ASCP IS PLEASED TO OFFER THE FOLLOWING RESOURCES FOR YOUR RESIDENCY PROGRAM:

RISE FIRST
The RISE FIRST examination is intended for pathology residents just starting their pathology residency program. Program Directors may find RISE FIRST a helpful tool in establishing a pathology-specific baseline for ACGME milestone assessment.

RISE
The Resident In-Service Examination (RISE) is a comprehensive examination designed as an evaluation tool that may be used to assess a resident’s progress in the area of Medical Knowledge, one of the competency areas in the ACGME Outcomes Project.

RISE PLUS
RISE PLUS, which includes RISE, the new Resident Question Bank and Lab Management University, ensures your residents have the competitive edge they need with top-rated education tools, offered at a significant discount for residency programs. 60% of US-based residency programs are currently enrolled in RISE PLUS. Renew or enroll now for 2020 for all of your residents.

Included with RISE PLUS

- The Resident Question Bank 2020 gives you online access to hundreds of multiple-choice questions, many case-based and with images, plus educational feedback, and references.
- A great learning tool for residents at any level
- Sort and receive questions in any grouping you need, for example by single organ, multiple organs or in a review of previously taken questions.
- Scoring, educational feedback and additional reading

Lab Management University
Lab Management University (LMU) is a self-paced certificate program that improves competency in laboratory management. LMU courses now meet levels 1, 2 and 4 for many of the ACGME Milestones.

ADDITIONAL OPTIONS

The University of Pathology Informatics (UPI) is a self-paced, online certificate program, leveraging case-based learning to develop critical knowledge of informatics concepts and increase quality, specimen throughput, and patient safety while controlling costs in the laboratory.

ASCP Leadership Institute is the lab team’s complete resource for practical, customizable leadership training developed to enhance pathologists’ and laboratory professionals’ effectiveness in the lab. This online certificate program teaches participants to adapt their behavior, communication skills, and leadership styles to be effective in a variety of workplace situations.

ORDER OR RENEW NOW FOR 2020! www.ascp.org/RISEPLUS
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As a Chair, one is often tempted to curse when faced with the darkness of conflicting needs and demands of students, residents, faculty and administrators. Our purpose and meaning gets lost in the day-to-day fray. We can light candles by realizing that we are the keepers of the noble traditions of our specialty. As stewards of this tradition, we must advocate for the best patient care, trainee education and discovery that will propel medicine forward. What better way to light a candle than to move our specialty forward? The APC is actively engaged in the future of pathology both with strategic planning and in our annual meeting planning. We urge you to join us by participating in our annual meeting and by engaging with one of our Committees:

- Practice & Management (P&M), chaired by Dr. Chen Liu
- Undergraduate Medical Education (UME), chaired by Dr. Jennifer Baccon
- Graduate Medical Education (GME), chaired by Dr. Karen Kaul
- Advocacy, chaired by Dr. Debra Leonard
- Leadership Development and Diversity (LD&D), chaired by Dr. Dani Zander

As pathology Chairs at academic institutions, we are directly responsible for educating the rising generations of physicians and pathologists. The APC not only works directly on student and resident education, but the Society of ’67 is heavily engaged in recruiting and supporting trainees in academic pathology. One terrific way to light a candle is to donate to the Society of ’67 programs, including the Scholars Travel Award. I’d like to share the reflections of one of last year’s attendees who puts it much better than I can:

“This conference with its many varied themes has been an amazing experience. All the people I met, and the wisdom they shared with me, has emboldened me to continue to seek to serve my fellow pathologists. I cannot overstate how crucial the knowledge gained and relationships made will be to my future success, and I have the Society of ’67 to thank for this experience. Thank you for this chance, from the very bottom of my heart.”
Please consider a donation to support medical students and residents discovering their future in academic pathology.

Other important programs from the Society of ‘67 include research grants to investigate a question and/or to develop a technology in pathology/lab medicine services that improves healthcare quality, cost, or access; and education grants to develop an educational program or offering in pathology/lab medicine services focused on improving healthcare quality, cost or access. Finally, consider publishing and encouraging your faculty to publish in our journal, Academic Pathology, on how you and your department are contributing to the future of pathology. Alternatively, support your trainees by donating to the Society of ‘67 to fund Open Access Publication Awards that cover the article processing fee, a value of $1,250 for full manuscripts.

As I write, winter is upon us and the future of medicine is discussed at length in our political system. The best way to ward off the coming darkness is to light a candle by joining in the fellowship of the APC. As my term as President winds down in 2020, I want to thank all of you. I have personally found friendship, purpose and meaning in the APC. And I thank our executive director, Priscilla Markwood, and her exceptional staff for keeping us moving forward to face the future. As always, it is my honor to serve as your President,

Barbara S. Ducatman, MD
President, Association of Pathology Chairs

APC developed its official journal,
Academic Pathology, in late 2014 with the vision of offering a unique, Open Access platform for academic departments to report on contributions and innovations in their education, practice and research missions. The breadth of scholarship welcomed by the editors includes, but is not limited to:

- education, including issues and developments in undergraduate medical education, residency and fellowship training, graduate education, and continuing medical education;
- approaches to faculty development, mentorship, grooming for leadership, and maintaining wellness;
- department administration, including management case studies applying business, finance, operations, and strategy;
- practice performance and quality and safety measures;
- value statements for academic pathology in the evolving healthcare landscape and within health systems; and
- the role of biorepositing, genomics, informatics, digital pathology, computational pathology, and clinical data management in driving pathology’s value.

Engaging and encouraging pathology departments to plan and publish content in Academic Pathology has been slow and deliberate editorial process. The editors are gratified that the number and quality of original research being submitted is steadily increasing and, most importantly, that the visibility of the published research is growing, as evidenced by the following charts.

Academic Pathology acceptance statistics:

<table>
<thead>
<tr>
<th>Year</th>
<th>Submissions</th>
<th>Accepted</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>44</td>
<td>19 (43%*)</td>
</tr>
<tr>
<td>2016</td>
<td>28</td>
<td>26 (93%)</td>
</tr>
<tr>
<td>2017</td>
<td>42</td>
<td>35 (83%)</td>
</tr>
<tr>
<td>2018</td>
<td>47</td>
<td>42 (89%)</td>
</tr>
<tr>
<td>2019</td>
<td>111</td>
<td>53 (78% to-date)</td>
</tr>
</tbody>
</table>

* Lower acceptance in the first year of publication was due largely to articles submitted out of scope.

Academic Pathology site usage (includes PDF downloads and HTML full-text views):

<table>
<thead>
<tr>
<th>Year</th>
<th>Downloads</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>14,966</td>
</tr>
<tr>
<td>2017</td>
<td>27,655</td>
</tr>
<tr>
<td>2018</td>
<td>39,048</td>
</tr>
<tr>
<td>2019</td>
<td>106,057</td>
</tr>
</tbody>
</table>

To reach as many desks as possible with important developments from academic pathology departments, the editors of Academic Pathology seek to mentor authors through the review process and ultimately accept as many articles as possible. I am immensely grateful to our talented Associate Editors: Richard Conran, Barbara Ducatman, Robert Hoffman, Karen Kaul, Barbara Knollmann-Ritschel, Daniel Remick, and Brian Smith. In recognition of their exemplary service and to accelerate achievement of strategic goals for the journal in 2020, Karen Kaul and Barbara Knollmann-Ritschel will be promoted to Deputy Editors.
continued

ACADEMIC PATHOLOGY EDITOR-IN-CHIEF’S REPORT
By James M. Crawford, MD, PhD - Editor-in-Chief, Academic Pathology

An extraordinary event in 2019 was the success of the Call for Educational Cases, which you can read more about in the following article by Dr. Knollmann-Ritschel. Another key development for the journal in 2019 was the Society of ‘67’s Open Access Award. Designed to promote the career progress of pathologists-in-training (students, residents, and fellows) and early career faculty by giving them opportunities for scholarly mentorship (through the peer review process) and publication, the Open Access Award provides payment of Article Processing Fees for qualifying authors’ whose articles are accepted in Academic Pathology. Importantly: (a) the Corresponding or First Author for the manuscript submission needs to be the eligible candidate for an Open Access Award; (b) it is the Society of ’67 Board that determines eligibility of the qualifying author for the award, independent of the journal review process; and (c) it is the journal, Academic Pathology, that determines the publishability of the submission through the normal peer review process. For the year 2019:

- 28 Corresponding Authors were deemed eligible for the Society of ‘67’s Open Access Award;
- $14,000 in Society of ‘67 Open Access Awards were committed toward articles published or accepted for publication;
- through Open Access Awards, Academic Pathology became a major platform for the professional development of the next generation of academic pathologists!

The journal is enormously appreciative to both the Society of ‘67 and its donors for supporting this program, and to the submitting authors who have responded to this opportunity.

Leading the journal’s excellent service and management is Henry Carter as Managing Editor, Erin O’Brien as SAGE’s Publishing Editor, and Priscilla Markwood as Executive Editor. The journal’s Senior Advisors, Editorial Board, and Educational Case Review Board are an experienced and exceptional group of leaders and we are grateful for their dedication to reviewing, recruiting, and writing for Academic Pathology. Most importantly, on behalf of the editors and staff, we thank all members of the Association of Pathology Chairs community for your support of this journal, both as an instrument of the society, and as a welcome home for publications of merit within the unique scope of this journal.

Learn more about how to qualify for an Open Access Award at www.apcprods.org/societyof67!
ACADEMIC PATHOLOGY - RESEARCH ARTICLES PUBLISHED IN 2019

Experiential Teaching Paradigms: Adapting the Medical Education Literature to *Academic Pathology* Practice
https://doi.org/10.1177/2374289519892553

Artificial Intelligence and Machine Learning in Pathology: The Present Landscape of Supervised Methods
https://doi.org/10.1177/2374289519873088

The Importance of the Autopsy in Medicine: Perspectives of Pathology Colleagues
https://doi.org/10.1177/2374289519834041

Utilizing Social Media to Spread Knowledge: The Association of Pathology Chairs Experience at the 2018 Annual Meeting
https://doi.org/10.1177/2374289520901342

The Value Proposition for Pathologists: A Population Health Approach
https://doi.org/10.1177/2374289519889857

Educational and Career Development Outcomes Among Undergraduate Summer Research Interns: A Pipeline for Pathology, Laboratory Medicine, and Biomedical Science
https://doi.org/10.1177/2374289519893105

How to Succeed in Fellowship Acquisition: A Survey of Pathology Residents
https://doi.org/10.1177/2374289519884711

Case-Based Asynchronous Interactive Modules in Undergraduate Medical Education
https://doi.org/10.1177/2374289519884715

Integrating Social Determinants of Health and Laboratory Data: A Pilot Study To Evaluate Co-Use of Opioids and Benzodiazepines
https://doi.org/10.1177/2374289519884877

Serving as a Temporary Pathology Chair: “Boon” or “Boondoggle”? 
https://doi.org/10.1177/2374289519877547

The “Race” Toward Diversity, Inclusion, and Equity in Pathology: The Johns Hopkins Experience
https://doi.org/10.1177/2374289519873104

Agreement in Histological Assessment of Mitotic Activity Between Microscopy and Digital Whole Slide Images Informs Conversion for Clinical Diagnosis
https://doi.org/10.1177/2374289519859841

Broadening Our Scope: A Pilot Curriculum in Bioethics for Pathology Graduate Medical Trainees, the Emory

University Experience
https://doi.org/10.1177/2374289519857243

Transfusion Medicine Education for Anesthesiology Residents: A Novel Curriculum
https://doi.org/10.1177/23742895198555729

Creating Pathologists from a Post-Sophomore Pathology Fellowship: 21 Years and 126 Fellows at an *Academic Pathology* Department
https://doi.org/10.1177/2374289519851203

A Strategy for Wellness in a Pathology Residency Program: Enhancing Chances of Success During an Epidemic of Burnout
https://doi.org/10.1177/2374289519851233

Learning Styles in Pathology: A Comparative Analysis and Implications for Learner-Centered Education
https://doi.org/10.1177/2374289519852315

Training the Next Generation of Pathologists: A Novel Residency Program Curriculum at Montefiore Medical Center/Albert Einstein College of Medicine
https://doi.org/10.1177/2374289519848099

Molecular Neuropathology in Practice: Clinical Profiling and Integrative Analysis of Molecular Alterations in Glioblastoma
https://doi.org/10.1177/2374289519848353

Life After Being a Pathology Department Chair III: Reflections on the “Afterlife”
https://doi.org/10.1177/2374289519846068

Design and Implementation of a Pathology-Specific Handoff Tool for Residents
https://doi.org/10.1177/2374289519839186

Patients Who Take Home Their Surgical Pathology Specimens: A Preliminary Study
https://doi.org/10.1177/2374289519832502

Forensic Autopsy Experience and Core Entrustable Professional Activities: A Structured Introduction to Autopsy Pathology for Preclinical Student
https://doi.org/10.1177/2374289519831930

Autopsy Standardized Mortality Review: A Pilot Study Offering a Methodology for Improved Patient Outcomes
https://doi.org/10.1177/2374289519826281

The Association of Pathology Chairs’ Pathology Leadership Academy: Experience From the First 2 Years
https://doi.org/10.1177/2374289519826309
So what can evolve from a discussion at the Amtrak station in Wilmington, Delaware? More than we expected!

The Pathology Competencies in Medical Education (PCME) were published in *Academic Pathology* in 2017. These competences were initially created with the input of 60 pathology course directors and chairs from APC who submitted their learning objectives for pathology to this project. The PCME were created as a national standard of what academic pathologists agree upon as the minimal standard of what the undifferentiated medical student should know about pathology. The PCME are divided into three competencies: Mechanisms of Disease, Organ System Pathology, and Diagnostic Medicine and Therapeutic Pathology. Each of these competencies has multiple learning goals and learning objectives to cover the basic pathology that should be taught in medical schools.

In September 2018, Priscilla Markwood (APC Executive Director) and Dr. Knollmann-Ritschel met at the Amtrak station in Wilmington and discussed a Call for Educational Cases, which focused on the Learning Objectives of the PCME. We discussed that the call might be sponsored by the Society of ‘67, waiving the publication fee for the Educational Case if the first author was a junior faculty member or a medical student or resident being mentored by a senior faculty member. We developed an expanded review board who would review the Educational Cases submitted. Our goal with the review board was to increase the number of reviewers for the Educational Cases, train the reviewers to increase the quality of the reviews by providing feedback to reviewers on review quality and depth of reviews, and create a more uniform review process.

We estimated that we would have about 20 submissions for this call. When Barbara asked Priscilla “what if we have 50 submissions”, Priscilla responded “that would be a nice problem to have.” Well, Priscilla was correct! We had an incredible response of 57 Educational Case manuscript submissions for this call! The topics of the Educational Cases span all three competencies of the PCME. We are especially delighted to receive several manuscripts for the third competency, Diagnostic Medicine and Therapeutic Pathology, as this is an area where we had the fewest Educational Cases and is a difficult topic to get into the curriculum. We are working diligently through all the manuscripts to make sure all Educational Cases adhere to the guidelines and standards we have developed.

The tremendous response to the call for Educational Cases reflects two important points: first, that there is tremendous interest to publish Educational Cases as scholarly work, and secondly, that the Educational Cases and PCME upon which the Educational Cases are based are valued. I urge you to keep your eyes tuned to *Academic Pathology* as the Educational Cases are constantly emerging as they come through production!
THE SOCIETY OF ‘67 – APC’s PHILANTHROPIC ARM
By Melvin Limson, PhD – Director of Programs and Development, APC

Programs of the Society of ‘67 invest in nurturing the academic pathology pipeline and are made possible by generous contributions to the Society of ‘67, named for APC’s founding year – 1967. Since the Society’s inception in 2017 (the 50th anniversary of APC), 76 awards totaling more than $160,000 have been made to 71 trainees from 45 academic institutions.

In 2019, $36,000 in donations were received from 36 members among all Sections of APC, in addition to the existing contributions from life-time members of the Society of ‘67. APC’s administrative support is funded by the Academic Mission Group, so all donations directly support the three established programs of the Society of ‘67:

- Open Access Publication Awards: $1250 covers a research article and $500 covers an education case published by a student, resident or early career pathologist (27 awards given in 2019)
- Scholars Travel Awards: $2500 sponsors one medical student or resident to attend the APC Annual Meeting and see opportunities in pathology and academia (19 awards given in 2019)
- Trainee Project Grants in Health Services Research and Education: Gives up to $5000 to fund a pathology trainee to innovate or address a healthcare quality, cost or access issue (4 projects awarded in 2019)

Members, their families, other organizations, and vendors may contribute to the Society of ‘67 to cultivate and inspire students and trainees in the academic pathology pipeline. Make a difference in the lives of future pathologists! Join your colleagues who have donated and made these programs possible. See a list of the Society of ‘67’s award recipients and donors, and make a donation at www.apcprods.org/m-societyof67.

Recipients of Society of ‘67 Awards, left to right: Sharon Song, MD (Scholar, 2017, University of Pennsylvania); Nathan McLamb, MD (Scholar, 2018, Beth Israel Deaconess Medical Center); Calixto-Hope Lucas, Jr, MD (Scholar, 2019 and Open Access Publication Award, 2019, University of California, San Francisco); and Christopher Hergott, MD, PhD (Trainee Project Grant, 2018, Brigham and Women’s Hospital)
ADVOCACY COMMITTEE REPORT
Debra G.B. Leonard, MD, PhD – Advocacy Committee Chair

Transition of Advocacy Chair
The APC Advocacy Committee thanks and wishes farewell to John Tomaszewski, MD (University at Buffalo, SUNY) who served two terms as Chair of the Advocacy Committee. His leadership in advocacy issues over the years has been important for the APC and academic pathology. As the new Chair, I will strive to continue the strong leadership of Dr. Tomaszewski.

Overview of Advocacy Issues in 2019
The APC Advocacy Committee identifies, discusses, and responds to the rapidly evolving issues facing pathology and laboratory medicine in the domains of business, regulation, and compliance. The committee recognizes that advocacy issues evolve throughout the year and it seeks to quickly adjust to the environment. The committee especially welcomes input on newly evolving advocacy developments from all APC members.

Priorities of the Advocacy Committee in 2019 were:
- MACRA, MIPS, and PAMA: maximizing academic pathology’s reporting ability and payment in evolving models;
- Local Coverage Determinations, especially exerting CMS’ authority and oversight of MACs;
- Commercial Laboratory Outsourcing Agreements: consolidation of academic laboratories;
- Laboratory Developed Tests (LDTs): providing the academic laboratory view of the critical role of patient access to LDTs;
- Pathology and laboratory medicine content in medical school curricula and enhancing the pathology pipeline;
- GME funding by CMS, as well as trends in pathology residency applications and unexpected fellowship openings;
- NIH funding, MD/PhD and PhD workforce development, and preservation of scientific standards;
- The new Common Rule and NIH policy on the return of research results to patients; and
- Draft legislation that would allow patenting of products of nature, including genes.

Advocacy Session at the APC 2019 Annual Meeting
The Advocacy Session in the July 2019 meeting, Lab Consolidation: Path to Perdition or Path to Paradise?, focused on the impact of widespread health system mergers on the science, education, and practice of pathology and laboratory medicine in 2019 and beyond. Discussions after the presentations by the speakers listed below were lively and engaging:
- Harvey Kaufman, MD, MBA, Medical Director from Quest Diagnostics presenting on the national joint venture laboratory model;
continued

**ADVOCACY COMMITTEE REPORT**

Debra G.B. Leonard, MD, PhD – Advocacy Committee Chair

The Advocacy Committee recommended the **Rory Staunton Foundation for Sepsis Prevention** to receive the 2019 Friends of Pathology Award. Ciaran and Orlaith Staunton accepted the award on behalf of the Foundation during Tuesday’s Award Lunch. Ciaran’s moving speech about the tragic loss of their otherwise healthy, young son was a reminder to all of the value of pathology and the important work that remains to be done in laboratory medicine, including advocating with patient groups on appropriate testing.

**Joint Practice & Management and Advocacy Session Planned for APC 2020 Annual Meeting**

The Practice & Management Committee and the Advocacy Committee are planning a joint session for the APC 2020 Annual Meeting in San Diego, CA that will focus on funds flows in academic pathology departments. The committees are designing a survey on funds flows that will be sent to department Chairs in the winter/spring of 2020 to explore the (1) sources of department funds, (2) the level of control chairs have over the use of funds, and (3) the support of their departments. The keynote speaker for the session will be Janis M. Orlowski, MD, who led an Association of American Medical Colleges (AAMC) report effort as the Chief Health Care Office on “Next-Generation Funds Flow Models: Enhancing Academic Health System Alignment.” Additional speakers from APC member departments will focus on weathering recent funds flow shifts at their institutions.

In 2020, the Advocacy Committee will look to identify ways to communicate more frequently and broadly to APC’s membership on the critical issues in academic pathology.
RESEARCH COMMITTEE REPORT
By Jeffrey Golden, MD – Research Committee Chair

The Research Committee met at the APC 2019 Annual Meeting and subsequently with phone conferences to discuss and finalize the SWOT analysis that had been developed over the previous eight months in response to Council’s request. The SWOT analysis for the Research Committee identified topics on which the Research Committee will focus its efforts:

- Examine how to engage other departments/students in computational pathology/precision medicine, such as computational biologists, engineers, physicists, mathematicians, and systems biologists;
- Explore new opportunities to sustain research; and
- New training opportunities, including that which encourages participation in pathology’s physician-scientist track.

The Research session at this year’s APC meeting, which was combined with the Practice session, focused on the continued emerging role of bioinformatics in healthcare and the essential role pathology must place in owning this space. The session, entitled “Development and Implementation of Big Data and Computer Algorithms in Pathology”, was kicked off by Karen Kaul, MD, PhD (NorthShore University HealthSystem) who gave an overview of the future state of pathology, highlighting some of her department’s outstanding work. The next speaker was Alexis Carter, MD (Children’s Healthcare of Atlanta) who provided a clear vision of how integration of pathology data with IT systems will lead the future practice of medicine. Next Steven Seltzer, MD (Brigham and Women’s Hospital), a radiologist, discussed the concept and prototype of a diagnostic cockpit. He highlighted the challenges and opportunities, an extremely important topic for our profession to be discussing. The final two keynote speakers, Georg Gerber, MD, PhD (Brigham and Women’s Hospital) and John Higgins, MD (Massachusetts General Hospital), provided in depth examples of how different types of pathology data can be more effectively mined using mathematical, statistical and machine learning models. Dr. Higgins highlighted how understanding the role of mechanisms of hemoglobin glycosylation can greatly improve the information we provide to our clinical colleagues for the management of all patients with diabetes. Dr. Gerber highlighted his work building novel machine learning tools to interrogate the microbiome and related data to improve diagnostics and therapeutics.

Dr. Gerber’s exploration of the role pathologists can and should play in therapeutics has informed planning of next year’s APC Research Session at the APC 2020 Annual Meeting in San Diego. We
RESEARCH COMMITTEE REPORT
By Jeffrey Golden, MD – Research Committee Chair

will focus on the role pathology plays in therapeutics with presentations on CAR-T cell therapies, other stem cell therapies, and further roles the microbiome can play in therapy.

Finally, over the previous year the Research Committee created a series of suggested programs that might be implemented to enhance attracting MD/PhD students and other academically oriented students into pathology. We are once again including highlights of this toolbox of possible options as several chairs have found this extremely useful. See the Spring 2019 issue of Paths to Progress for more details.

- Create a longitudinal experience for MD/PhD students during their research years in pathology.
- Develop a pathology research lab that students would rotate through and conduct research projects.
- Invite MD/PhD and other academically oriented medical students to come to pathology grand rounds and other pathology conferences.
- Expand pathologists’ presence on social media.
- Develop relationships with graduate programs in computer sciences, engineering, and other related sciences.

Variations on all these recommendations are expected and the Research Committee would appreciate feedback on efforts that were effective and, of course, additional suggestions.
At the APC 2019 Annual Meeting in Boston, there was a joint program session developed through collaboration between the Practice & Management and Research Committees. See the highlights of the joint session in the Research Committee Report.

During the P&M Committee meeting in July, members discussed the challenges that academic pathologists face, reviewed and analyzed a SWOT analysis, and drafted survey questions on practice and management for the upcoming year. One way to advance pathology is through the survey data and analysis. The data is used to develop aggregated statements that serve as the medium to advance academic pathology practice. Through data, the P&M Committee can help set national benchmarks. After the July meeting, survey questions continued to be developed and discussed on the monthly conference calls. Some of the potential survey questions include topics such as institutional funds flow models and their impact on academic pathology, clinical pathology payments (Part A), faculty compensation, and departmental reserve funds. The P&M Committee will work with the Advocacy Committee to roll out the final survey questions in early 2020.

In reviewing the SWOT analysis, the P&M Committee discussed the opportunity for academic pathology departments to maintain their leadership in molecular medicine and information technology.

Furthermore, new technologies such as artificial intelligence, digital pathology, and liquid biopsies have the potential to advance the field and practice. The P&M Committee has set forth five goals in the next three years:

- Continue to collect survey data for benchmarking salaries and RVU metrics;
- Develop approaches for evaluating workload and productivity of anatomic and clinical pathologists that emphasize the value of work in pathology that is not measured by current metrics (e.g., wRVUs);
- Monitor laboratory outsourcing, and the effects of outsourcing on the functioning and effectiveness of academic pathology programs;
- Work with the Advocacy Committee to influence national, state, and local decisions that impact academic pathology; and
- Explore and advocate for innovative pathology practice models beyond pure diagnosis. These initiatives are aimed at keeping pathology at the forefront, positioning it for long-term sustainability and growth both academically and clinically.

The P&M Committee welcomes participation by chairs who are engaged or knowledgeable on these issues. To join the committee, contact the APC Office at info@apcprods.org.
The UME Committee has been busy and active over the past year. In July, we saw transition in the leadership of this committee from Michael Prystowsky, MD, PhD (Albert Einstein College of Medicine) to Jennifer Baccon, MD, PhD (Northeast Ohio Medical University). Dr. Prystowsky’s stewardship of UME, over his two-term tenure as committee chair, created an enormous, positive impact on UME-related activities of the APC. Under his leadership, the committee worked with the Undergraduate Medical Educators Section (UMEDS) to create the Pathology Competencies in Medical Education (PCME). This project has had national impact; in particular, through the publication of Educational Cases associated with the PCME as articles in Academic Pathology. Together, the PCME and Educational Cases provide a go-to resource for pathology and medical educators across the country. The committee members and the APC thank Dr. Prystowsky for his service in the role of Chair of the UME Committee!

The UME Session at the APC 2019 Annual Meeting, jointly programmed with the GME Committee, focused on faculty development, which is vitally important to academic pathologists who choose careers as educators. At the UME level, these faculty are the critical link to ensuring curriculum committees include high-quality pathology and laboratory medicine content in medical school curricula. The main takeaway lesson from the session was that Investment in development of professional educators promotes greater effectiveness in teaching and mutual respect in dealing with fellow educators.

It was wonderful to have such a great turn-out at the UME Committee meeting at the Annual Meeting. The UME Committee met to establish goals and priorities for the coming academic year. Our goals are:

- Have more medical students competent in pathology and lab medicine;
- Increase the number of students going into pathology; and
- Enhance faculty development as educators and educational scholars.
continued

**UNDERGRADUATE MEDICAL EDUCATION COMMITTEE REPORT**

By Jennifer Baccon, MD, PhD – *Undergraduate Medical Education (UME) Committee Chair*

Not only did we define these goals, but we brainstormed on what our priorities will be, and how we hope to achieve them. The conversation really crystallized the need for APC, as a professional society, to develop ways to enhance the presence of key concepts in pathology and laboratory medicine within the undergraduate curriculum. The committee will continue these conversations with newly-instituted regular conference calls. Thank you to all who have joined the recent calls. Anyone interested in being part of the committee is encouraged to drop an email to me or the APC office at info@apcprods.org. We would love to have you join us!

As we already look ahead to next year’s annual meeting, we are busy assembling a UME program that will be sure to have broad interest to Chairs, as well as UMEDS. Programming will focus on the importance of laboratory medicine in the medical school curriculum.
GRADUATE MEDICAL EDUCATION COMMITTEE REPORT
By Karen Kaul, MD, PhD – Graduate Medical Education (GME) Committee Chair

For the GME Committee, the year started with the publication of two position papers: Surgical Pathology Residency Training (doi.org/10.1177/2374289518824054) and Assessing Autopsy Competency in Pathology Residency Training (doi.org/10.1177/2374289518824057). These position papers reflect the efforts of APC Council and PRODS Council to restate the importance of current residency training requirements, which are often debated, but are still essential to Board certification.

The GME Session at the APC 2019 Annual Meeting was co-organized with the UME Committee and focused on educational leadership and curricular advocacy with an overview from Paul Hemmer, MD (Uniformed Services University of the Health Sciences). His keynote was followed by an example from Kristin Olson, MD (University of California, Davis) of leadership by pathology in medical school curricular design, and encouragement to mentor and develop pathology’s junior faculty as educational leaders from Richard Conran, PhD, MD, JD (Eastern Virginia Medical School).

The GME Committee met in person at the 2019 APC Annual Meeting, as well as by conference call in September. The summer meeting was devoted to brainstorming and discussing the recent SWOT analysis, and prioritizing efforts for the committee in the coming year. In particular, curricular issues during training were discussed, including readiness to practice, possible approaches to autopsy training, and whether a core AP and CP curriculum could be defined. Additionally, a publication focusing on fellowship recruitment patterns is planned. The summer program topics for the APC 2020 Annual Meeting were also discussed and will focus on the theme of training to practice in the future of pathology. Other projects related to graduate medical education are underway.

Pathology pipeline discussions by the various working groups of the Pathology Roundtable’s Pipeline Development Council (PDC) are ongoing and have been detailed by Wesley Naritoku, MD, PhD (University of Southern California) elsewhere in this newsletter. The teams compiled a significant number of published documents on pathology education and workforce issues and created a compendium of funded opportunities and resources for students, trainees and young colleagues, which are now published on the APC website at: www.apcprods.org/pipeline-development. These resources will be helpful in providing accurate information on pathology and its opportunities to all currently in our field, as well as interested students. The Medical Education Working Group has gathered detailed data on how and when pathology is taught in our medical schools, with plans to publish a best practices paper next year. The Communications working group has focused on approaches to disseminating this information through traditional and virtual means and has worked across organizations to promote the field of pathology.
LEADERSHIP DEVELOPMENT & DIVERSITY COMMITTEE REPORT
By Dani Zander, MD – Leadership Development & Diversity (LD&D) Committee Chair

This year has been a busy and productive time for the LD&D Committee. Committee efforts were directed towards planning for the LD&D component of the APC 2019 Annual Meeting and the third iteration of the Pathology Leadership Academy (PLA). On July 22nd, the first event of the annual meeting was the Chairs Boot Camp, a collaborative program organized by the Senior Fellows and the LD&D Committee. Two panels staffed by ten Senior Fellows, Chairs, and PDAS members provided invaluable perspectives on “Optimizing Interactions with Institutional Leadership” and “Dealing with Disruptive Faculty and Staff.” The LD&D session followed and was kicked off with the Patricia Thomas Lecture by Janice Gross Stein, PhD, who offered a thought-provoking and entertaining presentation on “Diversity and Excellence Are Friends: Valuing and Promoting Excellence.” Equally as educational, Erick Messias, MD next discussed “Building a Wellness Program,” providing attendees with many helpful ideas about how to develop or enhance their own Wellness Programs. The third component of LD&D programming was a discussion group, “International Medical Graduates: Challenges and Opportunities,” focused on sharing insight and strategies to assist international medical graduates in our departments with some of the challenges that they may face.

For those not familiar with the PLA, APC’s PLA was designed to build and strengthen leadership skills and knowledge in future leaders of academic Pathology and Laboratory Medicine departments, and to provide a preview of a potential future phase of one’s academic career. This course was held immediately preceding this year’s APC annual meeting, and attendees were invited to stay for the annual meeting. The agenda included both general and pathology–specific leadership topics in lecture and interactive workshop formats. Although targeted towards academic pathology faculty members, other applicants were considered for inclusion on a case-by-case basis. Attendees this year totaled 49 individuals, including 47 faculty members with a broad...
continued

LEADERSHIP DEVELOPMENT & DIVERSITY COMMITTEE REPORT
By Dani Zander, MD – Leadership Development & Diversity (LD&D) Committee Chair

range of academic experience and titles, 1 resident, and 1 administrator. Reviews were very positive, and the next iteration of the PLA is tentatively planned for 2021 in Washington, DC.

Ongoing LD&D Committee discussions have focused upon the possibility of organizing a longer, more longitudinal leadership course and the potential for working on a survey of APC members to address diversity and inclusion-related issues. Enhancements to the LD&D Committee Resources webpage are receiving the attention of the LD&D Resources Task Force (Mary Lipscomb, MD, past Chair at the University of New Mexico; Greg Freund, MD, University of Illinois, Urbana; and Ann Thor, MD, University of Colorado), and those wishing to submit articles or other items for review and posting by the Task Force should send them to info@apcprods.org.

Programming for APC 2020 is also actively underway and Vivian Pinn, MD, has accepted the Committee’s invitation to present the Patricia Thomas lecture on diversity topics. Dr. Pinn, formerly a Chair at Howard University (1982-1991), directed the NIH’s Office of Research on Women’s Health and is currently Senior Scientist Emerita at the NIHG Fogarty International Center. This next year promises to be an opportunity for more creative thinking!
**SENIOR FELLOWS GROUP (SFG) REPORT**

By Fred Sanfilippo, MD, PhD – SFG Chair and David Bailey, MD – SFG Secretary

**Membership**

The APC Senior Fellows Group (APC SFG) has grown to 47 members. We thank the APC Office for encouraging chairs to apply online for membership in the APC SFG when they announce that they are stepping down. Per the SFG Operating Procedures, the APC SFG Executive Committee (Fred Sanfilippo, Chair; Deborah Powell, Vice Chair; David N. Bailey, Secretary; Rebecca Johnson, Councilor; and David Wilkinson, Councilor) reviews the applications and makes a recommendation to the APC Council, which has the final authority for approval. Memberships are for three years with an unlimited number of online renewals as long as the member remains active in the APC SFG through participation in conference calls, annual APC meetings, regional APC meetings, and/or APC SFG projects. There is no membership fee.

**Projects**

Once again, the APC SFG partnered with the APC Leadership Development and Diversity Committee in planning and presenting the APC Chairs Boot Camp at the 2019 Annual Meeting in Boston, MA. The Boot Camp (moderator, Fred Sanfilippo, APC SFG Chair) consisted of two panels involving sitting chairs (APC), senior fellows (SFG), and pathology department administrators (PDAS): “Optimizing Interactions with Institutional Leadership” (moderator, Max Buja, SFG; panelists, David N. Bailey, SFG; Barbara Ducatman, APC; Martha Miers, PDAS; and Brian Smith, APC); and “Dealing with Disruptive Faculty and Staff” (moderator, Deborah Powell, SFG; John Baci, PDAS; Avrum Gotlieb, SFG; and David Wilkinson, SFG). The APC SFG and the LDDC are now planning the 2020 Chairs Boot Camp (“Optimizing Departmental Effectiveness” and “Optimizing Faculty Productivity”).

For the last several years the APC SFG has also sponsored a discussion group at the annual meeting. The 2019 discussion group topic was “Serving as a Temporary Chair: ‘Boon’ or ‘Boondoggle’?” (moderator, David N. Bailey, SFG; panelists, Melissa R. George, APC; David Howell, APC; Donald Karcher, APC; Jenny Libien, APC; Deborah Powell, SFG; and Fred Sanfilippo, SFG). As in previous years, the discussion group resulted in a publication in *Academic Pathology* (doi.org/10.1177/2374289519877547). The APC SFG is now planning its 2020 discussion group on the topic “Generating Discretionary Income for your Department” (moderator, David N. Bailey, SFG; panelists James Crawford, APC; Peter Jensen, APC; Debra Leonard, APC; Susan McCarthy, PDAS; and Fred Sanfilippo, SFG).
At the suggestion of APC Council, the APC SFG launched a voluntary mentoring program for 35 new chairs with 25 senior fellows being matched with one or more chairs. A number of one-on-one mentoring sessions were launched at the 2019 APC Annual Meeting. Also, at the suggestion of APC Council, the APC SFG participated in the review of the APC standing committee SWOT (Strengths, Weaknesses, Opportunities, and Threats) analyses, which will be used to develop major goals for the committees for the next three to five years. During the year several members of the APC SFG (namely, L. Maximilian Buja, Stanley Cohen, Robert Colvin, Fred Gorstein, Vinay Kumar, James Madara, Mary Lipscomb, Salvatore Pizzo, Deborah Powell, Fred Sanfilippo, Clive Taylor, and Ronald Weinstein), expressed interest in preparing manuscripts that would cover the history of academic pathology in the United States. An effort coordinated by David Bailey (SFG Secretary) is underway with a number of interesting chapters in development. Other individuals interested in participating should contact Dr. Bailey at dnbailey@ucsd.edu.

Recent Academic Pathology publications produced by the Senior Fellows Group:

Life After Being a Pathology Department Chair: Issues and Opportunities (2016) https://doi.org/10.1177/2374289516673651

Life After Being a Pathology Department Chair II: Lessons Learned (2017) https://doi.org/10.1177/2374289517733734


SOCIAL MEDIA COMMITTEE REPORT
By Dana Razzano, MD and Yonah Ziemba, MD – APC Social Media Committee Co-Chairs

The APC Social Media (SoMe) Committee works to increase the visibility of the APC in the online pathology community and to extend the educational reach of the APC Annual Meetings. This year the committee is co-chaired by two pathology residents: Dana Razzano, MD (New York Medical College at Westchester Medical Center) and Yonah Ziemba, MD (Northwell Health). The committee worked to accomplish specific goals during the APC 2019 Annual Meeting which included the following:

- Amplify the reach and impact of the ideas presented at APC 2019 Annual Meeting
- Establish a forum for participants to continue discussion of ideas after sessions are finished
- Expand the audience to people who could not physically attend
- Provide coverage of sessions for participants who attended a different track
- Promote networking among meeting participants
- Amplify the smaller sessions and presentations

Two months prior to the annual meeting, a recorded SoMe Webinar was sent out to the APC members and registered attendees to discuss the goals, roles, and strategies of the committee to achieve collective excellence through social media. The link to the webinar can be found here: http://bit.ly/APC19Boston.

The APC SoMe Committee kick-off meeting was held on Sunday, July 21, 2019 to coordinate coverage on all conference sessions, tracks, and activities for each APC Section: Chairs, PRODS, PDAS, UMEDS, and GMEAS. This year was a tremendous success with the following notable results:

- In total, there were 2,096 tweets bearing the meeting hashtag at the 2019 meeting, which gathered 6,827,914 online impressions defined as the
continued

SOCIAL MEDIA COMMITTEE REPORT
By Dana Razzano, MD and Yonah Ziemba, MD – APC Social Media Committee Co-Chairs

Twitter Statistics from APC 2019 (Symplur data).

potential maximum impact (impact denotes the potential number of times a tweet was seen by a viewer, and is calculated by the number of tweets each author sends, multiplied by the number of followers for that author, aggregated for all authors).

- Tweets encompassing the meeting activities can be found on Twitter by searching for the annual meeting hashtag: #APC19Boston

During the APC 2019 Annual Meeting, the SoMe Committee presented the 2018 SoMe Committee impact data at the poster session. One significant finding reported was an 11-fold increase in social media presence and engagement at the APC 2018 Annual Meeting compared to the year prior due to the establishment of a designated SoMe Committee.

The SoMe Committee looks forward to the APC 2020 Annual Meeting where they hope to continue spreading the valuable educational content with the online pathology community!
Did you ever wonder how APC members use new knowledge from the annual summer meeting? Here are just a few of the many comments from our program evaluations that illustrate how attendees intend to put the content into action -- you might find some great ideas for your own department!

- Solidified the need to proactively identify working groups around informatics, IT, diagnostic management team concept. This will be discussed with departmental, then institutional leadership.
- Heard three ideas for low-risk (non-diagnostic) AI implementation in addition to many diagnostic possibilities, as well as landscape of AI/ML in academic pathology today. We are bringing AI/ML back to institutional leadership and my research group.
- Identify faculty in Pathology and Radiology departments who can establish collaborations in digital imaging and computational pathology and integrated diagnostics.
- Educate faculty about billing pitfalls.

UME
- During one presentation, the book, “Make It Stick” was mentioned. I bought the book...during the presentation and have read the first two chapters, which discuss methods to better get students to learn the material and remember it - and I will use it to do so.
- After listening to Dr. Black-Schaffer's session...I made changes to our surgical pathology curriculum to allow residents to be able to be involved with their previewed cases [until] signout...often the attending makes the final changes to the reports without including the residents. As soon as I got back from the meeting, we changed our curriculum so residents would have this opportunity more often.
continued

GREAT IDEAS FROM THE APC 2019 ANNUAL MEETING PROGRAM EVALUATIONS

By Lydia P. Howell, MD - President-Elect and Program Committee Chair

- Require faculty to have UME rotating students write educational cases as part of their annual goals.

GME
- Engaging associate directors and residents in a systematic review of our program to identify areas out of compliance with new rules and create correction plans to be carried out by residents and faculty.
- Using the generic institution safety curriculum to create a pathology specific one.
- Pilot EPA on our autopsy program. Getting group of faculty who supervise autopsy and our autopsy director alone with a resident to discuss what is needed ...Review success by reviewing autopsy evaluations from all sites.

Faculty Development
- This [what was presented at the meeting] is a call to action and I will likely ask for time during our monthly meetings to give a 5-10 minute faculty development presentation.
- Change my interactions with those who I am ‘mentoring’ towards more ‘coaching’ as they advance. Considering a session as a faculty development session at our program retreat.

- Add second mentor for each junior faculty from senior faculty who is independent.

Clearly, the APC Annual Meetings are valuable and impactful, so we hope you will join us on July 19-22, 2020 for APC 2020 at the Hotel Del Coronado!

Behind the scenes, APC contracted for the first time with Meeting Masters, Inc. (MMI), who provided on-site meeting management expertise. APC thanks Diane Fulton (Meetings Manager, MMI President), Christi Trimble (Conference Mobile App and Registration Support with MMI), Deborah Diddle (APC Accountant), and Madeleine Markwood (APC Summer Intern) for their help with preparations and managing the meeting registration desk! APC also appreciates and continues to contract with Kristofer Herlitz of AIM International, who manages the Exhibits Program and the show decorator in coordination with the APC Office. Finally, APC thanks the service staff, technical crew, and event managers at the Boston World Trade Center for making the APC 2019 the most successful and efficient annual meeting yet!

ANNUAL MEETING HIGHLIGHTS

APC 2019 broke records with:
- 513 paid registrants;
- 130 speakers (among all Sections);
- 400 mobile app users;
- 22 exhibiting companies;
- 2100 tweets; and
- 39.5 maximum hours of CME over 4 days of content-filled programming!
It is a pleasure to share with you a summary of PRODS and PRODS Council activities during the past year. It was a busy year that brought new members to the Council, exciting educational programs during our annual meetings, and several updates to initiatives to enhance the curricula of pathology residency programs.

Changes in the PRODS Council terms as well as membership elections last year resulted in changes to membership of the PRODS Council: Charles Timmons, MD, PhD (University of Texas Southwestern Medical School), finished his term as Immediate Past Chair and completed his long and industrious tenure on the PRODS Council. We certainly appreciate all of the dedication and contributions Charles has made to the PRODS Section over the years. Mary Furlong, MD (Georgetown University School of Medicine), completed her term as Chair and became the Immediate Past Chair, a role which includes chairing the PRODS Nominating Committee. Scott Anderson, MD (Larner College of Medicine at the University of Vermont), became the Chair of the PRODS Council after completing his term as Chair-Elect. Diane Kowalski, MD (Yale University School of Medicine), was elected Chair-Elect after serving as Secretary of the PRODS Council. Candice Black, DO (Dartmouth-Hitchcock Medical Center), became Secretary after completing her term as Secretary-Elect. Speaking of Secretary-Elect, Melissa George, DO (Penn State College of Medicine), was elected to this position after serving as Member-at-Large the previous year. Additional elections for PRODS Council members resulted in Cindy McCloskey, MD (from University of Oklahoma College of Medicine) elected to her second term as Member-at-Large, and new Members-at-Large Mark Friedman, DO (Icahn School of Medicine at Mount Sinai), and Deborah Chute, MD (Cleveland Clinic). John Childs, MD (Uniformed Services University of the Health Sciences), continues as Member-at-Large. Jennifer Laudadio, MD (University of Arkansas for Medical Sciences), the immediate past program director left the Council after a productive 1st term. We will certainly miss her contributions and wish her well into the future. I am especially grateful to PRODS Council members and PRODS Council Plus members for their guidance and wisdom, and to all PRODS for their commitment to the community and to the residents in our field.

Our spring PRODS meeting at the United States and Canadian Academy of Pathology (USCAP) in March 2019 in National Harbor, Maryland, proved to be
engaging and informative. With a plenary focused on resident education and training within a Surgical Pathology Subspeciality Practice, resident platform presentations on educational topics, and numerous PRODS updates, the half-day session energized the group and served as a great segue to the summer program.

The APC/PRODS summer meeting was back at the Seaport Hotel in Boston, Massachusetts. The PRODS meeting commenced with the C. Bruce Alexander Lecture, where competency-based curricula and entrustable professional activities were addressed by Deborah Powell, MD (University of Minnesota). The discussion continued with an update on the PRODS Council EPA Working Group by Cindy McCloskey, MD (University of Oklahoma). Joint sessions with the UMEDS Section and plenary discussions focused on faculty development, including a presentation by Janet Hafler, EdD from Yale University. Several PRODS members presented their experiences in providing faculty development (Jennifer Laudadio, MD) and feedback (Candice Black, DO). Updates from the ACGME are always important, and this year was no different, with Kate Hatlak, the Executive Director of the Pathology Review Committee, and Kymberly Gyure, MD, Neuropathologist at Allegheny General Hospital, Chair of the Pathology Review Committee, presenting changes to the ACGME program requirements and taking question regarding those changes. Following the ACGME discussion, several PRODS members, including Deborah Chute, MD (Cleveland Clinic Foundation),

**Past PRODS Chair, Robert Hoffman, MD, PhD (Vanderbilt University), encourages residents and students at the Society of ’67 donor appreciation event.**

Kristie White, MD (University of California, San Francisco), and Vijayalakshmi Ananthanaray, MD (Loyola University), shared their experiences in meeting and addressing the updated ACGME program requirements. The PRODS session concluded with updates from the ACGME on Milestones 2.0, the ABPath, the ASCP in regard to the RISE, and the ECFMG.

In addition to the excellent programming, networking opportunities during receptions, the Awards Lunch, and the Celebrate Exhibitors Lunch provided valuable opportunities for PRODS to connect and share experiences. A very special aspect of PRODS summer programming is the presentation of the Margaret Grimes Distinguished Teaching Award for GME. This year, the award was given to Wesley Y. Naritoku, MD, PhD, the program director at Keck School of Medicine of the University of Southern California. Dr. Naritoku has many accomplishments and a long history of service to GME education.
continued

RESIDENCY PROGRAM DIRECTORS (PRODS) SECTION
By Scott Anderson, MD – PRODS Council Chair

and the PRODS Section of the APC; he is an outstanding role model to all of us! Congratulations Wes!

Working groups of the PRODS Council continued their valuable and important work in 2019:

- The PIER (Pathology Informatics Essentials for Residents) Leadership Committee is currently working on an updated release of the PIER Curriculum (see pg 40 for more details).
- The TRIG (Training Residents in Genomics) working group has recently released an Updated Genomic Pathology Instructor Handbook and Toolkit, which includes new cases, variants, websites, and genomic testing reports (see pg 45 for more details).
- The TRIPS working group (Training Residents in Patient Safety) continues to work on expanding the working group, including resident representation, and completed a needs assessment survey (see pg 44 for more details).
- The EPA (Entrustable Professional Activities) working group is finalizing study protocols and participants for their pilot study on the effectiveness of EPAs in pathology resident training (see pg 36 for more details).

It has been a productive year for the PRODS Section and its members. We look forward to another active year and interacting with fellow PRODS at the annual Spring and Summer Meetings in 2020!
The APC 2019 Annual Meeting was held at the Boston Seaport Hotel and World Trade Center in Boston, MA, from July 21-24, 2019. The theme for the annual meeting was “Innovation through Collective Excellence Shaping the Future of Pathology.”

The PDAS sessions of the conference began on Sunday, July 21, 2019 with a Welcome Gathering for new and first-time PDAS attendees with PDAS Council. The council had the pleasure to meet a few first-time attendees and new Administrators, followed by a well-attended Welcome Reception, networking with many colleagues, and the opportunity to review posters being presented. PDAS attendance this year increased from the previous year from 56 registrants in 2018 to 65 registrants in 2019 – nice going members!

On Monday, we spent the morning and most of the afternoon learning with department chairs. In the Chairs Boot Camp, the first panel on “Optimizing Interactions with Institutional Leaders” included PDAS member Martha Miers, MBA (Vanderbilt University), whose participation capped a long history of PDAS leadership, before retiring after the meeting. The second panel discussion on “Dealing with Disruptive Faculty and Staff” included PDAS member John Baci, MBA (Children’s Boston Hospital) with his inimitable humor on a challenging topic. Martha and John did a great job representing the administrators’ perspective in this well-attended boot camp! In the afternoon the Leadership Development and Diversity Session included talks on “Diversity and Excellence are Friends: Valuing and Promoting Excellence” by Janice Stein, PhD (University of Toronto) and “Building a Wellness Program” by Erick Messias, MD (University of Arkansas). The sessions stressed the importance of being at the table, being transparent, creating relationships in the department and the institution, and speaking up - communicating, citizenship, and documentation of good and bad situations. These and many more leadership skills are needed to be a successful and involved pathology department.

PDAS concluded the first day by separating from the Chairs Program. I would like to acknowledge Martin Lawlor (University of Michigan) for stepping up and doing a last-minute clinical pathology presentation on “RVUs and Clinical Pathology” to replace a speaker who fell ill. Remarkably, Marty quickly assembled a thought-provoking talk on how the University of Michigan successfully renegotiated contracts with the American Red Cross, with a huge cost savings that allowed them to invest in
themselves to save on the margin. They brought testing in-house to increase their revenue and improve turn-around time. Pamela Gibson, MD and Michael Towle (University of Vermont) completed the day for PDAS with “Anatomic Pathology Scheduling and Effort Calculations in Partial Subspecialization.” Michael and Dr. Gibson described the process their department went through and the lessons learned in changing from general surgery to partial sub-specialization.

Tuesday morning was packed with PDAS sessions beginning with a PDM-sponsored session, “It’s the Future...Grab It!” with an expert panel that discussed emerging topics. Panelists included PDAS member Susan McCarthy (University of Southern California), Jane Pine Wood (BioReference Laboratories), Gregory Henderson, MD, PhD (PathForce Dx), Krista Tinsley (consultant to PathForce Dx), and Lisa-Jean Clifford (Gestalt Diagnostics). Then, John Baci, MBA (Boston Children’s Hospital), entertained us and spoke on “Succession Planning for Pathology Department Administrators: When and How to Start,” a very informative presentation to give PDAS members a starting point, at the least. The remainder of the morning was jam packed with awesome presentations:

- “Out of the Ordinary vs. Ordinary Days,” presented by Susan Evers (University of North Carolina at Chapel Hill) and Marty Lawlor (University of Michigan);
- “PDA with More than One Department,” presented by Brian Rudolph (University of Pittsburgh); and
- “The Juggling Act: Leading Two Departments” Andrea Saenim (Northwestern University). These presentations make you realize how similar we are in our roles and, for those of us with one department, how lucky we are!

At the awards luncheon, we proudly presented the 2019 PDAS Distinguished Service Award to Barbara Prentiss, who started as an administrator in the Department of Pathology initially at the University of California, Irvine (1992-1995), then retired from 16 years of service (1995-2011) at the University of Washington, and was one of the founding members of PDAS. Barbara attended the APC annual meeting when there was no Administrator section, so she took the initiative and her leadership skills to help create PDAS Council. Barbara served from 2003-2006 on the PDAS Council as Vice Chair, Chair, and Past Chair. Barbara represents the characteristics of a Fellow PDAS Distinguished Service Awardees:

true leader, by using passion and teamwork, as well as contributing to the field of Pathology and improving PDAS.

In addition to the awards, I would like to give a shout out to Marilea Grider (Emory University) for winning the Amazon gift card prize drawing as part of the Exhibits Program for visiting the vendor booths. Way to go, Marilea!

Tuesday afternoon, we re-joined the Chairs Program for the Advocacy Session on Lab Consolidation: Path to Perdition or Path to Paradise? The following were presentations that described different models and challenges of consolidation: Pressures in the Environment, The National Joint Venture Lab Model, The Regional Joint Venture Lab Model, and The Co-Operative Lab Model. Tuesday concluded with a sponsored reception by PDM.

Wednesday was a full day of PDAS Sessions jam packed with informative presentations:
- The Value of the Laboratory in an Uncertain Healthcare Landscape, Karen Kaul, MD, PhD, & Zachary Zahara, MBA, NorthShore University HealthSystem;
- Outreach Examples, Gary Brown, MBA and Ann Thor, MD, University of Colorado;
- Development of a Pathology Compensation Plan, Diane Lantz, Virginia Commonwealth University;
- Compensation Model Examples at UCSD and UCSF, Kai Wang, MBA, University of California, San Diego;
- Compensation Model Example at Baystate, Kristen Kolb, MBA, Baystate Medical Center; and
- Just Jane: A Legal Update, Jane Pine Wood, JD, BioReference Laboratories

All presentations were amazing, thanks to all of our speakers! In addition, the 2019 presentations spurred ideas for the PDAS Hot Topics Session at the APC 2020 Annual Meeting.

At the annual PDAS business meeting, outgoing Section Chair Beth Hansell (Medical University of South Carolina) presented “thank you” gifts to Council members and introduced the new Council members. Beth then reviewed revisions to the PDAS Operating Procedures, a motion was made to approve, seconded, and all agreed to the amendment of including non-voting “Associate Members” into the PDAS Section. A request for new speakers for the 2020 Annual Meeting was announced. Of note, this coming year we will be looking
continued

PATHOLOGY DEPARTMENT ADMINISTRATORS (PDAS) SECTION
By Kristen Kolb, MBA – PDAS Council Chair

for nominations for the Northeast and West Regional members to be elected in 2020. Please consider nominating or re-nominating someone or yourself to be part of the Council.

We ended the final day with our Hot Topic discussion with many ideas, topics, and questions. Again, we are looking for speakers for the 2020 meeting – another shout out to anyone who would like to speak or do a duo-presentation with another PDAS member. As evidenced by the great exchanges, both at the annual meeting and via the section’s e-list, we (the PDAS Section) are a “safe” group to speak to and to share your expertise and experience in administering a pathology department!

Throughout the year, PDAS Council works with the APC Council and the Practice & Management Committee to address practice and administrative issues, including generating support for annual APC surveys. PDAS Council has been working to develop a new online resource center for department administrators, which we expect to launch in 2020, and we are diligently programming the PDAS sessions of the 2020 APC Annual Meeting. Mark your calendars and plan on attending the 53rd APC Annual Meeting at the Hotel Del Coronado, San Diego, CA from July 19-22, 2020.
The UMEDS summer meeting had a tremendous array of topics that were discussed pertaining to pathology education and innovations in education. The meeting began with the Course Directors Workshop. The first presentation was from B. Alan Rampy, DO, PhD (University of Texas at Austin) who described the curriculum development and integration process from the ground up at the new Dell Medical School using the Pathology Competencies for Medical Education and Educational Case reports.

Our first Plenary Session focused on faculty development, a topic that had not been covered in our programming for many years. We joined our PRODS colleagues for a very inspiring talk by Janet Hafler, EdD, from Yale University, who focused on the skill of teaching and creating a supportive workplace. This was followed by focused presentations in the UMEDS Section on Faculty and Career Development by Kristin Olson, MD (University of California, Davis), as well as developing a Curriculum Vitae and Educational Portfolios by Barbara Knollmann-Ritschel, MD (Uniformed Services University of the Health Sciences).

We concluded the morning on faculty development, a topic that had not been covered in our programing for many years. We joined our PRODS colleagues for a very inspiring talk by Janet Hafler, EdD, from Yale University, who focused on the skill of teaching and creating a supportive workplace. This was followed by focused presentations in the UMEDS Section on Faculty and Career Development by Kristin Olson, MD (University of California, Davis), as well as developing a Curriculum Vitae and Educational Portfolios by Barbara Knollmann-Ritschel, MD (Uniformed Services University of the Health Sciences).
development with two presentations focusing on medical education certificate programs. First, Mary Furlong, MD (Georgetown University) described the Medical Education Certificate program at Georgetown University and the benefits to students and faculty who have participated in the program. This was followed by Scott Lovitch, MD, PhD (Harvard University) who discussed the certificate programs at Harvard University, including the Harvard Macy program among others. The feedback for this section of the programming was very positive and our members appreciated a focus on development and career planning of our own faculty, and how to support them to take that next step forward in academic progression.

Our second Plenary Session focused on E-Learning, as many of our institutions are moving to more online teaching and trying to do more with less faculty. The first talk, which was fascinating and extremely well received, was by Martin Pusic, MD, PhD, from New York University, who focused on the analytics behind teaching and assessment. This was a very eye-opening talk about what data can be captured with analytics, what should be captured, and how to use that data to make decisions on teaching and curriculum. This was followed by a very nice presentation by Marta Margeta, MD, PhD (University of California, San Francisco) on Asynchronous Online Learning and Teaching, and a discussion of an online educational program for Health Professionals by Peter Anderson, DVM, PhD (University of Alabama at Birmingham). This session focus was excellent to highlight some of the new processes on the horizon, as well as some of the pitfalls of online education, and how these can be prevented.

Our Undergraduate Training in Genomics (UTRIG) Working Group led by Rebecca Wilcox, MD (University of Vermont) presented a workshop for our members on a combination of two of the four genomics cases that are being developed by the UTRIG working group. It was a hands-on learning experience for the participants to see the cases that have been developed, and have an opportunity to work through them as students would, as well as an opportunity to give feedback back to the UTRIG working group on how the cases can be improved. The cases are very well developed and hopefully will be available for all in the coming year.

The third Plenary Session was divided into two main areas of focus, namely innovations in teaching and curricular development, and presentations on innovative pathology pipeline programs. In the innovations of teaching session, Philip Boyer, MD, PhD (East Carolina University) started us off with a presentation of new and digital resources in education, which was followed by Christine Roth, MD (Baylor College of Medicine), who discussed teaching stewardship in UME. Andrea Deyrup, MD, PhD (Duke University) gave a presentation on using multidisciplinary conferences to increase appreciation of pathology, and Jyotsna Pandey, MD, PhD (Central Michigan University) discussed case-based learning in UME. The final presentation in this category was a fascinating talk by Dr. Boyer.
continued

UNDERGRADUATE MEDICAL EDUCATORS (UMEDS) SECTION
By Barbara Knollmann-Ritschel, MD - UMEDS Council Chair

on using 3-dimensional printed congenital heart models to optimize medical student cardiovascular pathology education.

The session on the pipeline program was kicked off by Jennifer Findeis-Hosey, MD (University of Rochester Medical Center) on engaging high school students in pathology, which was followed by Dong Hyang Kwon, MD (Georgetown University) who discussed using residents as teachers in pathology. We then heard of an innovative diversity program by Alisha Ware, MD (Johns Hopkins University), which was followed by a presentation from Madelyn Lew, MD (University of Michigan) on increasing exposure to pathology by partnering with the surgery clerkship. Our final presentation was by Kimberly Sanford, MD (Virginia Commonwealth University) who discussed new ideas for activities for the pathology student interest groups.

During our Business Meeting the UMEDS Working Groups reported back to the membership of the activities of the past year. Our first presentation was from Margret Magid, MD (New York University) who discussed the enormous work of the UMEDS Toolbox Working Group. This working group was chartered at the UMEDS Business Meeting in 2018 with the goal of reviewing, categorizing and creating an electronic toolbox for our members that would allow for our members to easily search through past presentations at our annual meeting as well as applicable webinars on education topics. This was accomplished by the working group, with outstanding support from Jen Norman and Mel Limson of the APC staff, who made it all come together and go live just before the 2019 Annual Meeting! Dr. Magid walked us through the toolbox, which has been updated to include the 2019 presentations and is available to any APC member. Please log on and check it out! Also, be sure to read the special feature of the UMEDS Toolbox in this newsletter!

Dr. Wilcox updated the membership on the accomplishments of UTRIG from the past year. They are close to completing the first four cases, two of which we had a glimpse of during the workshop. All four cases were being pilot tested at the ASCP annual meeting this past fall. Dr. Wilcox recruited medical students from UMEDS members’ programs to attend the ASCP workshop.

Lastly Dr. Knollmann-Ritschel discussed the huge response to the call for Educational Cases. In total, there were 57 Educational Cases that were submitted. After the completing this group of Educational Cases, she discussed the need for reviewing and updating the PCME in the coming year. Please continue to submit Educational Cases to help develop this resource and use the cases at your institutions!

It has been a very productive year for UMEDS! The UMEDS Council is already actively planning the summer 2020 meeting based on our members’ comments from the Business Meeting.
During this busy recruitment season for program coordinators, we reflect on highlights of 2019 for the GMEAS Section:

Congratulations to the newly elected GMEAS Council Members with terms from 2019-2021:

Members-at-Large:
- Amy Bourgeois, University of Vermont
- Hollie Thomas, University of Mississippi

Thank you to the representatives who completed their two-year terms as Members-at-large: Tammy Talvy (University of Arizona Health Sciences Center) and Beth Shultz (Penn State College of Medicine).

The GMEAS Annual Meeting was held in Boston, MA, at the Boston Seaport Hotel and World Trade Center with a meeting theme of “Innovation Through Collective Excellence: Shaping the Future of Pathology.” Thank you all for your contributions to a successful meeting! We had an increase from 49 program coordinator attendees in 2018 to 64 registered attendees in 2019. Our New Program Coordinator Boot Camp Session had a large turn-out as well, and several talks were provided for new and seasoned coordinators. Here are some of the highlighted topics presented at the meeting overall:

- The ACGME: Five Capital Letters and Everything in Between, by Ashley Sanders (University of Arkansas)
- Optimizing Project Planning, by Carol Hollstein (Loma Linda University)
- A Year-in-the-Life of a Program Coordinator and What Coordinators Need to Know About the American Board of Pathology, by Tammy Talvy (University of Arizona)
- Coordinator Wellness, by Chelle Kozy (Orlando Health)
Reducing Errors in Program Administrative Tasks, by Amy Motta (Dartmouth-Hitchcock Medical Center)

Professional Development: Ways to Increase up the Ladder, by LeeTanya Marion-Murray (Cedars-Sinai Medical Center)

Resident Wellness, by Adriana Flores (Harbor-UCLA Medical Center)

Coordinator Family Feud, by Carol Hollstein, Chelle Kozy, and Ashley Sanders

In addition, as Chair of GMEAS, LeeTanya Marion-Murray (Cedars-Sinai Medical Center) spoke at the PRODS meeting during the New Program Directors Boot Camp on “An Overview of the Role of the Coordinator.”

At the GMEAS Business Meeting, each member received a gift bag of donated goodies from several program coordinators, coordinated by Beth Shultz (Penn State College of Medicine). Thank you, Beth!

Other GMEAS projects completed this past year with leadership from GMEAS Council include:

- Designating Members-at-Large representatives as leaders of an APC Region, who are charged with periodically having a conference call with members in that region to maintain communications within a smaller group:
  - Midwest - Tasha Gilbertson (Mayo Clinic)
  - Northeast - Amy Bourgeois (University of Vermont)

- Southeast – Ashley Sanders (University of Arkansas for Medical Sciences)
- West – Hollie Thomas (University of Mississippi Medical Center)

- Establishing the new GMEAS Distinguished Service Award. Nominations are accepted until December 31st, annually (for details, visit: www.apcprods.org/awards-gmeas)

- Developing a Frequently Asked Question (FAQ) page related to the American Board of Pathology for coordinators, led by Amy Motta (University of Vermont), Past Chair

- Compiling the history of the GMEAS Section, available on APC’s website at: www.apcprods.org/gmeas, completed by Ashley Sanders (University of Arkansas for Medical Sciences), Member-At-Large

- Establishing a GMEAS Program Committee by appointing Chair-Elect Chelle Kozy (Orlando Health) with assistance from Chair LeeTanya Marion-Murray (Cedars-Sinai Medical Center)

The GMEAS Section convenes at the upcoming APC 2020 Annual Meeting in San Diego, CA at the Hotel Del Coronado on July 19-22, 2020. The developing GMEAS Program is currently in progress with our Program Chair, Chelle Kozy, and the GMEAS Council. Topics are currently being discussed with GMEAS Council. If you have ideas for topics to present at the meeting, please contact Chelle Kozy at Erika.Kozy@orlandohealth.com.
ENTRUSTABLE PROFESSIONAL ACTIVITIES (EPA) WORKING GROUP

By Cindy McCloskey, MD – EPA Working Group Chair

The Entrustable Professional Activities (EPA) Working Group has developed a plan for a national pilot study to evaluate the impact of EPAs on the quality of education and assessment in primary pathology residency training. The EPA Working Group presented the plan at the 2019 APC PRODS meeting in July and successfully recruited 16 residency programs to participate in the study. An introductory conference call for participants was held on October 21, 2019 and participants were provided with initial materials including the study protocol, formative and summative assessment evaluation tools, study surveys, and implementation and planning tools. Participating programs are now in the beginning stages of applying for Institutional Review Board approval to participate in the pilot.

Faculty development activities are planned for April through June 2020, to prepare faculty to integrate the new evaluation tools into their teaching. The EPA evaluation intervention and survey portions of the study are scheduled for July 2020 through June 2021. Data evaluation and dissemination of results are planned at the conclusion of the study. The Working Group looks forward to having more to report as the pilot study gets underway.

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<tr>
<th>Intervention Groups</th>
<th>Control Groups</th>
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<tr>
<td>Duke University</td>
<td>Case Western Reserve University</td>
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<tr>
<td>Houston Methodist Hospital</td>
<td>Cleveland Clinic</td>
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<tr>
<td>Massachusetts General Hospital</td>
<td>Mount Sinai-St. Luke’s West</td>
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<tr>
<td>Montefiore Medical Center/Albert Einstein College of Medicine</td>
<td>SUNY, Stony Brook</td>
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<td>University of Arizona</td>
<td>University of Oklahoma</td>
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<td>University of Tennessee Health Science Center</td>
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<td>University of Minnesota</td>
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<td>University of Vermont</td>
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<td>Westchester Medical Center/New York Medical College</td>
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<td>Yale University</td>
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<td>Zucker School of Medicine at Hofstra/Northwell</td>
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Earlier in 2019, the Fellowship Directors Ad Hoc Committee (FDAHC) continued to focus on attempting to synchronize the fellowship application process among all pathology fellowship programs. However, during the summer and early autumn of 2019 there were several developments in the work of the committee.

Feedback from the representative organizations of the FDAHC prompted the decision not to move forward with the Fellowship Clearinghouse project due to legal issues with revealing the identities of applicants accepting positions. The group was still in search of a free, dynamic listing of open fellowship positions so that applicants could know which positions were still available. The group explored existing fellowship directories, including AMA FREIDA, ICPI/ASCP, Pathology Outlines, and Pathology Resident Wiki and determined that another solution was needed. To this end, the APC professional staff created a free online system to collect data on unexpected or unfilled openings within 18 months of matriculation to evaluate trends in these unplanned openings over time. An introductory announcement and the link to post openings were sent to FDAHC members in mid-October. They were asked to explore the site and then share the information with other Program Directors in their subspecialty so that listings could begin to be entered. Program Coordinators were also asked to share the link to the new resource with trainees who are seeking a fellowship opportunity. By the time the FDAHC met on November 8, 2019, there were many listings to review. Members on the call were impressed with all that had been accomplished and discussed possible refinements and enhancements to the listing. However, in December 2019, APC was notified by the Intersociety Council for Pathology Information (ICPI) that this list was in direct competition with ICPI’s Pathology Fellowship Directory. Thus, APC removed the list from public view, but continues to collect data on unexpected or unfilled openings within approximately 18 months of matriculation, to evaluate trends in these unplanned openings over time. All pathology fellowship programs, including ACGME-accredited and non-accredited programs, are still encouraged to submit their data on unexpected and unfilled positions, either at www.apcprods.org/fellowship-openings or by contacting APC at info@apcprods.org. It is quick and easy to submit!

The FDAHC welcomed several new members in 2019, through appointments of their sponsoring subspecialty organizations: Sara Monaco, MD (appointed by the American Society of Cytopathology to represent Cytopathology); Paul Staats, MD (appointed by the Association of Directors of Anatomic and Surgical Pathology to represent Selective Pathology); Julie Karp, MD (appointed by American
continued

FELLOWSHIP DIRECTORS AD HOC COMMITTEE (FDAHC) UPDATE
by Cheryl Hanau, MD – FDAHC Chair

Association of Blood Banks to represent Blood Banking and Transfusion Medicine); Daniel Dye, MD (appointed by the National Association of Medical Examiners to represent Forensic Pathology); and Bachir Alobeid, MD (appointed by the Society for Hematopathology to represent Hematopathology). We thank all FDAHC representatives for their thoughtful participation throughout the year and their willingness to share experiences with colleagues in other subspecialties.

More information about the history and make-up of the FDAHC can be found at https://www.apcprods.org/fdahc. If you have fellowship issues you would like to bring to the FDAHC, please feel free to contact me by email at ch48@drexel.edu.

<table>
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<tr>
<th>Subspecialty Area (per ACGME)</th>
<th>FDAHC Representative</th>
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<tr>
<td>Blood Banking/Transfusion Medicine</td>
<td>Julie Karp, MD</td>
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<tr>
<td>Chemical Pathology</td>
<td>Beverly C. Handy, MD, MS</td>
</tr>
<tr>
<td>Clinical Informatics</td>
<td>Bruce Levy, MD</td>
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<td>Cytopathology</td>
<td>Sara Monaco, MD</td>
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<td>Dermatopathology</td>
<td>Lyn McDivitt Duncan, MD</td>
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<td>Forensic Pathology</td>
<td>Daniel Dye, MD</td>
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<td>Hematopathology</td>
<td>Bachir Alobeid, MD</td>
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<td>Medical Microbiology</td>
<td>Eric S. Rosenberg, MD</td>
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<td>Molecular Genetic Pathology</td>
<td>Shuko Harada, MD</td>
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<td>Neuropathology</td>
<td>Suzanne Powell, MD</td>
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<td>Pediatric Pathology</td>
<td>Vivek Singh, MD</td>
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<tr>
<td>Selective Pathology</td>
<td>Paul Staats, MD</td>
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As reported in previous updates, a Task Force comprised of representatives from the American Board of Pathology, the American Society for Clinical Pathology, the Association of Pathology Chairs, the College of American Pathologists, and the United States and Canadian Academy of Pathology has been investigating the alignment of graduate medical education in pathology with the practice of pathology.

Over the last five years, the Task Force has surveyed new-in-practice pathologists annually in conjunction with the Continuing Certification process of the American Board of Pathology, and twice surveyed pathologist-employers of new-in-practice pathologists. The core of these surveys has been paired ratings by each respondent across a range of practice areas: first, of the importance of each area in their actual practice; and second, of the usefulness of their training to their practice in that area. These paired responses, collected and analyzed in conjunction with each respondent’s training (residency track and fellowship(s)) and practice characteristics (practice size, setting, and years in practice), permit assessment of how effectively and efficiently training in pathology has been preparing our residents and fellows for entry into practice. Meanwhile, the employer surveys provide a complementary perspective to confirm or challenge the perceptions of the new pathology practitioners on both the importance of the practice areas and the preparation of the new practitioners.

Recent Task Force efforts have focused on paring down the number of practice areas assessed to inform discussions about the relationship between modes of training and degrees of progressive responsibility in residency and readiness to enter practice. Questions exploring practitioner wellness and the pathology workforce pipeline have also been added. The 2019-20 new-in-practice survey (currently in the field) includes questions about new practitioners’ experience of burnout during training and entry into practice, as well as how their training institution addressed the topic of burnout to its trainees. With regards to the workforce pipeline, respondents are also being asked when and why they decided to become a pathologist, what medical school experiences were most influential in that decision, and to rate their level of satisfaction with their career (medicine) and specialty (pathology) choice.

The Task Force is working on continued dissemination of findings. A new manuscript, “Evidence-Based Alignment of Pathology Residency with Practice: Pathology-Specific Results and Discussion,” is currently in draft form, and two other manuscripts are in the early development process.
PATHOLOGY INFORMATICS ESSENTIALS FOR RESIDENTS UPDATE
By Scott Anderson, MD – PIER Leadership Committee Chair and Sue Plath – PIER Project Lead, CAP

Overall, 2019 was a very productive year for the PIER Leadership Committee and we would like to share the highlights with you. In the 2019 Spring Newsletter, we wrote about strategic changes made to the PIER Leadership Committee membership. We thanked members who completed their terms on the committee and introduced and welcomed new members. The committee is now composed of three program directors, two informatics experts (one representing the College of American Pathologists (CAP) and the other representing the Association for Pathology Informatics (API)), two residents, and supported by staff from the CAP and APC. The committee’s core responsibilities include driving and directing program enhancements, supporting the further adoption of the PIER curriculum to U.S. pathology residency programs, making presentations to inform and further engage PRODS and/or informatics experts, and, when applicable, authoring publications to support the adoption of PIER and help drive improvement in pathology education. The committee’s three focus areas for 2019, which align well with the core responsibilities, are: communicating and promoting PIER to further its adoption by pathology residency programs, pursuing funding to support improvements, and identifying major updates to the curriculum.

We spent a considerable amount of time in 2019 preparing a grant proposal for the American Medical Association’s Reimagining Residency initiative. Following the grant requirements, we proposed a broad-based project, including collaboration with the American Medical Informatics Association, that would support informatics training for residents in all medical specialties, which included an online delivery system with content, application projects, and assessment for residents plus tools to help program managers and faculty manage the learning process. There were over 500 letters of intent submitted and our project was one of only 30 projects selected to submit a full proposal. While we were not successful in receiving a grant, being a grant finalist in a rigorous, national competition encouraged the committee to continue to research and pursue funding opportunities to support improvements in informatics education for pathology residency programs. We thank Bruce Levy, in particular, for his support of the grant-writing process.

In May 2019, we conducted our annual usage survey, which was designed to help us measure program’s satisfaction with the PIER curriculum, as well as rate of adoption. Responses indicated that, since the curriculum was launched, 60 programs
continued

PATHOLOGY INFORMATICS ESSENTIALS FOR RESIDENTS UPDATE
By Scott Anderson, MD – PIER Leadership Committee Chair and Sue Plath – PIER Project Lead, CAP

have implemented PIER and that, once implemented, the majority of programs plan to continue to use PIER. Thank you to everyone who has responded and provided us with data to help gauge the success of PIER and understand the needs of residency programs.

There were several key opportunities to present about PIER to key stakeholder audiences. In March, we provided an update to program directors who attended USCAP. In May, one of our resident members, Dr. Yonah Ziemba, co-facilitated a session at the Association for Pathology Informatics Summit Meeting. He told the story of how his institution, Zucker School of Medicine at Hofstra/Northwell is teaching informatics using the PIER curriculum following a team-based approach. In July, several committee members (including myself, Dr. Michael Esposito, and Dr. Marie DeFrances), along with Dr. Bruce Levy as moderator, served as faculty for a Town Hall breakfast at the APC Annual Meeting. We appreciate everyone who got up early to join us and the session generated a lot of interesting discussion about challenges and needs related to the implementation of informatics education.

In August, we published an article in CAP Today celebrating PIER’s fifth birthday titled, “From concept to curriculum: PIER going strong five years later.” This was a very comprehensive story about how PIER began and has evolved. Another major deliverable we started in 2019 was preparing Release 4 of the PIER curriculum, which is scheduled for deployment in 2020. We review the curriculum every two years to ensure the topics and resources remain current and take into consideration feedback received from program directors to make improvements. To access the current version of PIER and read about latest updates, visit www.apcprods.org/pier.
A Pipeline Subcommittee of the Advocacy Committee was formed at the end of the 2014 APC/PRODS annual meeting, under the recommendation of Donald Karcher, MD (then President of APC; past Chair, George Washington University) to focus on residency recruitment efforts in a climate of changing medical school curricula. Early investigations by the Pipeline Subcommittee centered on best practices among medical student interest groups and sustaining or growing the number of post-sophomore fellowships. The subcommittee was relaunched in 2018, under the auspices of the Pathology Roundtable, to engage more pathology societies in understanding the factors associated with the downward trend in pathology residency applications, particularly among U.S. medical school graduates, and develop resources that can be shared by all pathology societies in their various recruitment strategies. The current Pipeline Development Council (PDC) has evolved into a larger group with four working groups that have distinct roles. Under the leadership of Karen Kaul and Wes Naritoku (Council Co-Chairs), with the oversight and coordination by Priscilla Markwood and Melvin Limson (Association of Pathology Chairs), the PDC has seen a productive year.

The Published Literature Working Group and the Financial and Peer Support Working Group last met in late 2018 and their work is now published on the APC website: www.apcprods.org/pipeline-development. For the medical students who have concerns or doubts from unreliable websites about the future of pathology and available jobs, refer them to this website and have them click on the “Published Literature” hyperlink for resources to learn more on our field. For your medical students, graduate students, other students/technologists, residents, fellows, PhD postdoctoral fellows and junior faculty who are seeking funding resources, refer them to this website and click on the link under “Financial and Peer Support.” Although the Published Literature Working Group and the Financial and Peer Support Working Group has published their work, keeping these resources current and accurate will be an ongoing duty of these working groups.

The Medical Education Working Group had two meetings this year, one in May and a face-to-face meeting at the 2019 APC/PRODS meeting in Boston. A synopsis of survey results, prepared by Mel Limson, is available at www.apcprods.org/assets/docs/MEWG2019Report.pdf. Members of this working group are preparing two publications, each which discuss the surveys from the PDC that looks at how pathology is taught at medical schools and what characterizes the best practices at the medical schools that produce the most applicants to pathology residency programs.

The Communications Group also met earlier in 2019. Some of the items discussed by the Communications Group include what are the barriers to attracting more medical students to pathology, such as lack of exposure to the field early on, a lack of
understanding about the job market, and misconceptions about what pathologists do. They discussed what attracted the group members to pathology, all had guidance from a mentor, but they all had to actively seek exposure to pathology, it was not offered or required of them. They also discussed ways to improve communication about pathology through social media, changes in UME curricula to expose students earlier in medical school and dispel misinformation through pathology student interest groups.

Members of the working groups were:

Medical Education Working Group – Jennifer Baccon, MD, PhD (Northeast Ohio Medical University), Mary Furlong, MD (Georgetown University), Cheryl Hanau, MD (Drexel University), Robert Hoffman, MD, PhD (Vanderbilt University), Barbara Knollmann-Ritschel, MD (Uniformed Services University of the Health Sciences), and Chaya Prasad, MD (Western University of Health Sciences).

Published Literature Working Group – Kim Collins, MD (Medical University of South Carolina), Donald Karcher, MD (George Washington University), Daniel Remick, MD (Boston University), and Nadeem Zafar, MD (University of Washington).

Financial and Peer Support Working Group – Michael Cohen, MD (Wake Forest University), Asma Nusrat, MD (University of Michigan), Vera Tesic, MD (University of Chicago), and James Wisecarver MD, PhD (University of Nebraska).

Communication Group – David Gross, PhD (College of American Pathologists), Jeff Jacobs (American Society for Clinical Pathology), and the following trainee representatives: Adam Booth, MD (University of Texas Medical Branch, Galveston), Sharon Song, MD (University of Pennsylvania), Katherine Scribner, DO (University of Southern California) and Rebecca Obeng, MD (Emory University).

There’s more to see at www.apcprods.org/pipeline-development!

- **Published Literature**: A growing collection of publicly available resources (“publications”) of peer-reviewed papers and other articles, books, and web-based content.

- **Financial and Peer Support**: A one-stop “shopping” matrix of funding and networking resources from among the Pathology Roundtable and other organizations.

- **Medical Education**: A preview of survey results on how pathology is currently taught in medical schools.
TRAINING RESIDENTS IN PATIENT SAFETY (TRIPS) WORKING GROUP UPDATE
By Yael Heher, MD and Richard Haspel, MD, PhD – TRIPS Working Group Co-Chairs

Improving patient safety, including preventing diagnostic error, is a pressing national issue and a key focus for the ACGME. Given the lack of pathology-specific patient safety educational resources, the Training Residents in Patient Safety (TRIPS) Working Group was established in November 2018. TRIPS is currently working to develop a consensus driven patient safety curriculum for pathology residents with tools for implementation.

Members of TRIPS include pathology residency Program Directors from a diverse group of institutions as well as representatives from national organizations including ABP, ACLPS, APC, ASCP, CAP, SIDM, and USCAP. ASCP also provides important administrative support. In addition, to ensure input from end-users, two residents have recently been added as TRIPS members.

The Working Group first undertook a needs assessment survey to determine the current state of patient safety education in pathology residency programs across the country. The survey was distributed to 143 program directors via email, and 48 responses (33%) were collected between June 21 and August 17, 2019. The results highlighted educational gaps and confirmed the need for developing a pathology-specific patient safety curriculum. Over 60% of respondents indicated they did not have a pathology-specific patient safety curriculum and more than 90% agreed that expert-created teaching tools would be helpful for implementing or improving current patient-safety training. Incident reporting, root cause analysis (RCA) and diagnostic error were the topics that over 90% of respondents believed should be included in a patient-safety curriculum.

Based on this needs assessment, the Working Group developed an interactive RCA exercise that was piloted during a Discussion Group (DG) at the 2019 APC Annual Meeting. According to the post-DG survey, the majority of participants believed their knowledge of using cause-map and fishbone diagrams to analyze patient safety incidents improved. Participants described the RCA exercise as engaging, practical, and informative and they would strongly recommend this RCA exercise to pathology residents and fellows. TRIPS plans to offer a comprehensive RCA exercise toolkit to assist individual residency programs in implementing the exercise locally and expand pilot sites to other institutions.

TRIPS is possible due to the support of APC, PRODS, and the many other cooperating national organizations. We are making great progress and are looking forward to providing vetted and evidence-based teaching resources to improve pathology patient-safety education.
TRAINING RESIDENTS IN GENOMICS (TRIG) AND UNDERGRADUATE TRAINING IN GENOMICS (UTRIG) UPDATE

By Richard Haspel, MD, PhD and Rebecca Wilcox, MD – TRIG/UTRIG Co-Chairs

Since inception in 2010, the Training Residents in Genomics (TRIG) Working Group has held over 40 genomics workshops at pathology meetings internationally for over 1,500 participants. To allow others to implement training using a team-based learning approach, there have also been train-the-trainer workshops and release of an instructor handbook and toolkit. Online modules have been made available that translate the workshop into a virtual environment using simulation of online genomics tools. These materials have been accessed by over 1,600 registered users from over 60 countries.

In September 2019, the Working Group released a new version of the handbook and toolkit with significant updates including new cases, variants, websites and actual genomic testing reports. Links to Google Forms are also provided that allow learners to more easily access exercise questions, online resources and record their answers and notes. The handbook, toolkit and other resources are available at no cost on the TRIG website (www.pathologylearning.org/trig), which is administered by the American Society for Clinical Pathology. Workshops utilizing the updated curriculum will be held at the 2020 CAP and USCAP annual meetings. Our renewed National Cancer Institute R25 grant, totaling approximately 1.5 million over five years, has allowed us to develop the updated curriculum and continue our work updating the online modules.

The R25 funding is also being used to support the Undergraduate Training in Genomics (UTRIG) Working Group. This group was established to adapt the TRIG curriculum to medical student education. The group has already made significant progress and has developed four pilot active learning sessions. Each of the four sessions are built on a “flipped classroom” model with both a case-based in-class exercise and its pre-session preparatory toolkit. The exercises have been piloted with 27 medical students at both the 2018 and 2019 ASCP Annual Meeting as day-long workshops. R25 grant funding was used for student travel and ASCP kindly provided complimentary registration so the attendees could also explore other aspects of pathology. The UTRIG Working Group is currently preparing a handbook and toolkit to allow medical schools nationwide to implement the curriculum.

Both TRIG and UTRIG continue to utilize in-service exams, the ASCP RISE and RISE-FIRST, to gauge the status of genomics training in both medical school and residency. The results continue to help inform and guide the development of the resident and medical student curricula.
continued

TRAINING RESIDENTS IN GENOMICS (TRIG) AND UNDERGRADUATE TRAINING IN GENOMICS (UTRIG) UPDATE
By Richard Haspel, MD, PhD and Rebecca Wilcox, MD – TRIG/UTRIG Co-Chairs

In regard to outreach to other specialties, TRIG-based workshops continue to be held for oncologists including sessions at the 2019 American Society for Clinical Oncology (ASCO) Annual Meeting, the 2019 World Conference on Lung Cancer (WCLC) Annual Meeting and several oncology fellowship programs. Workshops based on the TRIG approach with a non-cancer genomics focus, developed through the Intersociety Coordinating Committee for Practitioner Education in Genomics (ISCC), have been held at the annual meetings of the American Heart Association, American Academy of Neurology and American Academy of Ophthalmology. A handbook and toolkit for these plug and play “universal” exercises adaptable to different specialties is available on the TRIG website. Of note, the ISCC is currently looking for new members, as individuals and as organizational or industry representatives. More information can be found at www.genome.gov/iscc/.

TRIG and UTRIG are possible due to the support of APC, PRODS, UMEDS and the many cooperating pathology and genetics organizations. We are making great progress and are looking forward to a continued positive impact on genomic pathology education.
UMEDS TOOLBOX WORKING GROUP REPORT

The Medical Educator Toolbox - How It Was Conceived

By Margret S. Magid, MD - UMEDS Toolbox Working Group Chair

You may have heard about the UMEDS Toolbox already, but we wanted to alert you to its existence and recount the history behind its creation.

At the APC 2018 Annual Meeting, a discussion at the UMEDS Business Meeting highlighted the challenges members experienced in retrieving PowerPoint presentations of interest from previous years. Our meeting content is tremendously constructive and creative and often applicable to programs we want to implement in our home institutions, but pulling relevant presentations after the meeting was not easy. It is true that the APC made the presentations available on the website, but they were embedded in the calendar of the meeting. This meant that when we wanted to pull a relevant presentation (e.g., how to provide instruction on Laboratory Medicine in the medical school curriculum) we needed to remember details about the presentation: What year was it presented and in which session? Who presented the topic? If a more comprehensive review of the topic over the last few meetings was desired, it required a manual search by year scrolling through all the sessions.

A vote confirmed that UMEDS members volunteered to form a committee to brainstorm and create a user-friendly system: Marta Ambrozewicz, MD, PhD (Eastern Virginia Medical School), Patrick Lento, MD (New York Medical College), Magret Magid, MD (New York University), Amy Rapkiewicz, MD (New York University Long Island), and Donald Regula, MD (Stanford University), with the active contribution from our UMEDS Chair, Barbara Knollmann-Ritschel, MD (Uniformed Services University of the Health Sciences). Priscilla Markwood graciously offered administrative and IT technical support for the effort, which was supplied by Jen Norman, Mel Limson, and more recently, Amelia Stephenson.

The committee started by reviewing all UMEDS-relevant PowerPoint presentations, posters, and Webinars from the 2015-2018 APC/UMEDS annual meetings. We developed a list of topical categories, which, by committee consensus, we assigned to each presentation. The categories, 30 in all, run the gamut from Academic Scholarship, through Integrated Curriculum and Pathology Pipeline, to Wellness. Each presentation was tagged with 1 to 4 category labels that would be the basis for future searches by topic. We then accumulated all presentation files in the UMEDS Toolbox Dropbox folder. To enable easy selective retrieval, we created the UMEDS Toolbox List of Resources,

Looking for resources and professional development in pathology education? Visit the Medical Educator Toolbox at www.apcprods.org/ume-toolbox, free to APC members!
The Medical Educator Toolbox - How It Was Conceived
By Margret S. Magid, MD – UMEDS Toolbox Working Group Chair

For the APC 2019 Annual Meeting, the committee retrospectively assigned categorical labels to the UMEDS presentations, which were added to the UMEDS Toolbox by the APC administrative staff. For future meetings, the UMEDS Council will instruct authors of abstracts accepted for the meeting to assign appropriate topical categories to their work from the list developed by the committee, prior to being added to the Toolbox.

We invite all APC members (all Sections - not just UMEDS members!) to take a look at this new resource. It is available as a direct link on the APC website under the Resources tab (as “Medical Educator Toolbox”), which will take you to the UMEDS Toolbox landing page and the instructions for use. Please do utilize the Toolbox, since membership interest and usage will insure continued administrative support for this project!

which is an online directory of all the files by presentation year where relevant, additional resources are also linked to the presentations, such as abstracts in Academic Pathology. The user is able to search desired presentations from the list of resources by presenter, title, category or date. We included user-friendly video instructions on the UMEDS Toolbox List of Resources landing page for the various types of desired searches. The end result of a quick and easy search is a pdf of the desired presentation(s).
NOTES FROM THE EXECUTIVE OFFICE
Administrative Highlights from 2019…

Guided by APC President Barbara Ducatman, MD (Oakland University), and her encouragement to “light a candle”, the APC Executive Office reflects on the following additional highlights from 2019:

NEW Administration, Programs, and Resources
Previously managed by the Intersociety Council for Pathology Information (ICPI), the Intersociety Pathology Council (IPC) selected APC as its new Secretariat in the fall of 2018. The IPC was convened by APC in March 2019 during the USCAP 2019 Annual Meeting and featured an educational presentation from the Joint Pathology Center.

New Chair Mentoring Program for Permanent and Interim Chairs, launched by the Senior Fellows Group, to-date has matched nearly 30 new Chairs with a Senior Fellow mentor.

APC Courses (available at the APC website) were presented at:

USCAP 2019: APC offered its first boot camp on “Computational Pathology and Artificial Intelligence for the Practicing Pathologist.”

CAP 2019: APC presented the course, “A Glimpse into the Future Practice: Transitioning to Effective Pathology Practitioner in the Age of Machine Learning.”

Toolbox for Medical Educators, the “UMEDS Toolbox List of Resources,” provides easy members-only online access to categorized materials of interest that have been presented at annual APC/UMEDS meetings: www.apcprods.org/toolbox.

Opportunities for the pathologist pipeline from among multiple pathology organizations were compiled by the Pipeline Development Council of the Pathology Roundtable as a one-stop “shopping” matrix of funding and networking resources for students, residents and early-career pathologists: www.apcprods.org/pipeline-development.

PDAS established a new membership category: The Associate PDAS, who is not the lead administrator for the pathology department, but may have interest in the PDAS network as designated by the Department Chair. Associate PDAS members do not have voting-rights, but receive other benefits of membership, including peer mentoring through the PDAS e-list!

In December 2019, the Intersociety Council for Pathology Information (ICPI) selected APC and the American Society for Investigative Pathology (ASIP) to co-manage ICPI from 2020-2022. In 2020, APC prepares to reinvigorate the activities of ICPI that will benefit all of pathology.
The “APC’s E-News” updates, sent monthly by email, completed their first full year of timely news and reminders from the APC! Providing more current news on a monthly basis enabled APC to transition to a once-yearly annual report, starting with this 2019 look-back.

**NEW Awards**

**APC Inspiration Poster Awards** (for abstracts/posters) recognize abstracts to encourage publication of related research in *Academic Pathology*. APC Inspiration Awards pay for the article processing fee.

**GMEAS Distinguished Service Award** was established for a member who has shown exemplary engagement and commitment to the field of medical education. The first recipient will be honored at the APC 2020 Annual Meeting.

**Staff Changes**

In August 2019, the APC Office welcomed **Amelia Stephenson** as Member Services Coordinator! Amelia brings enthusiasm and experience as a science educator and hospital team manager to support a growing array of services and to provide excellent member support. We express our gratitude to Jen Norman and Amy Carter, who left the APC Office in 2019 to pursue other opportunities. Jen started her tenure with APC in January 2013, just as the organization was transitioning to self-management. She was a principle contributor to APC’s success, standing up our first account management system and website, as well as launching an online education platform. Jen was also the first Managing Editor of *Academic Pathology*. Amy joined APC as Office Assistant in November 2016, when APC moved from Bethesda, Maryland to Wilmington, Delaware. She provided valuable support services to fellow staff and APC members, while completing a phlebotomy certification, which she is now pursuing as a career. As before, Melvin Limson and Priscilla Markwood remain at your service, as Director of Programs & Development and Executive Director, respectively.

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**NOTES FROM THE EXECUTIVE OFFICE**

Administrative Highlights from 2019...

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**CONTACT THE APC OFFICE**

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Preparing the next generation of pathologists

“I’ve grown as a pathologist by participating in online discussions, attending courses and performing inspections.”

— Meredith A. Reyes, MD, FCAP

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- Resource for “new”
- Integrated with labs/practices
- Focus on Path & Lab
- Make the complicated look easy
- Maximize cash as extension of practice/lab
- Focus on doing the basics well

ABOUT PDM

Established in 1997, PDM was founded as a pathology-based boutique billing service to provide the highest level of billing and practice management services to Pathologists and Laboratories. With professionals who blend the best of billing experience with laboratory management experience, PDM offers a unique understanding of what it takes to be an extension of a pathology practice or laboratory. Our success is driven by: our employees’ tenacity; advanced technology; extensive experience; blended practice management and billing focus; billing for clinical testing; clinical professional component; and anatomic pathology.

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SETH GODIN