Pathology Workforce Issues
ASCP Fellowship & Job Market Survey

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[Henry M. Rinder]
Survey of all U.S. residents in all programs (>2500)
87% of PGY3/4 are AP/CP  56%/44% (F/M)
20% have additional clinical training
• Confidence levels
  – Sign-out, business aspects
• Fellowships planned
  – Reasoning, numbers, offers, career plans
• Jobs coming out of residency (v. small numbers)
• Outlook on U.S. Healthcare
  – General, jobs, pathology
Do you anticipate being ready for general pathology sign-out at graduation?

**SENIOR RESIDENTS only (defined as last year of training)**

- **18%** Yes
- **12%** Yes, but with a transitional period where all cases are reviewed
- **22%** Yes, but with back-up if needed
- **35%** No

---

**All RESIDENTS ALL YEARS who answered previous question “No”**

<table>
<thead>
<tr>
<th>Reason</th>
<th>PGY 1 &amp; 2</th>
<th>PGY 3 &amp; 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not prepared — educational deficiency</td>
<td>32%</td>
<td></td>
</tr>
<tr>
<td>Not enough graduated responsibility in training program</td>
<td>17%</td>
<td></td>
</tr>
<tr>
<td>Need fellowship training to feel confident in general pathology</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>Did not see enough volume of cases in residency</td>
<td>49%</td>
<td></td>
</tr>
<tr>
<td>Did not see enough variety of cases in residency</td>
<td>59%</td>
<td></td>
</tr>
<tr>
<td>Did not see enough volume of cases in residency</td>
<td>15%</td>
<td></td>
</tr>
</tbody>
</table>
ALL RESIDENTS

Association of Directors of Anatomic and Surgical Pathology

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does your program have graduated sign-out?</td>
<td>80%</td>
<td>20%</td>
</tr>
<tr>
<td>Do you want graduated sign-out to be instituted?</td>
<td>81%</td>
<td>19%</td>
</tr>
<tr>
<td>Do you benefit from graduated sign-out?</td>
<td>97%</td>
<td>3%</td>
</tr>
<tr>
<td>Do you sign-out frozen sections on your own?</td>
<td>15%</td>
<td>85%</td>
</tr>
</tbody>
</table>

Graduated responsibility and coverage

All residents all years

<table>
<thead>
<tr>
<th>Rotations on:</th>
<th>I have graduated responsibility during:</th>
<th>I am pulled off the rotation for service reasons:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anatomic Pathology</td>
<td>78 %</td>
<td>19 %</td>
</tr>
<tr>
<td>Clinical Pathology</td>
<td>62 %</td>
<td>48 %</td>
</tr>
</tbody>
</table>
Comfort level of residents with the Business aspects of pathology

Only SENIOR RESIDENTS

Is residency training tailored to practicalities of the working environment?

Amount of training: AP/CP PGY3/4 respondents

<table>
<thead>
<tr>
<th>Training in:</th>
<th>None</th>
<th>≤ 1 month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autopsy</td>
<td>0 %</td>
<td>5 %</td>
</tr>
<tr>
<td>Forensics</td>
<td>20 %</td>
<td>62 %</td>
</tr>
<tr>
<td>Hematopathology</td>
<td>0 %</td>
<td>4 %</td>
</tr>
<tr>
<td>Hematology</td>
<td>15 %</td>
<td>28 %</td>
</tr>
</tbody>
</table>

Presume that these are all PGY3’s whose training will occur as PGY4
Is residency training looking to the future (possible) working environment?

Amount of training: AP/CP PGY3/4 respondents

As above, possibility of completing additional training as PGY4

<table>
<thead>
<tr>
<th>Specialty rotation in:</th>
<th>≤ 1 week of training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molecular Pathology</td>
<td>26 %</td>
</tr>
<tr>
<td>Genomic medicine</td>
<td>68 %</td>
</tr>
</tbody>
</table>

Principal Reason for Pursuing a Fellowship (All residents)

Most AP/CP residents finalize fellowship plans during their 3rd year
About 40% of residents plan to do multiple fellowships – stable over past 3 yrs

Data from fellow in-service exams also confirms this percentage

**Why do multiple fellowships?**

In previous years, more than half cited career goals as the reason, e.g. specialization for a pathology niche practice

**Reasons for pursuing multiple fellowships**

- 34% Career goals include specialization in multiple fields.
- 18% Improve “weak” areas of residency training.
- 29% Multiple subspecialties needed for job.
- 6% Family/location/timing of training
- 13% Job not available

Compared with previous surveys: less focus on career goals and more on securing a job and/or correcting training gaps
Applying for fellowships

Almost 60% of residents apply for multiple fellowship specialties simultaneously
• What is the reasoning?
• Based on survey results:
  • 50-66% cite career basis for multiple fellowships...not picky on the order
  • Remainder either: (a) hedging their chances...take 2\textsuperscript{nd} or 3\textsuperscript{rd} choice; or (b) address educational gaps thru additional training

Multiple fellowships

• When residents apply for multiple specialties:
• 50% of all the applications are to:
  – Surgical pathology (25%)
  – Hematopathology
  – Cytopathology
• Possible questions to ask in future surveys:
  – Is Surgical pathology fellowship the 1\textsuperscript{o} fellowship, followed by a 2\textsuperscript{nd} specialty?
  – Are SP fellows finding jobs directly from this training?
Multiple fellowships

• For residents who have already settled on a fellowship in their first year out of residency:
  • 38% are applying for a 2\textsuperscript{nd} fellowship
  • Half of this group are similarly applying for multiple specialties for the 2\textsuperscript{nd} fellowship
  • Again, 50% of these applications encompass:
    • Surg Path, Hemopath, Cytopath

Number of Fellowship Offers Received (PGY-3/4 residents only)

Very similar to previous years
40% with positive response from several programs, hence there is competition amongst programs for strong applicants
What practice environment are you aiming for?

Keep this slide in mind when we look at fellow data

<table>
<thead>
<tr>
<th>Academic Institution</th>
<th>PGY 1-3</th>
<th>PGY 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>41%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>35%</td>
<td></td>
</tr>
<tr>
<td>Community group practice</td>
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<td>39%</td>
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Only 52 residents considered job opportunities. 22 did receive offers: most had only a single offer.
About two-thirds of residents who plan to live & practice in the U.S. are pessimistic about the future of U.S. healthcare in general …and

Resident Feelings About U.S. Healthcare in General

- Optimistic:
  - PGY1: 40%
  - PGY2: 32%
  - PGY3: 32%
  - PGY4: 25%

- Pessimistic:
  - PGY1: 60%
  - PGY2: 68%
  - PGY3: 68%
  - PGY4: 75%

…are even more pessimistic about future compensation for practicing U.S. pathologists

Resident Feelings About future compensation in U.S. for pathologists

- Optimistic:
  - PGY1: 36%
  - PGY2: 28%
  - PGY3: 26%
  - PGY4: 21%

- Pessimistic:
  - PGY1: 64%
  - PGY2: 72%
  - PGY3: 74%
  - PGY4: 79%
12% decrease in “somewhat to very confident” groups from PGY1 to PGY4

Survey of Fellows (300) in 5 programs (Forensics, Heme, Neuro, Pedi, Transfusion)

- Jobs
  - Offers, timing, location
- Fellowships
  - How many more, career plans
- Anticipated job responsibilities
Fellows in Hemepath, Neuropath, and Transfusion struggled with finding jobs & these percentages are generally higher than in previous years.

For fellows who received job offers, how long did it take you to find a job?

Most jobs are found within 6 months.
For fellows who have applied for but not found jobs as yet, how long have you been looking?

Hemepath, neuropath, and transfusion fellows have been looking >3 months.

Overall 42% of fellows plan to complete ≥ 2 fellowships.
Forensics fellows are most focused on immediate jobs; neuropath the least

Except forensics, academic jobs (for these fellowships) outpace community practice, in marked contrast to resident expectations... and this feeling is confirmed by...
Based on your experience, where are most available specialty pathology positions at this time?

...the feeling amongst these fellows that academics (except forensics) holds the most available positions currently

What practice environment are you aiming for?

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<td>39%</td>
</tr>
<tr>
<td>Reference Laboratory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate (e.g. Amelopath)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government/Military</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Hematopathology: What types of cases will make up the majority of your workload?

The majority of workload includes non-specialty work for Hemepath fellows in their new jobs.

Neuropathology: What types of cases will make up the majority of your workload?

Neuropath fellows also expect lots of generalist work as well...
Pediatric Pathology: What types of cases will make up the majority of your workload?

...whereas Pedi Path fellows are expecting more specialty work by itself

Conclusions (brief) from the ASCP RISE & Fellow In-Service Surveys

Residency

Significant areas for improvement in training
  • General sign-out confidence
  • Fellowships viewed as “gap fillers”
  • Graduated responsibility could increase
  • Need to teach business skills

Fellowships
  • Multiple specialties sought – jobs & education gaps
  • Small numbers of residents not finding fellow spot
  • Community practice favored (slightly)
  • Pessimism – general & pathology (compensation, job)
Conclusions (brief) from the ASCP RISE & Fellow In-Service Surveys

Fellowships in 5 specialties

Fellows are:
• Not quickly finding jobs – HP, NP, TM worse
• Aiming at multiple fellowships
• More jobs in academic practice (may be skewed)
• Workloads anticipated – lots of general SP/CP for HP and NP

Surveys could not be accomplished without active assistance & input from the

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- Academy of Clinical Laboratory Physicians & Scientists (ACLPS)
- Society for Hematopathology
- Association of Directors of Anatomic & Surgical Pathology (ADASP)
- American Society for Apheresis (ASFA)
- AABB
- National Association of Medical Examiners (NAME)
- American Association of Neuropathologists (AANP)
- Society for Pediatric Pathology (SPP)
- American Pathology Foundation (APF)
- Association for Molecular Pathology (AMP)

• Thank you
• Discussion
To how many fellowship programs did you formally apply? (PGY-3/4 residents only)

INCLUDES all programs in all specialties