OVERVIEW
Anatomic Pathology continues to experience significant growth in service matched by ongoing success in recruiting faculty. Education and research missions remain strong with sustained successes in, 1) recruiting to a growing portfolio of subspecialty fellowships, 2) funding research programs and collaborative projects, 3) peer-reviewed publications, and 4) expanding and maintaining a national and international presence as opinion leaders, educators, and clinician scientists.

Practice growth combined with attrition continues to drive faculty recruitment efforts. **May Chan** (Assistant Professor) and **Julie Jorns** (Assistant Professor) joined the faculty in July 2011 to meet needs in dermatopathology and breast pathology, respectively. Both were replacement positions. **Amer Heider** (Assistant Professor) arrived in September 2011, joining Dr. Raja Rabah as a core member of our pediatric pathology group. In addition, integration with the Wayne County Medical Examiners Office through a signed Professional Services Agreement brought four new fully credentialed faculty to our Center of Excellence in Forensic Pathology: **Francisco Diaz** (Clinical Lecturer), **Leigh Hlavaty** (Assistant Professor), **Carl Schmidt** (Associate Professor), and **Lokman Sung** (Clinical Lecturer).

Additional faculty were recruited in the last two quarters of FY2012 and will join the faculty in the first quarter of FY2013 as listed below.

**Forensic Pathology**
- **Avneesh Gupta**                July 2012
- **Kilak Keesham**               July 2012
- **Chantel Njiwaji**             August 2012
- **Allecia Wilson**              August 2012

**Surgical and dermatopathology**
- **Aleodor Andea** (dermatopathology) July 2012
- **Paul Harms** (dermatopathology)  July 2012
- **Rohit Mehra** (GU pathology)    July 2012
- **Scott Tomlins** (GU pathology)  July 2012

Safety, quality, and service remain high priorities in anatomic pathology. Our **All Faculty and Staff Quality Assurance meetings** remain an important vehicle for driving Lean principles and tools into our clinical operations. AP leadership and management participated in launch of a departmental service excellence initiative.

In the second quarter, we moved into new office and laboratory space in the new C.S. Mott Children’s Hospital. This required shift in not only faculty but also laboratory and administrative personnel. As a consequence we are much better positioned to be more tightly integrated into a multidisciplinary model for providing age-appropriate care to our Mott Hospital patients and families. It is especially important that we can now offer
onsite support for intraoperative consultations.

Education programs remain strong as demonstrated by ongoing successes in existing fellowships, recruitment of a very strong alumnus of our Michigan residency to a recently accredited fellowship in Pediatric Pathology, and applications for new fellowships in Neuropathology and Forensic Pathology. AP faculty continue to play key roles in support of our residency program and in medical school teaching, accounting for over 430 hours of contact time with University of Michigan 1st, 2nd, and 4th year students.

Success and vitality in our research activities remains very strong as evidenced by continued visibility in peer-reviewed journals considered high impact by the academic anatomic pathology community. AP faculty contributed over 180 publications to the peer reviewed literature, a 17% increase compared to the year before. Despite an increasingly challenging funding climate research expenditures remained steady at 1% above FY2011 levels.

**CLINICAL ACTIVITIES**

**Surgical Pathology**
A total of 88,940 pathology specimens, including a combination of intramural and extramural cases, were processed in 2012 compared to 89,785 in 2011 and 80,690 in 2010. This represents a 0.9% decrease compared to FY11 but a 10.2% increase over the last two years and nearly 30% (27.1%) compared to FY07. Among our “inside” surgical pathology practices only our breast (BE) and pediatric (IP) services saw substantial increases of 12.8% (253 cases) and 19.6% (357 cases) respectively. The total number of patient specimens acquired from procedural areas within the UMHHC was nearly unchanged from the previous year and accounted for 66.8% of cases. In contrast outside (“transfer”) cases reviewed for patients referred to UMHS for care grew at an annual rate of 10.3%. The number of extramural consultation totaled 10,976 compared to 10,598 in FY11, reflecting a 3.6% annual increase.

Faculty productivity increased despite relatively flat case volumes. Expressed as a 12 month rolling average, faculty generated an average of 636 RVUs/FTE/month in June 2012 compared to 612 RVUs/FTE/month in June 2011. This continues to reflect disproportionate impact of RVUs compared to case accession numbers (i.e. $\uparrow$RVUs/case) in several key surgical pathology services.

**Pediatric and Perinatal Pathology**
The pediatric and perinatal pathology service continued to flourish under the leadership of Dr. Raja Rabah. Dr. Amer Heider joined the faculty as a core member of our pediatric and perinatal pathology team in September 2011. A brand new state-of-the-art anatomic pathology laboratory opened in the new C.S. Mott Children’s Hospital in December 2011, and Drs. Rabah and Heider moved to offices in the new hospital. This move provided the department of pathology and the pediatric perinatal pathology team more visibility and greater opportunities to interact more closely with our clinical colleagues resulting in improved care for our young patients.

As summarized in Table 1, pediatric surgical cases grew at an annual rate of nearly 20%, accessioning 2,177 cases from the Mott Hospital ORs as well as a number of transfer cases and staging bone marrows. Although the pediatric case volume is
increased, the TAT is showing continuous improvement as depicted in Fig 1. Case volume and TAT for placentas remained steady as shown in Fig 2.

Table 1: Pediatric Pathology Clinical Activity, FY10 – FY12

<table>
<thead>
<tr>
<th></th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peds (IP)</td>
<td>1655</td>
<td>1820</td>
<td>2177</td>
<td>19.6%</td>
</tr>
<tr>
<td>Placentas (PL)</td>
<td>1166</td>
<td>1478</td>
<td>1456</td>
<td>(1.5%)</td>
</tr>
</tbody>
</table>

Figure 1 – Pediatric surgical (IP) case volumes increased nearly 20%. Despite increased workload service levels held steady with average turnaround times of less than 2 days.

Figure 2 – Placenta (PL) case volumes were largely unchanged with sustained service delivery levels (mean turnaround time around 2 days).
In addition to the surgical cases, the service covers all pediatric autopsy cases from Mott and, effective January 2012, all fetal examinations. Thirty seven pediatric autopsies and 43 fetal examinations were done through June 2012.

The team participated in over 150 multidisciplinary and teaching conferences at Mott and Women’s Hospital and over 600 patients were discussed. Over 40 pediatric autopsy cases were reviewed in several morbidity/mortality meetings and grand rounds with different pediatric/perinatal subspecialties.

**Dermatopathology**

The Dermatopathology Service receives diagnostic case material from four primary sources: (1) UMMC (ID) cases; (2) outside contractual (MD) cases; (3) outside cases reviewed for referred patients (TD); and (4) personal consultation cases.

<table>
<thead>
<tr>
<th></th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
<th>% change (FY11 - FY12)</th>
<th>% change (FY10 - FY12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID</td>
<td>13,168</td>
<td>13,441</td>
<td>13,716</td>
<td>2.0%</td>
<td>4.2%</td>
</tr>
<tr>
<td>MD</td>
<td>5,269</td>
<td>9,691</td>
<td>7,412</td>
<td>(23.5%)</td>
<td>40.7%</td>
</tr>
<tr>
<td>TD</td>
<td>1,958</td>
<td>2,828</td>
<td>3,566</td>
<td>26.1%</td>
<td>82.1%</td>
</tr>
<tr>
<td>Consults</td>
<td>2,410</td>
<td>2,106</td>
<td>2,263</td>
<td>7.5%</td>
<td>(6.1%)</td>
</tr>
<tr>
<td>TOTALS</td>
<td>22,805</td>
<td>28,066</td>
<td>26,957</td>
<td>(5.7%)</td>
<td>16.1%</td>
</tr>
</tbody>
</table>

The Dermatopathology Service continues to be a high volume service (see Table 2) and has seen substantial growth over the last two years driven primarily by outside (MD) and transfer (TD) cases. Combined with modest growth in UMMC (ID) cases this offsets a small decrease in consultation cases over that same time period to result in a net increase of 16.1% in FY12 compared to FY10.

Doug Fullen and Lori Lowe served as Co-Directors of Dermatopathology through FY2012. Drs. Alexandra Hristov (UCSF) and May Chan (Harvard) joined the faculty in June and August 2011, respectively. In the last quarter of FY11 the same search committee that successfully recruited Drs. Hristov and Chan also recruited Dr. Aleodor Andea to an incremental position intended to support practice growth and create a new Dermatopathology Molecular Research Laboratory (DMRL) as part of a strategy to establish our dermatopathology practice as a center of excellence for molecular diagnostics applied to cutaneous malignancies. Dr. Andea joined the faculty in the first quarter of FY2013 as Director of the MPRL and will also serve as Director of our Dermatopathology Fellowship beginning in January 2013. In addition, Dr. Paul Harms, a graduate of our dermatopathology fellowship training program, was appointed as Clinical Lecturer effective July 1, 2012. Dr. Harms will fully participate in the dermatopathology service while also pursuing research projects in the laboratory of Dr. Arul Chinnaiyan. In addition to his full-time dermatopathology service responsibilities, Rajiv Patel participates in the soft tissue and orthopedic pathology service. May Chan participates in the general surgical pathology (“Room 1”) service.

We continue our active involvement in the University of Michigan Multidisciplinary Melanoma Clinic (MDMC) and Tumor Board, Multidisciplinary Cutaneous Oncology Clinic (MCOC) and Tumor Board, Cutaneous Lymphoma Conference and Tumor Board,
and the University of Michigan Cutaneous Oncology “Destination” Program. Dermatopathology plays an integral role in all of these programs.

Neuropathology

Sandra Camelo-Piragua, Constance D’Amato, Andrew Lieberman and Paul McKeever contributed to the Neuropathology Service. Ms. D’Amato is Active Emeritus.

There were just over 1200 neurosurgical cases examined this year, including 230 personal consultation cases (see Figure 3). The nerve and muscle biopsy service is now staffed by Drs. McKeever and Camelo-Piragua. Inside (IB) and outside (MM) nerve and muscle biopsies declined by -8.0% (15 cases) and -16.4% (35 cases), respectively. This was offset by a 3.7% (24 cases) increase in UMHS surgical cases and a 66% (91 cases) increase in consultation cases for an overall annual growth rate of 5.4%. The Brain Tumor Board of the University of Michigan Cancer Center and Hospitals, supported weekly by a neuropathologist, reviewed more than 150 neuro-oncology patients with challenging diagnostic evaluations. Also supported by the neuropathology service was a weekly neuromuscular disease conference and monthly neurosurgery CPC.

There were 223 University Hospital brains examined at autopsy. Of these, 53 brains were examined at formal Brain Cutting Conference. Also examined at Brain Cutting Conference were 17 cases of chronic neurodegenerative disease referred by the Michigan Alzheimer Center. Beginning in June 2012 brain cutting occurred weekly and was staffed on a rotating basis by all three neuropathology faculty with the goal of shortened turnaround time for CNS autopsies.

Consensus conference was expanded to twice weekly to enable rapid turnaround of difficult cases.

The neuropathology faculty taught medical students during the M2 neuroscience sequence and house officers, including an evening introductory course in diagnostic neuropathology. A fellowship in neuropathology was accredited and recruitment is underway to fill this spot for a July 2013 start.

Medical renal pathology

Our renal biopsy service continued to show strong growth, accessioning 1,166 cases in
FY12 compared to 984 in FY11 (18.5% annual growth rate) and 641 in FY07 (81.9% growth over 5 years). Growth in practice was driven in large part by a change in protocol for managing UMHS renal transplant patients launched in FY11. Whole slide scanning remains an aspirational goal as a method for archiving and virtual review of biopsies from renal transplant patients.

Figure 4. Renal biopsies continued to show strong growth beginning in July 2010 as a consequence of a change in protocol for managing transplant patients. Expressed as a 12 month rolling average, we are now accessioning nearly 100 cases monthly.

Dr. Kent Johnson, Professor of Pathology and long time member of the faculty primarily responsible for the renal biopsy service, transitioned to Active Emeritus status at the end of FY12. A search committee under the leadership of Dr. Paul Killen, Head of our Renal Biopsy Service and Director of Electron Microscopy, is actively recruiting to address the gap created by Dr. Johnson’s retirement.

Cytopathology
A number of transitions occurred in cytopathology in the course of FY2012. Michael Roh assumed leadership responsibilities as Director of Cytopathology, Medical Director of the Cytopathology Laboratory, and Program Director for the Cytopathology Fellowship, on an interim basis January 1st and permanently effective July 1, 2012. After 17 years of service Claire Michael stepped aside from all leadership positions at the end of the 2nd Quarter and resigned from the department at the end of the 4th Quarter to take a leadership position in the Department of Pathology at Case Western University. Stewart Knoepp resigned in the 2nd Quarter to enter community practice in the region. Amer Heider joined the Division in September 2011 with a primary focus in pediatric pathology but a secondary focus in cytopathology. A search committee under the leadership of Mike Roh continues to actively recruit to an open position.

Brian Smola continues to serve as interim supervisor while Kalyani Naik remains on temporary leave to play a lead role in implementing the Soft LIS system in Pathology Informatics. Brian is a member of the LIS build team and actively involved in building and implementing the new Soft LIS system.

Total gynecologic specimens for the year were 32,866; a 3.4% decrease from last year (see Table 3). This is in line with the expected national average decrease as a result of changes in follow-up Pap test recommendations for women with negative HPV.
Non-gynecologic specimens numbered 9,664 a 1.5% decrease from last year. Exfoliative non-gyn specimens totaled 7,034, a 1.3% decrease from last year. Fine needle aspirations (FNAs) totaled 2,630, a 0.9% increase from last year. FNAs performed at the Cancer Center (ASP3) numbered 242, representing a 9.5% increase from last year; assisted FNAs (ASP2) numbered 1,526 a 6.8% increase from last year while aspirates performed by clinicians without our assistance (ASP1) numbered 862 representing a 11.6% decrease from last year. This continued increase in the assisted FNAs reflects our continuous communications with our clinical colleagues reinforcing the value of cytology assistance on site and its impact in the improved outcome for the patients. It also reflects an increased demand on laboratory personnel, cytotechnologists, fellows and faculty to provide the needed service.

Table 3: Cytopathology Clinical Activity, FY10-FY12

<table>
<thead>
<tr>
<th></th>
<th>FY2010</th>
<th>FY2011</th>
<th>FY2012</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gyn Total</td>
<td>36392</td>
<td>34014</td>
<td>32866</td>
<td>(3.4%)</td>
</tr>
<tr>
<td>Non-Gyn Total</td>
<td>9398</td>
<td>9812</td>
<td>9664</td>
<td>(1.5%)</td>
</tr>
<tr>
<td>Non-Gyn</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exfoliative</td>
<td>6867</td>
<td>7123</td>
<td>7034</td>
<td>(1.3%)</td>
</tr>
<tr>
<td>ASP Total</td>
<td>2531</td>
<td>2604</td>
<td>2630</td>
<td>0.9%</td>
</tr>
<tr>
<td>ASP 1</td>
<td>977</td>
<td>962</td>
<td>862</td>
<td>(11.6%)</td>
</tr>
<tr>
<td>ASP 2</td>
<td>1276</td>
<td>1423</td>
<td>1526</td>
<td>6.8%</td>
</tr>
<tr>
<td>ASP 3</td>
<td>278</td>
<td>219</td>
<td>242</td>
<td>9.5%</td>
</tr>
</tbody>
</table>

Cytology continued to focus on maintaining high service delivery levels as summarized in Table 4 and continued to employ Lean principles and tools in laboratory management.

Table 4: Cytopathology Turnaround time (7 day week)

<table>
<thead>
<tr>
<th></th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
</tr>
</thead>
<tbody>
<tr>
<td>GYN</td>
<td>3.8</td>
<td>4.0</td>
<td>5.1</td>
</tr>
<tr>
<td>NGYN/FNA</td>
<td>1.7</td>
<td>1.7</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Summary of Lean Activities and Service Initiatives in Cytopathology

- A team consisting of Brian Smola, Kent Traylor, Jeanette Gohl, Michael Roh and Stewart Knoepp evaluated the current process of reporting cytopathology and proposed a different work flow process that has the potential of improving transcription turn-around time; reduce lost requisitions and the rate of addendums and transcription corrections. The proposed changes were piloted near the end of the 2010-2011 and were implemented smoothly during 2011-2012.

- Cytopathology staff actively participated and presented at AP QA meetings.

- In follow-up to an inventory management value-stream map done in the past, with collaboration from our website committee, Kalyani Naik and Brian Smola developed a web-based inventory management system that is currently in use. The idea, then in its development stage, was presented at the quality assurance meeting and was presented again in completed form. The web-based tool will
provide not only Cytopathology, but the entire department with an effective and efficient tool for ordering and, more importantly, tracking of those orders.

- A web-based solution is currently being discussed with the Pathology Web Committee for all daily QA/QC activities such as stain QC, refrigerator temperature, equipment maintenance, etc. Brian Smola developed an Excel based solution to a multiple paper log system and presented to the Web Committee on July 9th. The program will be user defined with the hope that other departments may also participate.

- Laboratory staff continues to be actively engaged in problem solving and practicing Lean thinking in a standardized manner utilizing the A3 and root cause analysis tools. Volunteers are sought to lead small groups to study any individual problem and develop an A3. A 10 minute discussion is devoted in our monthly laboratory operations meeting for the presentation of each A3.

- A “leaner and greener” approach to triage of appropriate ThinPrep Pap test vials for HPV testing was formulated and is being piloted at the current moment. This countermeasure was enacted in response to a low but finite number of errors in inadequate identification of all ThinPrep Pap test vials for HPV testing triage in a timely manner. Data is being collected to compare error rates with the prior and current protocols.

In collaboration with the breast pathology service, cytotechnologists continue to be involved in utilizing the VIAS system for scoring ER/PR and Her2Neu expression in breast tumors. As of January 2011, Brian Smola and Julie Jorns led the training of our cytotechnologists. A total of 4 cytotechnologists are currently trained (Sue Clozza, Binita Naylor, Kim Luckett, Brian Smola) and are performing scoring on approximately 750 breast biopsies annually.

The end of FY12 marks the three-year anniversary for the implementation of the telecytology program designed to cover the endocrinology/thyroid fine needle aspiration program from Domino’s Farm. The onsite adequacy assessment via the web was successfully implemented with no major difficulties and continues to grow 3 years later. The service has grown to involve two procedure rooms at Domino’s Farms which operates two days per week. This requires the commitment of one cytotechnologist for about 4-6 hours in 6-10 days per month.

**Autopsy and forensic services**

FY2012 continued to be a time of change for our autopsy practice under the leadership of Dr. Jeffrey Jentzen, Director of Autopsy and Forensic Services. This section continues to provide faculty and resident support for both UMHS and the VA hospital, while also supporting forensic pathology, autopsy and death scene investigation for the Washtenaw County Medical Examiner (WCME).

Effective October 2011 the Director of Autopsy and Forensic Services also assumed responsibilities as Chief Medical Examiner for Washtenaw County. In September 2011 the Washtenaw County Medical Examiner Office attained accreditation by the National Association of Medical Examiners (NAME). It is one of only sixty offices in the United States to have attained full accreditation. In addition, all eight of the medical examiner
death investigators earned certification by the American Board of Medicolegal Death Investigators (ABMDI).

The Director provides autopsy coverage for 30-40 percent of days and the remainder is distributed among eight other faculty. The coordinator of the autopsy service is assisted by two FTE autopsy assistants who also contribute to on-call coverage. A dedicated Administrative Assistant provides clerical, administrative, and computer support. Another member of the staff monitors the on-line death investigation software, MDIog, completes all death certificates, and provides administrative coverage for the medical examiner. This has facilitated centralization of all death certificates and provided additional support for the autopsy and forensic services.

A total of 520 autopsies were performed in FY2012 in the UM morgue, compared to 516 in FY2011. The 520 autopsies included 207 UMHS autopsies, up just over 11% from 186 in FY2011. The UMHS hospital autopsy percentage rate increased from its previous level of 15.8% in FY2011 to 19.4% in FY2012. A total of 313 autopsies and 20 external examinations were performed for the WCME, an increase of 20% over the previous year.

Effective October 2011 the autopsy section contracted with the Wayne County Medical Examiner Office (WCMEO) to provide professional forensic pathology services and to process histology and toxicology specimens from the office. This collaboration greatly enhances our role as one of the top centers of forensic pathology in the country. This required the recruitment of four additional forensic pathologists who will join the existing four pathologists at WCMEO in the first quarter of FY2013. Dr. Carl Schmidt will continue to serve as the Chief Medical Examiner for Wayne County. From January through June 2012, the Wayne staff pathologists performed 996 autopsies and 301 inspections.

For the third year, the Department sponsored Advances in Forensic Medicine and Pathology, a two-day conference on topics related to advances in death investigation. The conference attained its highest attendance at 125 and received superior evaluations from the participants.

Improvement initiatives of the section continue to revolve around autopsy turnaround time and communication with the clinical staff. Gross pathological diagnoses are routinely communicated to the clinical staff immediately following completion of the autopsy. We continue to work with the office of Decedent Affairs and Risk Management to improve the autopsy service to the UM hospital patients. A major goal for the Wayne Office will be to attain NAME accreditation in the coming year.

Application for an ACGME accredited forensic fellowship is in process with the intent of transitioning the Wayne County fellowship program to the University of Michigan for July 2013. The fellow will obtain training and experience in all aspects of forensic medicine including toxicology, criminology, forensic anthropology, forensic pathology, and courtroom testimony. The forensic autopsy experience will be augmented with cases from the WCMEO.
RESEARCH ACTIVITIES

The Anatomic Pathology faculty remains remarkably productive despite the demands of patient care (see Table 5). Despite an incomplete dataset, twenty seven faculty reported an average of 6.8 (median 6) peer-reviewed publications for a total of 184 papers either in print or in press at the end of FY2012 compared to 5.1 (median 5) in FY2011. This reflects a 17.2% increase compared to a year ago. In addition faculty reported the results of their work in abstract form on 111 occasions, a 23.3% increase over last year. Twenty-eight faculty served as invited lecturers, speakers or visiting professors on 101 occasions, for an overall average of 3.6 (median 3) per participant. Clearly our faculty remain top-of-mind when looking for cutting edge speakers in anatomic pathology. In addition fifteen different faculty reported being members of 34 editorial boards, including a Senior Editor for Cancer Research as well as Associate Editor for Clinical Cancer Research and Laboratory Investigation (Dr. Kathleen Cho), and Associate Editor for BMC Cancer (Dr. Celina Kleer).

Table 5: Academic Productivity in AP, FY10-FY12

<table>
<thead>
<tr>
<th></th>
<th>FY2010</th>
<th>FY2011</th>
<th>FY2012</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>publications</td>
<td>176</td>
<td>157</td>
<td>184</td>
<td>17.2%</td>
</tr>
<tr>
<td>abstracts</td>
<td>80</td>
<td>90</td>
<td>111</td>
<td>23.3%</td>
</tr>
<tr>
<td>invited lectures</td>
<td>108</td>
<td>120</td>
<td>101</td>
<td>(15.8%)</td>
</tr>
<tr>
<td>editorial boards</td>
<td>27</td>
<td>29</td>
<td>34</td>
<td>17.2%</td>
</tr>
<tr>
<td>FTEs funded</td>
<td>4.5</td>
<td>4.9</td>
<td>4.5</td>
<td>(9.7)</td>
</tr>
<tr>
<td>research</td>
<td>$3,473,969</td>
<td>$4,125,489</td>
<td>$4,167,734</td>
<td>1.0%</td>
</tr>
<tr>
<td>expenditures</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Research expenditures remained strong despite strong pressures on extramural funding, reflecting 38.1% growth compared to FY2006 and nearly recovering to FY2009 levels (see Figure 5). The total number of funded FTEs showed minor downward fluctuation, dropping from 4.9 to 4.5, sustaining the gains realized in FY2010 compared to FY2009 (3.9 FTEs) and FY2008 (3.6 FTEs). Maintaining this level of funding in today’s environment reflects the remarkable success of our laboratory investigators, all of whom also have substantial commitments to patient care.

Figure 5 – AP Research Expenditures, FY06-FY11

Research expenditures remained steady in FY12 compared to FY11, reflecting a nearly 40% increase since FY2006.
AP funding accounted for an additional $51,515 allocated in support of projects in which AP faculty and trainees served as Primary Investigators (see Figure 6). This reflects a 39.4% increase compared to FY11 but a 44.1% drop compared to peak spending in FY07, the first year of the AP Project Funding Program.

We hosted our third Annual Research Day on February 18, 2012 in collaboration with Hematopathology and Molecular Pathology. The day included 33 abstracts presented as posters (25) and platforms (8). Our Keynote Speaker was Dr. Christopher Corless from Oregon Health and Science University. The target audience was departmental trainees and faculty with the goal of increasing collaboration and projects.

The Molecular Pathology Research Laboratory (MPRL) continues to be an important asset for faculty in AP. Funded projects executed with support from the MPRL in which AP faculty were either Primary Investigators or collaborators were well represented at our Annual Research Day and also resulted in multiple abstract presentations at the 2012 Annual Meeting of the USCAP as well as manuscripts in press or in print in peer reviewed journals.

Drs. Rich Lieberman and Peter Lucas were promoted to Associate Professor, and Celina Kleer to Professor of Pathology effective September 2011.

EDUCATIONAL ACTIVITIES
Education is an essential and vibrant component of our mission. Anatomic Pathology continues to provide a robust experience for trainees, including standard rotations in autopsy, surgical and cytopathology as well as required and elective rotations in various subspecialties. Fellowships in breast pathology (1), cytopathology (2), gastrointestinal pathology (1), dermatopathology (2), genitourinary (1), pediatric (1), pulmonary (1) and surgical pathology (3) were filled by competitive candidates in the 2011-2012 academic year. In the coming fiscal year our portfolio of fellowships will expand to include forensic and neuropathology. Trainees continued to actively participate in various research projects during the course of the year and served as authors or co-authors for 26 different abstracts presented at the 2012 annual spring meeting of the USCAP in
Educational programs within our **autopsy and forensic services** continue to benefit from our integrated hospital and medical examiner service. Residents complete three one-month rotations on the autopsy service to comply with ACGME autopsy requirements. Medical students receive exposure to autopsies during their second year. A one-month rotation dedicated to forensic medicine is offered to senior medical students. Educational conferences in autopsy pathology include a weekly autopsy gross conference, a monthly extended gross conference emphasizing clinico-pathological correlations, and presentations in mortality conferences serving the clinical services within the hospital. A monthly didactic forensic pathology conference along with multidisciplinary forensic sign-out conference also is provided by the faculty.

Active and emeritus faculty in Anatomic Pathology continued to play significant roles in the **medical school**, accounting for just over 437 recorded contact hours. AP faculty had primary responsibility for first and second year courses in pathology as lecturers, laboratory instructors, advisers and mentors. In addition, two residents (**Norah Frisch** and **Alero Inyang**) and two fellows (**Beatrice Lee** and **Allison Young**) participated in M2 laboratories logging a total of 10 additional contact hours. Electives for senior students remained popular and were supported by a number of active and emeritus AP faculty including **Drs. Andy Flint, Julie Jorns, Amir Lagstein, Jon McHugh, Scott Owens, Judy Pang, Lindsay Schmidt** and **Angela Wu**. Multiple faculty also participated in teaching dental students.

Nearly all faculty in Anatomic Pathology participate in supporting an impressive array of **multidisciplinary conferences** including Tumor Boards for bone and soft tissue, brain, breast, endocrine oncology, gastrointestinal, genito-urinary, gynecologic, liver, pediatric, and lung tumors. Faculty also regularly participate in various other conferences including brain cutting, dementia brain cases, diagnostic dermatology, cutaneous T-cell lymphoma, nephrology, nerve and muscle, multiple pediatric subspecialties (GI, hematology-oncology, lung, surgery) and adult non-neoplastic lung disease. Educational conferences targeting primarily pathology trainees in which faculty participate include weekly slide and didactic teaching sessions.

Four invited speakers visited our department through the **A. James French Visiting Professorship** (**Ralph Hruban** from Johns Hopkins, **John Reith** from University of Florida, **Maria Merino** from NCI, and **Cheryl Coffin** from Vanderbilt) each presenting a lecture and slide seminar.

Multiple faculty participated in our fifth on-campus CME workshop, **New Frontiers in Pathology**, presented in collaboration with the A. James French Society. **Dr. Elaine Jaffe** served as guest faculty and the A. James French Lecturer. We attracted over 100 attendees whose evaluations reflected high praise for the world-class quality of this annual event.

Our CME offerings included the third year of **Advances in Forensic Medicine and Pathology**, hosted in collaboration with the Washtenaw County Medical Examiner’s Office in May 2012 at The Inn at St. John’s in Plymouth, MI. Feedback was extremely positive and this will continue to be an annual component of our CME programs.