the laboratory continued to experience increased activity. This related to modification of our patient population. The institution has mounted new programs which require large volumes of blood. These programs include liver and bone marrow transplantation, thoraco-abdominal aneurysmectomy, and thoracic aortic aneurysm repair. In addition, the institution now has a Level 1 Trauma Center, and the extracorporeal membrane oxygenation service has been extended to include adult patients.

These programs, in large measure, have accounted for a 13 per cent increase in Red Blood Cell transfusions during the past year and a comparable increase in transfusion of other blood components. This increase in utilization has occurred in spite of pretransfusion monitoring of many requests for platelet concentrate transfusions and auditing of selected Red Blood Cell transfusions. In addition, monthly review of blood transfusion associated with open-heart surgery has resulted in a progressive decrease in blood utilization for those procedures. The latter is exemplified by a reduction in donor exposures for patients undergoing CABG operations from an average of 14.4 units in 1990 to an average of 6.7 units in 1995.

The Transfusion and Apheresis area experienced the usual peaks and valleys of activity during the year. A pressing problem has been an inability to respond to requests for increased collection of peripheral blood progenitor cells for bone marrow transplantation. The space available in the laboratory has precluded collection of more than two patients per day. It is hoped that the introduction of the Cancer Center will allow relocation of some of the outpatient transfusion activity, thereby freeing up additional space for progenitor cell collections.

Members of the staff played an integral role in support of specialized clinical activities. Mrs. Hoffman worked closely with the Bone Marrow Transplantation Program and also coordinated orders for HLA-matched Single Donor Platelets from our blood suppliers. Ms. Steiner supported the Department of Obstetrics and Gynecology, attending their weekly high-risk pregnancy conference, and playing a vital role in PUBS procedures. Ms. Butch led the Quality Management program of the clinical laboratories of the Department of Pathology and Mrs. Stoe chaired the Department’s Laboratory Safety Committee.
EDUCATIONAL ACTIVITIES:

As in previous years, the medical, technical and nursing staffs of the Blood Bank/Transfusion Service were active in providing educational programs within the institution and at regional and national meetings. The long-standing two-week Blood Bank orientation program for House Officers at University Hospital was presented on two occasions during the year, related to modification in the training program schedule. In addition, the Blood Bank portion of the Laboratory Medicine course for senior medical students was well received. Three hours of lecture were provided for the sophomore medical class in the context of the Department of Pathology course, and a presentation on Transfusion Medicine was provided for the medical student senior elective course in Pharmacology and Therapeutics.

Lectures on Transfusion Medicine were given to clinical departments in University Hospital, including the Section of Thoracic Surgery and the Departments of Anesthesiology and Pediatrics.

The 22nd annual postgraduate course, “Current Topics in Blood Banking”, was held on May 31, June 1 and 2, 1995. The course, under the direction of Mr. Judd, attracted 170 technologists and physicians from throughout the United States. It continues to be one of the most popular postgraduate courses in the country devoted to blood bank topics. Members of the Blood Bank and Transfusion Service staff presented Workshops on a variety of topics, and Ms. Steiner, Ms. Butch, Mr. Judd and Dr. Oberman participated in the plenary sessions of the symposium.

Members of the Blood Bank and Transfusion Service faculty and staff participated in the annual meeting of the American Association of Blood Banks, providing poster presentations and lectures covering a variety of topics. In addition, members of the laboratory, including Mr. Judd, Ms. Butch, Mrs. Stoe, Ms. Steiner and Drs. Davenport and Oberman, presented invited lectures to a variety of regional and national blood banking organizations and state societies.

Aside from the lectures and presentations noted in the individual faculty reports of Mr. Judd and Drs. Davenport and Oberman, Mrs. Stoe lectured to the Michigan Association of Blood Banks, including presenting the annual Loring seminar, and Ms. Butch provided numerous invited lectures throughout the country. She also authored chapters in three books and presented a poster at the annual meeting of the American Association of Blood Banks. Mrs. Knafl was active in organization of the MABB spring meeting. Ms. Steiner lectured in Chicago and Toledo, as well as at the annual meeting of the American Association of Blood Banks.

PROFESSIONAL ACTIVITIES:

Members of the Blood Bank and Transfusion Service medical and technical staffs were active at the regional and national levels. Dr. Oberman served as Associate Editor of TRANSFUSION and was a member of the Transfusion Practices Committee of the American Association of Blood Banks. Ms. Butch served on the Standards Committee of the American Association of Blood Banks. Ms. Butch also served on the Information Systems Committee and on the Chief Technologist’s Forum of the American Association of Blood Banks. Ms. Steiner served as chairperson of the AABB Committee on Reference Laboratories and Rare Donor File, co-edited the newsletter of the Michigan Association of Blood Banks.
and chaired the By-laws and Policy Manual Committee of the MABB. In addition, members of the technical staff participated in the Inspection and Accreditation program of the American Association of Blood Banks. Dr. Oberman’s, Dr. Davenport’s, and Mr. Judd’s activities are further noted in their individual faculty reports.

RESEARCH ACTIVITIES:

The individual reports of Drs. Oberman, Davenport and a Mr. Judd record their publications and investigative efforts related to blood banking and Transfusion Medicine. In addition, Ms. Butch and Mrs. Knafl participated in a study of adult extracorporeal membrane oxygenation with Drs. Oberman and Bartlett.

Harold A. Oberman, M.D.
Director, Blood Bank and Transfusion Service
CHEMICAL PATHOLOGY LABORATORY

DEPARTMENT OF PATHOLOGY
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The Chemical Pathology Laboratory completed another hectic but overall very successful year. Cross training of technologists from Chemistry, Ligand Assay, and Immunology Labs continued through the year, allowing for greater flexibility in scheduling. The Chemistry Laboratory experienced an approximate 5% increase in test volume for the year. The lab performed nearly 3.2 million tests this past fiscal year. The laboratory is projecting that it will likely finish several percent under budget for this same time period.

The laboratory undertook a major beta-site evaluation of the new Ektachem 950 IRC automated chemistry analyzer. Sue Stern, supervisor of automated chemistry, was the principle operator for this four month long extensive evaluation of the accuracy and precision of over 50 serum, urine, and CSF tests of the Ektachem 950 analyzer. In addition, Dr. Giacherio, Sue Stern, and Keith Matz performed a more detailed comparison study of serum digoxin and phenytoin assays on the E-950 analyzer. These evaluations gave the laboratory an excellent overview of the capabilities and potential advantages of this new analyzer.

The laboratory has continued its major commitment to the expansion of point of care testing. In collaboration with PDS, we implemented new interfaces to the blood gas/electrolyte analyzers in the Emergency Department and the operating rooms of Mott and Main Hospitals. These satellite labs are supervised and maintained by Chemistry lab staff, with most of the actual testing being performed by unit based personnel. The interface makes it possible to capture all pertinent data from these remote sites in the laboratory information system and make it a part of the permanent medical record. The lab would like to acknowledge the contributions of the late Bob Cohn to making this project a success.

As part of a multi-departmental initiative to reduce blood product utilization, Chemistry personnel were responsible for the evaluation, implementation, and ongoing management of a program that will bring rapid delivery of platelet counts, prothrombin time, and APTT to the operating rooms. A small Coulter MD8 hematology analyzer and portable Coaguchek Plus whole blood coagulation analyzers have been placed in the operating rooms. Testing is performed by Anesthesiology Department staff, with Chemistry Lab personnel doing all the training, quality control evaluation, and ongoing competency assessment of all operators.

The lab has continued its active role in the supervision of bedside blood glucose monitoring programs at University Hospitals. The maintains quality control, linearity, and proficiency testing records on 75 whole blood glucose meters stationed throughout the institution. Several new glucose meters are being evaluated by the Point of Care Testing group, and the Chemistry Lab continues to actively pursue options for the computerized collection and analysis of quality control data from these meters.
The Point of Care group in Chemistry has implemented a number of other smaller projects. Pregnancy tests are being performed in Mott OR and in the OB/GYN Clinic, with results collected and entered into Pathnet by Chemistry personnel. Cholesterol testing is being performed on select patients at the MedSport Clinic, and Hemoglobin A₁c is being performed in the Diabetes Clinic. In both of these programs, clinic personnel perform the tests, and Chemistry Lab staff are responsible for training, quality assurance, and proficiency testing. Other sites being considered for Point of Care testing include the Cardiac Catheterization Lab and the Medical Procedures Unit.

The Lab's role in managing small laboratories at off-site clinics has also continued to grow. The seven U of M health care clinic labs supervised by Chemistry personnel all passed inspections and received accreditation from COLA. Small laboratories are also managed at an acquired physician office practice in Chelsea and the U of M Livonia Surgical Center.

Finally, the Chemistry Lab and its Point-of Care Testing services passed a CAP inspection with no citations or deficiencies. Martha Thiessen, the Chief Technologist, and all the laboratory staff deserve credit for making sure the lab was in compliance with the changing regulations.
The Clinical Flow Cytometry Laboratory processed approximately 3100 immunophenotyping specimens, a volume increase of 15% from the previous year. This included approximately 700 specimens submitted for leukemia/lymphoma immunophenotyping, over 1000 specimens for monitoring of acquired and inherited immunodeficiencies, and over 600 specimens for T-cell subset monitoring in organ transplant recipients. Anti-platelet and anti-neutrophil antibody assays were performed on approximately 300 specimens. In addition, the laboratory processed about 2800 specimens of peripheral blood for flow cytometric reticulocyte analysis.

The laboratory has continued to increase its volume of work through the M-Labs Program. The comprehensive hematopathology consultation service provided by the laboratory has helped to attract this enlarging referral base. For the past year, M-Labs referrals comprised 36% of all acute leukemia immunophenotyping panels, 45% of all chronic leukemia/lymphoma profiles, and 38% of all non-transplant immunodeficiency monitoring.

The laboratory works in close cooperation with clinical services to enhance efficiency and control costs. For example, a collaborative study with the solid organ transplant service was aimed at improving T-cell subset monitoring in patients on the drug OKT3. The study resulted in a streamlined reagent panel (fewer antibodies, at lower cost) and a modified patient report. The impact of these changes on utilization of this expensive drug will be monitored over the coming year. Working in conjunction with the bone marrow transplant service, the laboratory now provides same-day reports of stem cell quantitation from apheresis products.

Last year the laboratory implemented a simplified cell antigen profile for acquired immunodeficiency monitoring using three-color analysis. That change has resulted in a 50% cost savings (reagents plus labor costs) for this high-volume test. Another major area of utilization management continues to be the close monitoring of all requests for leukemia/lymphoma immunophenotyping. The hematopathologists staffing the laboratory must screen all requests for these extensive antigen profiles. Of the 700 specimens submitted for leukemia/lymphoma immunophenotyping, pathologist review led to cancellation of 300 of these requests.

Quality assurance conferences enable medical and technical staff to review leukemia/lymphoma cases reported by the laboratory. These meetings entail a comprehensive review of each case to assure such things as appropriateness of the test request, technical quality of the analysis, clerical quality of the reports, and consensus regarding final diagnoses. Teaching activities in the laboratory include daily case
sign-out with the residents and hematopathology fellow. Continuing medical education for the technologists and house staff is also offered at the biweekly leukemia conference, an interdisciplinary conference held in conjunction with the Division of Hematology, Internal Medicine.

Charles W. Ross, M.D.
Director

Lloyd M. Stoolman, M.D.
Co-director
The Clinical Cytogenetics Laboratory has continued to plateau in volume in some areas, while others have continued to expand. In the area of prenatal diagnosis, just over 900 amniotic fluid specimens, 70 chorionic villus biopsy, and 50 tissues were analyzed; this is approximately the same number as last year. Of interest is the increase in the number of cases that are seen solely for the purpose of growing fibroblasts with the ultimate aim of DNA or biochemical diagnosis; these cases are in addition to the 50 enumerated above. The bone marrow specimens continue to skyrocket, from under 400 two years ago, to 480 in the last year to 573 in the current fiscal year. These requests are scrutinized more carefully due to staffing problems, and the increased volume does not include the approximately 100 requests which were declined for one or more reasons. In addition, 504 peripheral blood specimens were analyzed, a ten percent increase from last year. Approximately 50 of these tests were for high resolution karyotypes. Most of the fragile X testing by cytogenetic analysis has been replaced by routine karyotyping and a specific DNA test (performed in the Molecular Diagnostics Laboratory).

Cytogenetic analysis of solid tumors has remained steady. Pediatric sarcomas and "small round, blue cell tumors" remain the specimens most commonly submitted. Although there are descriptions of various other tumors with specific cytogenetic abnormalities, often the clinical significance is unclear.

The demand for molecular Cytogenetic analysis has increased from one request a month to 2 or more per week. The Laboratory is currently offering a number of specific gene probes for fluorescence in situ hybridization on a research basis including those for Prader-Willi, Angelman's, Williams, and DiGeorge syndromes. Marker chromosomes are characterized. A probe for the so-called minor breakpoint cluster region in the bcr/abl gene rearrangement in CML and ALL are being developed as a potential supplement to cytogenetic analysis. In situ hybridization is performed on at least a weekly basis.

Again, the Laboratory is faced with space constraints, and the consequent staffing constraints. This is particularly worrisome as other Clinical Services are being encouraged to expand by the institution of a Clinical Delivery System. Cytogenetics technologists still require a minimum of one year to train, and several additional years to properly evaluate the more complex specimens which are being received at an increasingly frequent rate.

Susan Sheldon, Ph.D.
Director, Clinical Cytogenetics
CLINICAL HEMATOLOGY LABORATORY

DEPARTMENT OF PATHOLOGY
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LABORATORY ACTIVITIES:

A. Implemented automated billing and electronic signature for professional component of pathologist review procedure.
B. Evaluated the Abbott Cell Dyne hematology instrument.
C. Acted as a beta site for testing of Coulter instrumentation.
D. Served as a reference lab to establish normal values for MAS urine controls.
E. Completed the normal value study for complete blood counts and differentials.
F. Several internal quality improvement teams dealt with such laboratory problems as work flow on different shifts, EMU students, implementation of new policies, etc.
G. Daily bone marrow and lymph node signout with House Officers, Hematology Fellows and Fellows from Adult and Pediatric Hematology/Oncology as well as visiting pathologists from other institutions.
H. Daily signout of in-house and UM clients' cases of abnormal smears and body and joint fluids takes place 7 days per week.

TEACHING ACTIVITIES:

A. Pathology House Officers and Hematopathology Fellows, Fellows from Pediatric and Adult Hematology/Oncology and visitors from other institutions (Dr. Hanny Adam, University of Zurich, Switzerland and Dr. Sun-Hee Kim from Korea) participated in the following activities:
   1. Daily review of abnormal blood smears, body fluids, joint fluids for crystals, bone marrow aspirates, smears and bone marrow biopsies.
   2. Daily review of in-house and transfer consultation cases in hematopathology (lymph node biopsies, bone marrow biopsies, aspirates, splenectomy specimens, etc.).
   3. Daily review of outside consultation cases of Dr. Schnitzer.
   4. Correlation of morphology with special studies (cytochemistry, flow cytometry, immunoperoxidase and occasionally electron microscopy).
   5. Daily review of abnormal blood smears from M-Labs clients.
   6. A formal teaching conference for House Officers has been continued.
   7. Weekly review of cases to be presented at Lymphoma Conference (Hematopathologists, Fellows, and house officers).
   8. Review of SWOG cases.
   10. Biweekly Interdepartmental Leukemia Conference.
   11. Pediatric and Adult Hematology/Oncology Fellows participate in signouts.
B. Hematopathology Fellowship Program.
C. Continuing medical education for medical technologists - monthly.
D. Senior Student Clerkship Elective.
E. Summer Clinical/Research Program for Under-represented Minority Students.
FISCAL YEAR 1995/1996 GOALS:

A. Implement competency testing and competency based evaluations.
B. Implement reticulocyte counts using the Coulter STKS.
C. Continue as a beta site for Coulter Corp.
D. Prepare for the opening of the laboratory in the Cancer/Geriatric Center.
E. Continuation of cost-containment programs.
F. Continued review and development of laboratory utilization.
G. Implement limits on repetitive differential requests.
H. Continue to liberalize automated differential criteria.
I. Continue studies of limiting WBC requests from intensive care units.
J. Continue to enhance the overall efficiency of the laboratory operation.

Bertram Schnitzer, M.D.
Director
Clinical Hematology Laboratory

Timothy P. Singleton, M.D.
Assistant Director
Clinical Hematology Laboratory
CLINICAL IMMUNOPATHOLOGY LABORATORY

DEPARTMENT OF PATHOLOGY
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OVERVIEW:

The Immunopathology Laboratory experienced a 4% increase in overall test volume in 1994-95. Anthony A. Killeen, M.D., Ph.D., provided an invaluable service commitment to the laboratory in the interpretation of protein electrophoresis studies. Kent Johnson, M.D., and Kevin Cooper, M.D. (Dermatology) continued to signout tissue immunofluorescence studies under the auspices of the Anatomic Pathology Division. Paul Killen, M.D., Ph.D. and Dr. Johnson, also under the auspices of Anatomic Pathology, continued to enhance the Rnal Biopsy Service. Dr. Killen provided invaluable technical oversight of tissue immunofluorescence studies and leadership in the area of case-handling and tracking. Drs. Johnson and Killen also provided cross coverage of anti-neutrophil cytoplasmic antibody (ANCA) and anti-GBM studies.

CLINICAL SERVICES:

As the fiscal year approached its conclusion, the laboratory had experienced a modest increase in overall volume (approximately 4%). Particularly gratifying was the continued growth in several specialized assays; most notably the ANCA test and the anti-GBM indirect immunofluorescence test. Neutrophil cytoplasmic antibody determinations increased from approximately 100/month to more than 125/month. More than 100 indirect immunofluorescence assays for anti-glomerular basement membrane antibodies were interpreted in 1994-95. New procedures were also implemented in the protein electrophoresis area. We have recently evaluated and initiated a series of new utilization control measures in the laboratory. Most notable in this regard is sendout assays of circulating immune complexes, at a cost of $180/test. By instituting necessary approval by IP laboratory professional staff the number of these requests declined 5-fold, resulting in more than $12,000 saved. Finally, laboratory personnel continued cross-training programs with the Chemistry Laboratory. This was one of the chief goals of the 1992-93 Chemistry Section consolidation.

RESEARCH AND DEVELOPMENT:

The laboratory participated in an ongoing methods comparison study of microalbuminuria assays. This study is being conducted by Dr. Patricia Mueller at the Centers for Disease Control and Prevention in Atlanta. Involvement in this study was an outgrowth of our support of clinical studies of ambulatory diabetic patients that were carried out by Dr. William Herman (formerly of the Department of Medicine, University of Michigan) and Dr. Mindy Smith (Department of Family Practice, University of Michigan). We continued laboratory support of clinical studies of the effects of cytotoxic/immunosuppressive drugs on IgG, IgA and IgM as well as IgG subclass concentrations in lupus patients in conjunction with Dr. Joseph McCune (Department of Medicine, University of
Michigan). Finally, we recently added the capability of determining specific IgG and IgM anti-cardiolipin antibody concentrations. This assay has relevance to the “anti-phospholipid antibody syndrome” which has been associated with thrombosis, thrombocytopenia, and fetal wastage. Several commercially-financed methods evaluations were also carried out. These studies involved anti-streptolysin O and anti-cardiolipin antibody measurements.

QUALITY ASSURANCE:

The laboratory participated in two departmental QA projects. These related to a project that addressed transmission of laboratory testing data from point of order to medical record and the development of a department-wide utilization management database and activity plan.

TEACHING/PROFESSIONAL:

Residents, M4 medical students, and medical technology students from Eastern Michigan University rotated through the laboratory. Immunopathology journal club for medical technologists and on-service house officers was conducted biweekly during the academic year. Clinical Pathology Grand Rounds included immunopathology presentations by Dr. John Carey (Henry Ford Hospital, Detroit), Dr. Daniel Remick (Department of Pathology, University of Michigan), Dr. David Keren (Warde Medical Laboratory, Ann Arbor), and Dr. Jeffrey Warren (see individual faculty report). Dr. Keren was appointed as a Clinical Professor of Pathology and Drs. Warren and Keren continued the weekly series of didactic sessions entitled “Current Topics in Immunopathology”. Other professional activities of faculty and staff in the laboratory are summarized under individual reports.

Jeffrey S. Warren, M.D.
Director, Clinical Immunopathology Laboratory
MICROBIOLOGY/VIROLOGY LABORATORY
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CLINICAL ACTIVITIES

The Clinical Microbiology section of the Microbiology/Virology laboratory has demonstrated a 7.99% increase in volume in the past year. The virology section has demonstrated a 12.5% increase in overall volume. Significant increases in volume were noted in: blood cultures, Chlamydia testing, antimicrobial sensitivity testing, and urine cultures. In the virology section of the laboratories CMV IGG antibody, CMV culture/shell vials, EBV antibody, miscellaneous IGG antibodies, rubella, and rubella IGG antibody all demonstrated a significant increase in volume. The Microbiology/Virology laboratory continues to focus on utilization management in such areas as antimicrobial sensitivity correlations with the use of antimicrobics. In addition, studies of the appropriate use of blood cultures and the use of blood culture systems for specimens other than blood are ongoing.

The laboratory is an active participant in the U of M Hospitals Program for Excellence with a quality improvement team continuing to work on unacceptable sputum specimens. The Microbiology/Virology laboratory continues to improve the quality of correlative clinicopathologic laboratory data to our clinical colleagues in Infectious Disease and Infection Control. The clinicopathologic data is used in clinical laboratory rounds on a daily basis.

RESEARCH ACTIVITIES

The laboratory continues to focus on clinically applied research in such areas as viral serology, the effect of delayed bottle entry on recovery of blood isolates, and in vitro susceptibility studies including, for example; in vitro susceptibility of Bacteroides fragilis. The laboratory is an active collaborator in a National Institute of Health grant entitled "Candida Vaginosis Study." The principal investigator of the Candida Vaginosis Study is Dr. Barbara Reed in the Department of Family Practice.

In addition, the laboratory is focusing its applied research activities on PCR for the detection for organisms in various body sites. For example, under study at the present time are PCR methodologies for the detection of Pneumocystis carinii, Herpes simplex and Chlamydia trachomatis.

The laboratory also continues to evaluate data from two hospital small grants: 1) the possible over utilization of blood cultures on clinical services, and 2) monitoring of antimicrobial usage in intensive care settings with intervention where appropriate (an attempt to affect change in ordering patterns). These grants will be converted to ongoing monitors in the laboratory to support the hospital’s utilization management initiative.

The result of interdepartmental collaboration has resulted in four papers accepted or submitted for publication as well as abstracts presented by staff at national Infectious Disease and Microbiology meetings.

Kenneth D. McClatchey, M.D., D.D.S.
Director

Carl L. Pierson, Ph.D.
Associate Director
DRUG ANALYSIS AND TOXICOLOGY LABORATORY

DEPARTMENT OF PATHOLOGY
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The Drug Analysis and Toxicology Laboratory continues to maintain its prominent role as an active, progressive, and vital contributor to the success of the Department of Pathology and the University of Michigan.

The laboratory continues to be certified by the College of American Pathologists for the forensic drug testing program. The laboratory successfully passed the 1995 inspection for recertification in this special area. The requirements and demands to achieve this recognition escalate each year. Support of the M-Labs program through involvement in this added certification process places a large burden of responsibility on the staff of the laboratory, and the technologists in the laboratory deserve special recognition for their efforts. The Drug Analysis Laboratory successfully passed the 1995 general clinical laboratory inspection by the College of American Pathologists and performed very well during the review.

The laboratory continued several ongoing quality assurance projects. These projects involve review of corrected reports, turnaround times, and accuracy of data entry. The laboratory maintained involvement in a pharmacokinetic Quality Improvement Team, headed by the Pharmacy Department, which is evaluating the appropriateness of serum drug requests. A document outlining specific outcomes and future strategic goals was submitted in May 1995 to hospital administration for implementation.

The Drug Analysis Laboratory has been actively involved in novel research and development projects. The laboratory supports a large number of institutional clinical projects through collaboration with the Departments of Surgery, Dermatology, Obstetrics and Gynecology, Pediatrics and Pharmacology. Dr. Patel has continued to be active in athletic substance abuse testing for the NCAA and IOC. Dr. Annesley was a co-investigator in a major funded Phase III clinical trial supported by the Sandoz Corporation which is investigating the clinical utility of a new immunosuppressant drug. This trial was terminated in February 1995. The laboratory has also been involved as a reference facility for several external commercial research projects.

PUBLICATIONS BY LABORATORY STAFF:


Thomas Annesley, Ph.D.
Drug Analysis and Toxicology Laboratory
PATHOLOGY DATA SYSTEMS

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The following are some of the major achievements of Pathology Data Systems (PDS) personnel during the past year:

- Extensive work on the STC interface engine (hub) including developing specifications for a Cerner HL7 interface to the hub; deployment of the HL7 interface anticipated for this Fall.

- Revision of the autopsy information system to allow on-line house officer editing of autopsy reports and searching of the autopsy database by diagnosis.

- Sponsorship of the 13th Annual Symposium June 7-9 on Automated Information Management in the Clinical Laboratories with 310 paid registrants and 41 vendors; two hours of programming presented as an audioconference for 53 pathology training programs in the U.S. and Canada.

- Improvements to the Anatomic Pathology module of PathNet with automatic requeueing to increase faculty efficiency (reassignment of finalized surgical pathology reports from the original workcenter to the queue of the surgical pathologist who signs out the case).

- MLabs information support with a test-ordering interface to Foote Hospital in Jackson, Michigan, using Eagle software, work in-progress on an HL7 interface to transmit parsed test results from PathNet to the Parke Davis laboratory management information systems (LIMS), work in progress on a hub-mediated host-to-host interface from PathNet to the LIS at Mt. Clemens Hospital.

- Installing and interfacing a Coulter analytic instrument in the operating room for rapid TAT of hemoglobin, hematocrit, and platelet count, with anticipated favorable effects on the utilization of blood and blood products.

- Wireless access to PathNet by phlebotomists, allowing phlebotomists in Mott to enter point-of-care test results; this functionality will be expanded as soon as barcodes are printed on patient wrist bands to allow bedside identification of patients, positive pre-transfusion identification checks, and “specimen-drawn” notification to PathNet directly from patient care units.
- PCIS/TDS deployment planning with numerous task forces studying various aspects of system activation such as identification of the blood drawer for physician draws and a strategy for printing PathNet barcodes labels directly in patient care units.
- Reduction of scheduled and unscheduled system downtime to a four-year low for PDS (total down time now averaging 1-2% per month including scheduled daily and weekly maintenance).
- Deployment of new Help Desk software in PDS to track and document problems.
- Modification of the biweekly meeting of PDS personnel with a special focus on the priority list of ongoing PDS projects.
- Deployment of new PathNet software for non-gynecology cytology specimens including automatic diagnosis coding.

Bruce A. Friedman, M.D.
Laboratory Director
PHLEBOTOMY SERVICES AND CENTRAL DISTRIBUTION

DEPARTMENT OF PATHOLOGY
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The following are major achievements for phlebotomy and central distribution during 1994-1995:

- Expansion of the resident phlebotomist program to all floors in University Hospital and Mott; the resident phlebotomist is assigned permanently to a patient care unit and is responsible for most of the blood drawing on that unit during daylight hours.

- Deploy antibiotic peak blood drawing services Monday through Friday during resident phlebotomy hours; this has been a much sought after service by house officers that also improves the quality of the antibiotic levels.

- Transfer of 28 messenger service FTEs to the phlebotomy service accompanied by the hiring and training all these new personnel; all blood specimens in the hospitals are now picked up by phlebotomy personnel, blood products are delivered by them, and “code” specimens are managed by the phlebotomy team in the Taubman Center, Mott, and University Hospital.

- Phlebotomists now enter point-of-care results into the PathNet database from the Mott ICU’s using wireless laptop computers; this has been both a technically challenging project as well as being worthwhile from the perspective of ensuring the completeness of the pathology database.

- Management of the Death Registry land release of deceased patients to funeral directors by central distribution personnel; this is a service for the department that was not being optimally managed off-hours that central distribution was able to take over.

- Remote blood drawing services are now being managed by traveling phlebotomists for the Clozaril project and at the Hawthorne Center.

- Blood drawing services now being offered in the Radiology/Oncology unit once per week as a valuable service to patients who are too sick to comfortably come to the Taubman blood drawing stations.

- Planning for blood drawing services in connection with the PCIS/TDS project, in the Cancer/Geriatric Hospital, and in the East Medical Campus; these are complex planning projects that will have a major impact on the laboratory service load and through-put.
Limited laboratory bench testing by phlebotomists now being offered at the Turner blood drawing station and also at the Briarwood Family Practice Center.

Designed and implemented a plan with Dr. Dieter Roloff from the Holden Pediatric Center for reducing the amount of blood drawn from premature infants; this required close cooperation with the various laboratories in terms of the blood volume necessary for adequate testing, but the new policy has been effective in reducing test-related anemia in premature infants.

Bruce A. Friedman, M.D.
Laboratory Director
M-LABS
DEPARTMENT OF PATHOLOGY
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This last year has been a multifaceted year of growth for M-Labs. We have experienced increases in net revenues from the clinical and anatomical pathology services. We began significant efforts in the area of managed care. We now participate in providing laboratory services for the growing list of newly acquired University of Michigan practices, and have begun efforts to expand our services to the pharmaceutical industry. Finally, we have seen an increase in the size of the M-Labs staff.

This last fiscal year has seen a 22% increase in net revenue from billings to clients for clinical pathology services and a 100% increase in net revenues from billings to patients for clinical pathology services. In anatomic pathology, the number of surgical pathology cases has increased by 22% to approximately 11,500 cases per year. Cytology cases have also increased. Although most of the increase in revenues has been through additional services rendered to existing clients, some has been due to the addition of 3 new physician office accounts, a group practice account, a home care account, and new accounts for dermatopathology, renal biopsy service (up to 21% in volume), flow cytometry, and muscle biopsies service. A new small hospital account has just been acquired and is not yet reflected in these numbers. One hospital contract for clinical pathology services was terminated. This was with a hospital which had been previously taken over by a larger hospital. Another hospital contract for both anatomic and clinical pathology services continues despite that hospital's recent affiliation with a larger institution.

We have begun our involvement in the area of managed care by exploring the opportunity to provide outpatient laboratory services to M Care. We propose to provide these services using the University of Michigan clinical laboratories in our own service area and using a network of hospital laboratories in areas outside of our service area. Such a network has the capability of providing high quality laboratory services to M Care subscribers at a competitive price to M Care, and to help maintain the laboratory volume and reduce per-unit costs for the hospital laboratory network providers. Involvement in this network will also provide a significant marketing tool to M-Labs. We have analyzed M Care's historical outpatient laboratory utilization data and compared that with the Department of Pathology costs to estimate an appropriate capitation rate. We have developed a listing of patient centers for the proposed M-Labs/M Care network of laboratory providers. This network will include the M-Labs client hospitals currently in the proposed area of service as well as other M Care participating hospitals. Our new managed care representative, Deirdre Fidler, has done much work in preparing the ground work for negotiations with M Care. Discussions are currently underway with M Care regarding service and quality issues as well as preliminary financial discussions.

In the last year we have been active participants in the formation of a network of hospital laboratories being organized to bid for state-wide managed care contracts. Susan Valliere, the M-Labs manager, has assumed the chairmanship of the newly formed Marketing and Communication Committee for this network. Deirdre Fidler serves on the operations committee.

During the year Kent Johnson, M.D., has spearheaded an effort to expand our laboratory services for clinical phase drug testing for Parke-Davis Co. of Ann Arbor. This effort has resulted in a decision by Parke-Davis to send us more phase 1 clinical laboratory testing. In the future we expect to expand our efforts in this potentially lucrative market.

Dr. Rudolfo Rasche's effort at expanding our services to clients has resulted in some innovative and successful new programs. Three M-Labs symposia in the last year were well attended by client and
potential client pathologists. The presentations were by our Anatomical Pathology faculty and were well received. A symposium on rules-based control of utilization presented by the Pathology Data Services group was of great interest to our clients. Dr. Rasche’s efforts and the support of the Anatomic Pathology faculty have resulted in our developing and providing an innovative quality assurance program for surgical pathology for client pathologists. These efforts in the last year have also resulted in a steadily growing number of surgical pathology and cytopathology “quick” consult cases, sent from pathologists at six hospitals.

The past year has seen the commitment of additional funds by the University Hospital for expansion of the M-Labs program. This has resulted in the promotion of Susan Valliere to manager of M-Labs, and in the addition of Debra Moss (operations), Melissa Brown (sales), and Kenneth Cartwright (information systems) to our staff. Competitive market forces now dictate that we be prepared to offer and deliver interfaces between the University of Michigan Pathnet system and client hospital laboratory information systems. Pathology Data Systems is now working towards the establishment of our first complete interface with Mount Clemens General Hospital, a project that we hope will be completed by November 1, 1995.

Impediments to the success of the M-Labs program persist, however. Clients complaints about the report format of many of our tests remain our biggest problem. Some billing problems persist, although there has been some improvement in this realm.

Mistakes in accessioning specimens have increased recently and, in my view, will require a double order entry system or other means of cross-checking of entries before specimens are tested until systems are in place to allow for order entry by clients at client sites.

Turnaround times for some of our services also do not meet current market expectations. We hope that through increased volume via our outreach efforts, and innovative test sharing with other local laboratories, improvements can be made in turnaround time.

We have recently submitted proposals for complete clinical laboratory testing to three potential client hospitals and we are optimistic that some of these proposals will be accepted. We are currently preparing a proposal for laboratory services to a nearby network of nine hospitals. Exploration is underway with a potential client hospital that previously rejected a proposal from us but is now reconsidering.

In the future, we must continue our efforts to meet the needs of our client hospitals and their physicians in various areas of surgical and clinical pathology. Some tasks will be to revise our requisitions and test panels and to establish reflex testing to help control utilization. We must explore the possibilities of increasing our market share in the potentially very rewarding area of laboratory testing for clinical phase drug trials.

Our new strengths are the addition of some bright new faces to the seasoned veterans of a dedicated, highly motivated M-Labs staff.

Our continuing strengths are the breadth of expertise of our faculty and staff and our positioning ourselves as allies to our client hospitals and their laboratory staffs in an increasingly competitive environment. The key to our success will be making this expertise available to our client hospitals, in assisting them with their outreach efforts, and in helping them, through networks of hospital laboratories, to remain players in the managed care arena.

EM Silverman, M.D.
DEPARTMENT OF VETERANS AFFAIRS MEDICAL CENTER
PATHOLOGY AND LABORATORY MEDICINE SERVICE

DEPARTMENT OF PATHOLOGY
ANNUAL DEPARTMENTAL REPORT
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INTRODUCTION:

The Department of Veterans Affairs Medical Center (VAMC) is a Dean’s Committee institution affiliated with the University of Michigan. The VAMC Pathology and Laboratory Medicine Service maintains a close relationship with the University Department of Pathology at every level. The pathologists in the Pathology and Laboratory Medicine Service have academic appointments and participate in University departmental activities in a manner similar to other sections. Recruitment efforts for pathologists are combined and candidates are selected on the basis of academic performance and potential as well as professional competence similar to any departmental candidate. There are four full-time pathology staff positions and these are presently filled. Three resident training positions have been maintained at the VAMC for university pathology residents who serve monthly rotations in Surgical Pathology, Autopsy Pathology, and a number of arranged electives including Electron Microscopy and special study programs in Surgical Pathology. The Chief, Pathology and Laboratory Medicine Service is a voting member of the Dean’s Committee.

ANATOMIC PATHOLOGY:

A. Surgical Pathology: 4,733 surgical cases have been accessioned and reported during this period of time. This is a decrease of 468 cases over the past year. The resident assigned to surgical pathology, usually a first year resident, acts as coordinator of the section and in that capacity has the opportunity to examine all of the specimens grossly and microscopically under close one-to-one supervision by the staff pathologist. The resident interacts with the clinical staff, the medical students and other laboratory sections as appropriate to obtain a broad educational experience and to aid in providing high quality medical care. There is an extensive quality improvement program within Surgical Pathology including regular consultations with the Armed Forces Institute of Pathology, University of Michigan, and other outside consultants. There is extensive review and analysis of frozen sections, amended diagnoses and surgical appropriateness within the medical center.

B. Autopsy Pathology: 64 autopsies were performed during this year which is a rate of approximately 30% of deaths. Assigned residents perform the autopsies, prepare the pathologic diagnosis, and present the case in conference to the staff pathologists and other residents. The resident cuts and otherwise prepares the tissue for the preparation of slides and then reviews them and makes a microscopic diagnosis. These steps are supervised by staff pathologists who permit a gradual increase in independence for the resident with increased experience. During the year the residents presented the findings of selected autopsies at the Medicine Morbidity and
Mortality Conference with a total of 22 cases presented. Several autopsies performed at the VAMC were also presented at the extended Gross Conference at the University.

C. Cytology: 2,222 cases were examined and diagnosed during this period. Although there is not a formal rotation in cytology within the VAMC the cytologic material is readily available and is used as correlative information for surgical and autopsy pathology. This laboratory is a "Center of Excellence" in cytology and is the program center for the national VA quality improvement survey which was established and is directed by Dr. Beals.

D. Electron Microscopy: 328 electron microscopy cases were reported. An elective rotation is available for pathology residents in electron microscopy. In other rotations the electron microscope findings are used to complement surgical or cytopathology diagnoses. During the academic year Dr. Beals presents biweekly electron microscopy seminars at the University of Michigan. This VAMC is a "Center of Excellence" in electron microscopy and serves as consultant to other VA Medical Centers, to the University of Michigan Medical Center, and to other hospitals by contract.

CLINICAL PATHOLOGY:

During the last fiscal year (Fiscal Year 1994) 1,220,224 clinical pathology procedures were done in the laboratory. In Chemistry there were 708,227; in Hematology 122,707; in Microbiology 90,618, and in Blood Bank approximately 7,000 crossmatches. This represents raw data rather than weighted test numbers. There is not a formal clinical pathology rotation available for pathology residents at this time although the residents may participate or observe clinical pathology procedures when this activity is appropriate in relation to their other rotations. Dr. Chensue is director of clinical pathology and makes available interesting and pertinent clinical laboratory available to residents as desired. Clinical Pathology data is available to residents via computer for their information in surgical pathology, autopsy pathology, and elective rotations.

EDUCATION AND TEACHING:

In surgical pathology the staff pathologists provide one-to-one teaching during the surgical sign out time. In addition, there is a surgical pathology conference approximately every other week and an autopsy conference with the entire staff following each autopsy. Because of the closeness of various sections of the laboratory there is frequent consultation among the pathologists and the residents are involved throughout. Since the VAMC is relatively close to the University, the residents are permitted and expected to attend the appropriate teaching conferences at the University as well. The entire staff participates in the laboratory and lecture portions of the second year medical students at the University of Michigan. Lectures in bone pathology are also given to the dental students. The VA staff also participate in other ad hoc lectures and in a moderate number of seminars for the resident staff, most often given at the University of Michigan.
RESEARCH:

The specific efforts of the pathology staff are included on individual reports. Dr. Stephen Chensue has a strong funded research program that was renewed for four years in October, 1993. He also participates in cooperative studies with other investigators at the University of Michigan. Other staff participate in various clinical studies and collaborate with a variety of investigators. The laboratory in general serves the VAMC research program by providing considerable technical support for clinical research and in some cases for more basic research in both anatomic and clinical pathology. The staff also serves as consultants and advisors for a number of research programs. Dr. Peter Brawn continues his research in carcinoma of the prostate gland and has been a member of the VA Research and Development Committee since 1 July 1993.

ADMINISTRATION:

The staff pathologists at the VAMC serve in various capacities involving administrative tasks for the University of Michigan, such as the Resident Selection Committee, the Medical Student Admissions Committee, and the teaching faculty of the second year medical students. At VA Medical Center the pathology staff members serve on all major committees involved with institutional policies and procedures. Dr. Beals has been designated as the National Veterans Administration Office Representative to oversee anatomic pathology within Department of Veterans Affairs Medical Centers. He has been instrumental in developing policies and procedures related to anatomic pathology within the Department of Veterans Affairs. Late in 1994, Dr. Beals was appointed Acting Director of Pathology for the VA nationally and serves in that position at the time of this report.

SUMMARY:

The Department of Veterans Affairs Medical Center Pathology and Laboratory Medicine Service considers the practice of high quality medicine and the appropriate care of patients as its first and highest responsibility. There is close supervision of resident activities as they are involved with patient care. All staff members are privileged and evaluated in accordance with their training, experience, continuing education and participation in quality improvement activities. Within the service there is an extensive quality improvement program that integrates with that of the hospital as a whole. The Pathology and Laboratory Medicine Service has been accredited by the College of American Pathologists since the early 1960’s. The Blood Bank is certified by the American Association of Blood Banks and is approved by the Federal Drug Administration. The association with the University of Michigan serves to strengthen and improve the quality of patient care. The teaching effort involving both residents and medical students is of mutual benefit to the two institutions. The physical plant of the VAMC Pathology and Laboratory Medicine Service is short of space but there has been considerable progress toward the VA Clinical Addition that will double the present space.

Lee Weatherbee, M.D.
Chief, Pathology and Laboratory Medicine Service
Ann Arbor VA Medical Center
The Department of Pathology for several years has enjoyed a close professional relationship with the Department of Toxicology/Pathology at the Parke-Davis Pharmaceutical Research Division of Warner-Lambert Company which is located in Ann Arbor. This Department at Parke-Davis is headed by Dr. Felix De la Iglesia who also has a faculty appointment in the Department. Dr. De la Iglesia is a world expert on hepatic injury as well as morphometric analysis of cellular injury. For several years we have collaborated scientifically with Dr. De la Iglesia and his colleagues which has resulted in several publications.

In the past few years these collaborative interactions have been greatly expanded in the context of increased collaborations between the University and Parke-Davis. Parke-Davis and the University of Michigan, Department of Pathology have entered into an agreement with Dr. De la Iglesia and colleagues to enhance joint research interests. This includes combining positions for postdoctoral fellowship programs as well as providing research opportunities for individuals at both institutions. Currently, there is one Parke-Davis postdoctoral fellow in the Department and several fellows from the Department who collaborate with colleagues at Parke-Davis including working at the Parke-Davis Faculty. In terms of faculty interactions there are collaborations with faculty from Parke-Davis and the Pathology Department dealing with models of inflammation and the regulation of the inflammatory response. There are also collaborations dealing with the mechanisms of apoptosis and DNA alteration in diseases such as SLE as well as morphometric evaluation of tissue injury. These interactions are mutually beneficial and have provided both groups with expertise that is not otherwise available at only one of the two institutions. These collaborations have been mutually reinforcing as demonstrated by joint seminars between the two institutions and joint efforts in recruitment of postdoctoral fellows.

These interactions are expected to continue to increase in the future. This industrial-academic partnership represents an important model for collaborative experiment research that will be jointly beneficial. It also provides an important exposure for our fellows to needs of the pharmaceutical industry.

Felix A. de la Iglesia, M.D.