FY2012

... top-of-mind when imagining excellence in academic anatomic pathology
DISCLAIMER

• high level overview
• data accuracy dictated by available systems
• inherent risk of operator error
Our Faculty
Our Patients
Research
Education
FY2013 Goals
ANATOMIC PATHOLOGY 2012
Our Faculty

Lost
Kent Johnson
Stewart Knoepp
Claire Michael
ANATOMIC PATHOLOGY 2012
Our Faculty

Gained

May Chan
Francisco Diaz†
Amer Heider
Leigh Hlavaty†
Julie Jorns
Carl Schmidt†
Lokman Sung†

†Wayne County Medical Examiners Office
ANATOMIC PATHOLOGY 2012
Our Faculty

Gained (FY13)

Aleodor Andea
Avneesh Gupta†
Paul Harms
Kilak Keesha†
Rohit Mehra
Chantel Njiwaji†
Scott Tomlins
Allecia Wilson†

†Wayne County Medical Examiners Office
ANATOMIC PATHOLOGY 2012
Our Faculty

Number of Faculty Hired
FY07 – FY13

<table>
<thead>
<tr>
<th>Year</th>
<th>Faculty Hired</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY07</td>
<td>2</td>
</tr>
<tr>
<td>FY08</td>
<td>3</td>
</tr>
<tr>
<td>FY09</td>
<td>4</td>
</tr>
<tr>
<td>FY10</td>
<td>2</td>
</tr>
<tr>
<td>FY11</td>
<td>7</td>
</tr>
<tr>
<td>FY12</td>
<td>7</td>
</tr>
<tr>
<td>FY13</td>
<td>8</td>
</tr>
</tbody>
</table>

Total Faculty Hired, FY07-FY13: 33
ANATOMIC PATHOLOGY 2012
Our Work - RVUs

Annual Growth Rate -0.6%
(35.6% in 5 years)
ANATOMIC PATHOLOGY 2012
Our Players & Our Work – “Productivity”

RVUs per Clinical FTE
(12 Month Rolling Average)
FY2002 – FY2012

Annual Increase 11.8%
(23.1% increase in 5 years)
ANATOMIC PATHOLOGY
2012
Our Faculty – Awards

U.S. News Top Doctors
Henry Appelman
Kathleen Cho
Joel Greenson
Richard Lieberman
Lori Lowe
David Lucas
Jeffrey Myers

America’s Best Doctors
Thomas Giordano
Joel Greenson
Lori Lowe

Top Doctors for Cancer
Kathleen Cho
Joel Greenson
Lori Lowe
David Lucas
Jeffrey Myers

Pathology Resident Teaching Award
Dave Lucas

Top Young Investigator Oral Abstract (ASN)
Jeff Hodgin

League of Clinical Excellence
Jeffrey Myers

Best Scientific Submission Award
(Congress of Int’l Acad Digital Pathol)
Priya Kunju (co-author)

2011 Top 10 (#5) Game Changers in Pathology
Michael Roh (co-author)

Future of the Profession Award (ASC)
Michael Roh
We continue a tradition of recruiting the best and the brightest to keep pace with clinical demand.
Our Faculty

Our Patients
ANATOMIC PATHOLOGY 2012
Our Patients - Cases

Annual Growth Rate -0.9%
(31.5% in 5 years)

FY2007: 69,991
FY2008: 72,280
FY2009: 80,120
FY2010: 80,690
FY2011: 89,785
FY2012: 88,940

-0.9%
ANATOMIC PATHOLOGY 2012
Our Patients - Cases

<table>
<thead>
<tr>
<th>Inside</th>
<th>FY12</th>
<th>FY11</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inside</td>
<td>59,389</td>
<td>59,320</td>
<td>0.1%</td>
</tr>
<tr>
<td>MLabs</td>
<td>7,611</td>
<td>9,928</td>
<td>-23.3%</td>
</tr>
<tr>
<td>Transfer</td>
<td>10,964</td>
<td>9,939</td>
<td>10.3%</td>
</tr>
<tr>
<td>Consults</td>
<td>10,976</td>
<td>10,598</td>
<td>3.6%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>88,940</td>
<td>89,785</td>
<td>-0.9%</td>
</tr>
</tbody>
</table>

inside + transfers = 79.1% of cases
### ANATOMIC PATHOLOGY 2012

**Our Patients – Surgical Pathology**

<table>
<thead>
<tr>
<th>Category</th>
<th>FY12</th>
<th>FY11</th>
<th>Increase/Decrease</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>breast</strong></td>
<td>2,222</td>
<td>1,960</td>
<td>253 (increase)</td>
<td>12.8%</td>
</tr>
<tr>
<td><strong>GI</strong></td>
<td>16,857</td>
<td>17,512</td>
<td>(655) (decrease)</td>
<td>(3.7%)</td>
</tr>
<tr>
<td><strong>GU</strong></td>
<td>2,387</td>
<td>2,551</td>
<td>(164) (decrease)</td>
<td>(6.4%)</td>
</tr>
<tr>
<td><strong>GYN</strong></td>
<td>5,988</td>
<td>6,300</td>
<td>(312) (decrease)</td>
<td>(5.0%)</td>
</tr>
<tr>
<td><strong>Peds &amp; Placenta</strong></td>
<td>3,633</td>
<td>3,298</td>
<td>335 (increase)</td>
<td>10.2%</td>
</tr>
<tr>
<td><strong>Room 1</strong></td>
<td>9,318</td>
<td>9,452</td>
<td>(134) (decrease)</td>
<td>(1.4%)</td>
</tr>
</tbody>
</table>

**Net increase/decrease**

(677) (1.6%)
ANATOMIC PATHOLOGY 2012
Our Patients – Transfer (TC, TD, TS) Cases

<table>
<thead>
<tr>
<th></th>
<th>FY12</th>
<th>FY11</th>
<th>increase (decrease)</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases</td>
<td>9,316</td>
<td>8,420</td>
<td>896</td>
<td>10.6%</td>
</tr>
</tbody>
</table>

Transfer Cases, FY02 – FY12 (12 month rolling average)
ANATOMIC PATHOLOGY 2012
Our Work - RVUs

Total RVUs (12 month Rolling Avge)
FY2002 - FY2012

Annual Growth Rate - 0.6%
(35.6% in 5 years)
ANATOMIC PATHOLOGY 2012
Our Patients – Surgical Pathology

5 Year Growth in RVUs
(19.1% - 69.3%)
<table>
<thead>
<tr>
<th></th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
<th>FY11-12</th>
<th>FY10-12</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ID</strong></td>
<td>13,168</td>
<td>13,441</td>
<td>13,716</td>
<td>275/2.0%</td>
<td>548/4.2%</td>
</tr>
<tr>
<td><strong>MD</strong></td>
<td>5,269</td>
<td>9,691</td>
<td>7,412</td>
<td>(2,279)/(23.5%)</td>
<td>2,143/40.7%</td>
</tr>
<tr>
<td><strong>TD</strong></td>
<td>1,958</td>
<td>2,828</td>
<td>3,566</td>
<td>738/26.1%</td>
<td>1,608/82.1%</td>
</tr>
<tr>
<td><strong>Consults</strong></td>
<td>2,410</td>
<td>2,130</td>
<td>2,263</td>
<td>157/7.5%</td>
<td>(147)/(6.1%)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>22,805</td>
<td>28,090</td>
<td>26,957</td>
<td>(1,109)/(4.0%)</td>
<td>4,152/18.2%</td>
</tr>
</tbody>
</table>

ANATOMIC PATHOLOGY 2012
Our Patients - Dermatopathology

Increase (decrease)/% change
ANATOMIC PATHOLOGY 2012
Our Patients - Dermatopathology

Dermpath
• long term growth
ANATOMIC PATHOLOGY 2012
Our Patients - Dermatopathology

Dermpath
• long term growth
• volatility in extramural practice
ANATOMIC PATHOLOGY 2012
Our Patients – Consultation Cases

49.1% increase in 5 years (94% since FY05!)

Total Consults

FY07: 7,361
FY08: 8,275
FY09: 8,267
FY10: 8,574
FY11: 10,598
FY12: 10,976

Annual % Growth
### ANATOMIC PATHOLOGY 2012

**Our Patients - Cases**

<table>
<thead>
<tr>
<th>Category</th>
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<td>10,976</td>
<td>10,598</td>
<td>3.6%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>88,940</td>
<td>89,785</td>
<td>-0.9%</td>
</tr>
</tbody>
</table>

**MLabs + consults = 20.9% of cases**

- **Inside**
- **MLabs**
- **Transfer**
- **Consults**

**Legend:**
- inside (blue)
- M-labs (red)
- transfer (green)
- consults (purple)
ANATOMIC PATHOLOGY 2012
Our Patients – Consultation Cases

Total Consultation Cases, FY02 – FY12
(12 month rolling average)

Opportunities in consultation practice
increase faculty experience & diagnostic courage
expand educational programs
revenue/competitive compensation
recruit patients likely to benefit from tertiary care/destination programs

Our Patients – Consultation Cases

296

915
Our consultation practice continues to grow, a consequence of recruiting the best and the brightest & service excellence.
### ANATOMIC PATHOLOGY 2012

**Our Patients - Neuropathology**

<table>
<thead>
<tr>
<th></th>
<th>FY12</th>
<th>FY11</th>
<th>increase (decrease)</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NF</strong></td>
<td>677</td>
<td>653</td>
<td>24</td>
<td>3.7%</td>
</tr>
<tr>
<td><strong>IB</strong></td>
<td>173</td>
<td>188</td>
<td>(15)</td>
<td>(8.0%)</td>
</tr>
<tr>
<td><strong>MM</strong></td>
<td>178</td>
<td>213</td>
<td>(35)</td>
<td>(16.4%)</td>
</tr>
<tr>
<td><strong>Consults</strong></td>
<td>230</td>
<td>139</td>
<td>91</td>
<td>65.5%</td>
</tr>
<tr>
<td><strong>TOTAL NP</strong></td>
<td><strong>1,258</strong></td>
<td><strong>1,193</strong></td>
<td><strong>65</strong></td>
<td><strong>5.4%</strong></td>
</tr>
</tbody>
</table>

Growth in neuropathology driven by UMHS surgical and consult cases.
ANATOMIC PATHOLOGY 2012
Our Patients - Neuropathology

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Neuropath Cases</th>
<th>Outside N/M</th>
<th>Inside N/M</th>
<th>Consults</th>
<th>Surgicals</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY09</td>
<td>1,235</td>
<td>719</td>
<td>137</td>
<td>136</td>
<td>1,136</td>
<td></td>
</tr>
<tr>
<td>FY10</td>
<td>1,300</td>
<td>668</td>
<td>162</td>
<td>1,193</td>
<td>139</td>
<td>1,258</td>
</tr>
<tr>
<td>FY11</td>
<td>1,250</td>
<td>653</td>
<td>188</td>
<td></td>
<td></td>
<td>1,258</td>
</tr>
<tr>
<td>FY12</td>
<td>1,300</td>
<td>677</td>
<td>178</td>
<td></td>
<td></td>
<td>1,258</td>
</tr>
</tbody>
</table>

Legend:
- Light Blue: Outside N/M
- Pink: Inside N/M
- Yellow: Consults
- Blue: Surgicals
- X: TOTALS
### ANATOMIC PATHOLOGY 2012

Our Patients – Renal Pathology

<table>
<thead>
<tr>
<th></th>
<th>FY12</th>
<th>FY11</th>
<th>increase (decrease)</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,166</td>
<td>984</td>
<td>182</td>
<td>18.5%</td>
</tr>
</tbody>
</table>

Renal Biopsies Accessioned Per Month, FY02 – FY12 (12 month rolling average)

81.9% increase since FY07!
### ANATOMIC PATHOLOGY 2012
#### Our Patients – Cytology

<table>
<thead>
<tr>
<th></th>
<th>FY12</th>
<th>FY11</th>
<th>Increase/Decrease</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL</strong></td>
<td>42,530</td>
<td>43,741</td>
<td>(1,211)</td>
<td>(2.8%)</td>
</tr>
<tr>
<td><strong>Gyn Total</strong></td>
<td>32,866</td>
<td>34,014</td>
<td>(1,148)</td>
<td>(3.4%)</td>
</tr>
<tr>
<td><strong>Non-Gyn Exfoliative</strong></td>
<td>7,034</td>
<td>7,123</td>
<td>(89)</td>
<td>(1.2%)</td>
</tr>
<tr>
<td><strong>ASP</strong></td>
<td>2,630</td>
<td>2,604</td>
<td>26</td>
<td>1.0%</td>
</tr>
<tr>
<td><strong>ASP 1</strong></td>
<td>862</td>
<td>962</td>
<td>(100)</td>
<td>(10.4%)</td>
</tr>
<tr>
<td><strong>ASP 2</strong></td>
<td>1,526</td>
<td>1,423</td>
<td>103</td>
<td>7.2%</td>
</tr>
<tr>
<td><strong>ASP 3</strong></td>
<td>242</td>
<td>219</td>
<td>23</td>
<td>10.5%</td>
</tr>
</tbody>
</table>

†assisted FNAs
‡pathologist performed FNAs (Cancer Center)
Growth in assisted FNAs drives demand for increased professional resources.

†assisted FNAs
‡pathologist performed FNAs (Cancer Center)
ANATOMIC PATHOLOGY 2012
Our Patients – Cytology

Total Cytology Cases

FY07: 43,741
FY08: 42,530
FY09: 7,930
FY10: 7,426
FY11: 6,000
FY12: 6,500

Total RVUs/Year

FY07: 43,741
FY08: 42,530
FY09: 7,930
FY10: 7,426
FY11: 6,000
FY12: 6,500
ANATOMIC PATHOLOGY 2012
Our Patients – Autopsy & Forensics

Washtenaw Cty ME cases
= 313 (60%)
ANATOMIC PATHOLOGY 2012
Our Patients – Autopsy & Forensics

- UMHS Faculty
- NAME accreditation
- Economies of scale
- Combined fellowship
- Residency education
Total autopsies ≈ 3,030 annually
Our practice is still growing & changing.
Our Faculty
Our Patients
Research
ANATOMIC PATHOLOGY 2012
Research

- D. Lucas: 19
- J. McHugh: 15
- A. Lieberman: 14
- T. Giordano
- P. Kunju: 12

Peer-reviewed publications:
- D. Lucas: 19
- J. McHugh: 15
- A. Lieberman: 14
- T. Giordano
- P. Kunju: 12

Abstracts:
- D. Lucas: 19
- J. McHugh: 15
- A. Lieberman: 14
- T. Giordano
- P. Kunju: 12

Books & Chapters:
- D. Lucas: 19
- J. McHugh: 15
- A. Lieberman: 14
- T. Giordano
- P. Kunju: 12
<table>
<thead>
<tr>
<th></th>
<th>Fiscal Year</th>
<th></th>
<th>% change</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2010</td>
<td>2011</td>
<td>2012</td>
<td>FY11-12</td>
</tr>
<tr>
<td>Peer-reviewed</td>
<td>176</td>
<td>157</td>
<td>184</td>
<td>17.2%</td>
</tr>
<tr>
<td>publications</td>
<td></td>
<td></td>
<td></td>
<td>4.5%</td>
</tr>
<tr>
<td>Abstracts</td>
<td>80</td>
<td>90</td>
<td>110</td>
<td>22.2%</td>
</tr>
<tr>
<td>Lectures</td>
<td>108</td>
<td>120</td>
<td>103</td>
<td>(14.2%)</td>
</tr>
<tr>
<td>Edit bds</td>
<td>27</td>
<td>29</td>
<td>34</td>
<td>17.2%</td>
</tr>
</tbody>
</table>


ANATOMIC PATHOLOGY
2012
Research

[Image of a group of people at a conference or event]

[Table with data on peer-reviewed publications, abstracts, lectures, and edit bds for fiscal years 2010, 2011, and 2012, with percentage changes for FY11-12 and FY10-12]
APMPHP
Anatomic, Molecular, Hematopathology
Research Day
February 18, 2012
BSRB

Keynote Speaker: Christopher Corless, MD, PhD
Professor of Pathology
Oregon Health and Science University

Target Audience: UM Pathology faculty and trainees

Expected results: Attendees will learn new tools and techniques to apply to their own areas of investigative interest, and identify opportunities for collaborative research.

Program: Abstract presentations to include work recently presented at national and international meetings, as well as projects supported by the AP Projects Funding Committee. All works in progress are invited for brief presentation and peer input.

Platform Presentations: 9:00-10:00am & 11:15-12:15pm
Poster Sessions: 10:00-11:15am

Keynote Speaker: 1:15-2:15pm

For further information, please contact:
Beth Minors
936-1888
edodge@umich.edu

The University of Michigan Medical School is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

The University of Michigan Medical School designates this live activity for 4.25 hours AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.
ANATOMIC PATHOLOGY 2012
Research – APMPHP Research Day

33 abstracts
8 platforms
25 posters
2012 APMPHP RESEARCH DAY
33 Abstracts

• 14 – 2012 USCAP
• 9 – “other” meetings
• 7 – AP Project Funding
# 2012 APMPHP RESEARCH DAY

33 Abstracts

<table>
<thead>
<tr>
<th>Pathology housestaff authors &amp;/or co-authors</th>
<th>27 (82%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post-doc/grad student authors</td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTAL abstracts with trainee authors</strong></td>
<td><strong>29 (88%)</strong></td>
</tr>
</tbody>
</table>
34 abstracts
7 proffered papers
1 short course (dermpath)
5 companion societies (speakers, moderator)
3 evening specialty conferences (speakers, moderator)
MLAbs exhibit
“According to our records, this year your institution had the tenth highest number of first-authored scientific abstracts accepted for presentation at the 101st Annual Meeting of the USCAP (2012) in Vancouver, BC. There were over 3,000 scientific abstracts submitted from over 400 different medical school programs and academic institutions (over 200 in the US and Canada and 200 from around the rest of the world). This is the highest number ever submitted.”
Despite a growing practice and external pressures on funding, we remain very academically productive and are nationally and internationally visible.
ANATOMIC PATHOLOGY
Faculty Meeting, August 13, 2012

Our Faculty
Our Patients
Research
Education
20 AP faculty M1/M2 lectures
≈ 78 hours

9 faculty M4 clerkship mentors (≈ 92 hours)

29 AP faculty in M1 and/or M2 laboratories
≈ 346 contact hours
Department Graduate School
Kathy Cho, Dave Gordon, Tom Giordano, Celina Kleer, Andrew Lieberman, Peter Lucas

Postdoctoral fellowships
Residency
AP fellowships
breast, cytopath, dermpath, GI, GU, GYN, pediatrics, pulmonary, surg path
ANATOMIC PATHOLOGY
2012
Education – CME

30 AP and departmental faculty
2 guest speakers
21 case presentations
8 breakout sessions
3 plenary lectures
“Enjoyed the format (case presentations, lectures and breakout sessions).”

“Great conference! Keep it going!”

“This has been a wonderful and extremely informative course. Congratulations to the organizers and all the speakers and support personnel for an outstanding job. I will definitely recommend to my colleagues.”
May 16-17, 2012

True to its theme, this exciting two-day conference addresses topics related to cutting-edge technology, techniques, advances, and current controversies in the field of forensic medicine and pathology. Participants will understand and be able to implement:

- Identification of water-related and asphyxial deaths
- Intricacies of crime scene investigations
- The process of evidence collection in sexual assault victims
- The medicolegal issues of fetal deaths
- Identifying victims of suicide
- New international Red Cross guidelines on deaths in custody
- Identification of the deceased during the first 48 hours

The University of Michigan Medical School is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians. The University of Michigan Medical School designates this live activity for a maximum of 15 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity. This conference will also offer category credits.
“Greatly appreciate the historical links provided by Dr. Jentzen. Fantastic course! Two day length very doable and keeps interests sharp.”

“A very great program with excellent speakers.”

“Excellent course with good selection of topics.”

“Very good presentation.”
We remain passionately committed to education across a broad range of students and target audiences.
ANATOMIC PATHOLOGY
Faculty Meeting, August 13, 2012

Our Faculty
Our Patients
Research
Education
FY2013 Goals
ANATOMIC PATHOLOGY
FY2013 Goals

schematic design for new pathology building

ongoing project specification/design for new LIS

implement bar code-driven workflow in accessioning and histology

complete installation of new grossing station in CVC frozen section laboratory

upgrade remote telepathology in UH, CVC and EAA frozen section labs
expand menu of molecular tests and NGS for solid tumors in collaboration with Molecular Diagnostics Lab, MLabs & Paradigm

successfully recruit to open positions in renal and cytopathology

c成功fully recruit to incremental position for physician scientist in neuropathology

create new position for Research Coordinator
CONGRATULATIONS and THANK YOU!