Annual Report 2017-2018

A DITILITY OF THE PATHOLOGY INFORMATICS

Annual Report (Fiscal Year July 1, 2017-June 30, 2018)

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Report from the President



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J. Mark Tuthill, MD

Dear Members and Colleagues:

On behalf of the Governing Council of the Association for Pathology Informatics (API), I am pleased to provide the president's letter for this year's API Annual Report. Since 2000, API has been dedicated to promoting the field of Pathology Informatics as an academic and clinical subspecialty of Pathology and Laboratory Medicine. More recently, we have seen how important Pathology Informatics is within the broader field of Clinical Informatics, from interoperability and the exchange of clinical laboratory data to digital pathology, computational pathology, and personalized medicine.

This year represents our tenth year as a separately chartered and fully independent professional association. We continue to make considerable progress in advancing Pathology Informatics as a valued and respected subspecialty of Pathology. Some of the highlights of the last year are listed below and are mentioned in greater detail within the pages of this annual report.

- > Pathology Informatics Summit 2018: The May 21-24, 2018 Pathology Informatics Summit was a resounding success for the organization and its members. With over 310 attendees and 23 exhibitors, the energy was high and the connections/interactions significant. There were 39 short abstract platform presentations, 5 elevated platform presentations, 32 posters, and eligible attendees could claim 22.75 hours of CME and/or SAM credits. There were multiple indepth workshops, a PI Fellows retreat, and Bootcamp sessions covering a variety of important Pathology Informatics topics, including: general and specialized LIS functions, data extraction, analytics, machine learning, and computational pathology. Presenters explored novel technologies in Pathology including WSI Primary Diagnosis in the United States, light-sheet microscopy for nondestructive slide-free 3D pathology, and raman backscatter microscopy. We would like to thank Dr. Edward Klatt, Dr. Raymond Aller, Dr. Mary E. Edgerton, ASCP, and General Data for providing funds for 13 travel awards.
- Digital Pathology and Al Workshop: This past fiscal year featured the first Digital Pathology and Al Workshop. Across two days (December 8 and 9, 2017) 45 registrants attended sessions exploring the practical issues surrounding the deployment of digital pathology in hospital and private practice settings. The series consisted of small group sessions with abundant audience-speaker interaction, as well as a tour of the Henry Ford Health System. Seven exhibitors were also present, with all involved rating the overall interactive experience highly. Additional workshops are now in the planning stages for future years.
- API/Sunquest Educational Webinars: We are grateful to Dr. Bruce Friedman for his vision and leadership in designing the API and Sunquest webinars. These webinars are designed to be free from commercial interests and are available for free to API members. To date, experts have discussed driving factors in laboratory efficiency and effectiveness in large multihospital systems, focusing on ways to improve workflow, reduce costs and improve outcomes, while delivering value-based care for hospital organizations. Additional sessions have been planned for later this year.



PAST PRESIDENTS

Michael I. Becich, MD, PhD University of Pittsburgh School of Medicine

2002-2003

Bruce A. Friedman, MD Pathology Education Consortium

2004

Walter H. Henricks, III, MD Cleveland Clinic

2005

J. Mark Tuthill, MD Henry Ford Health System

Jules J. Berman, MD, PhD Freelance Medical Writer

Ulysses J. Balis, MD University of Michigan Health System

2008

Michael G. McNeely, MD, FRCPC (1944-2009) Consultant-Medical Informatics

Myra L. Wilkerson, MD Geisinger Health System

2011-2012

Ronald S. Weinstein, MD University of Arizona

2012-2013

Raymond D. Aller, MD University of Southern California

2013

Liron Pantanowitz, MD University of Michigan Health System

Alexis Carter, MD **Emory University**

2015

Rodney Schmidt, MD, PhD University of Washington

Michael Riben, MD MD Anderson Cancer Center

2017

John Gilbertson, MD Massachusetts General Hospital

- > Journal of Pathology Informatics: |Pl is in its eighth year and continues to publish important articles in the field of Pathology Informatics. The journal continues to be an important vehicle for our members to disseminate their research and has become a major player in shaping our field. We are deeply indebted to the outstanding efforts of founding and current Editors-in-Chief Anil V. Parwani, MD, Ph.D and Liron Pantanowitz, MD for providing us with this peer-reviewed, openaccess, PubMed-indexed resource. Most viewed article topics include: (1) IT tools for pathology education; (2) Next gen sequencing; (3) Image analysis; (4) PHI in labs; and (5) Deep learning/machine learning. Manuscript submissions were evenly split between authors in the United States (49%) and internationally (47%), with a total of 77 manuscripts submitted in 2017.
- Teaching Program Memberships: The API Teaching Institutional Members continue to make significant contributions to both the success of API and to the success of the Pathology Informatics Summit. A significant number of institutional trainees attended various workshops along with many prominent and active pathology department faculty. We are committed to expanding the number of teaching institution programs as we move forward this year.
- > Presence of API in National Initiatives: The API was represented at numerous national conferences in 2017-2018. API-branded content was delivered at the annual American Society for Clinical Pathology (ASCP) meeting, in addition to the annual College of American Pathologists (CAP) and the Association for Molecular Pathology (AMP) meetings. The API continued to participate as a Companion Society of the United States and Canadian Academy of Pathology (USCAP), with ever-increasing attendance at these meetings. API-branded content has also been delivered to the Pathology Visions meeting (held by the Digital Pathology Association).
- > Clinical Informatics Subspecialty: Pathology programs currently host 6 of the 31 ACGME fellowships in Clinical Informatics, with additional programs being planned. Fall 2017 represented the sixth cohort of examinees in pathology informatics, with 178 new diplomates for the Clinical Informatics Board Examination, of which 16 are pathologists, representing 9.0% of total diplomates (with pathologists only representing around 2% of physician population).

I want to recognize the efforts of the staff at API who have helped to move this organization in a positive direction. First, I am very pleased to announce that Nova Smith has been brought on full time now as API's Executive Director - she has truly been the cornerstone of API operations for the past years, serving in the roles of Senior Conference Manager, JPI's Managing Editor, and performing a wide variety of functions for the organization, including ensuring that the leadership of API addresses salient issues. Second, I want to recognize the work of Beth Gibson (University of Michigan), who helps in a part-time capacity as Assistant Conference Manager and performs additional roles in helping with membership and other organizational responsibilities. We also appreciate the webmaster expertise of Rebecca Boes (University of Pittsburgh), John Hamilton and Brian Royer (University of Michigan) for their audiovisual and technical support. Without the collective efforts of these important individuals, the API would not be as successful as it is today.

Finally, a special set of thanks is due to our 747 active API members and 27 Teaching Institutional and Non-profit members, including but not limited to members of the API Governing Council, who have dedicated much time and effort to the advancement of this organization. I have greatly enjoyed my term as President of this wonderful organization and its members. Pathology Informatics is critically important for accurate, efficient, and improved patient care, and as such, it is the key to the future success of the discipline of Pathology and all of its subspecialties.

Sincerely,

David McClintock, MD API President 2018



History and Mission

History: API was founded in 2000 by pathologists interested in defining Pathology Informatics (PI) as a clinical subspecialty within the medical discipline of Pathology. API was initially supported by the Department of Biomedical Informatics and the University of Pittsburgh School of Medicine until API became financially independent. The University of Michigan currently provides additional administrative support for API.

Mission: Promote the field of Pathology Informatics as an academic and a clinical subspecialty of Pathology and Laboratory Medicine and further substantiate pathology's relevance into the future as the most critical component for precision patient care.

What is Pathology Informatics? Pathology Informatics recognizes the disruptive role of new technologies and strives to facilitate adoption of information-driven diagnostic tools that deliver better patient care and enhance our understanding of disease-related processes. Such new diagnostic technologies include whole slide imaging (WSI), next-generation sequencing (NGS), and emerging technologies like machine learning and artificial intelligence. In addition, PI works to refine the data generated by diagnostic technologies currently used within all of the clinical laboratories (AP/CP/Molecular). Through these efforts, Pl has positioned itself as the data stewards for pathology, in addition to supporting pathology's relevance for enhancing patient care.

Goals:

- Advance Pathology Informatics through research, scientific meetings, and electronic and printed communications
- Provide educational activities that disseminate knowledge to a broad audience and support the practice of Pathology Informatics
- Support "democratization" of diagnostic pathology data by eliminating or integrating data silos that hinder multi-institutional sharing of data and impede better public health, patient care, and research
- Develop standards for the storage and exchange of data and mechanisms for reporting, transferring, and merging diagnostic data while maintaining the needed level of confidentiality and appropriate stewardship of the data
- Play an active role in legal, ethical, social, regulatory, and governmental issues related to Pathology Informatics
- Prepare Pathology for upcoming paradigm shifts in practice like primary digital signout and incorporation of artificial intelligence
- Define the technological barriers that current technologies have in accommodating the upcoming technological paradigm practice changes, using a systems-based approach
- Develop relationships with other professional societies and industry partners that share similar interests and goals and synergize efforts to achieving the above listed goals
- Maintain our commitment to diversity, equity, and inclusion efforts by actively recruiting women and minority members from the international pathology informatics community as API members, to serve on API committees and the JPI editorial board, and as invited speakers for our national meeting and educational workshops

Activities: Informaticians seek to continuously improve laboratory information technology/systems, enhance the value of laboratory test data, and develop computational algorithms and models aimed at deriving clinical value from new data sources. We offer a broad array of expertise in the primary informatics pillars of:

- Information fundamentals
- Information systems
- Workflow and process
- Governance and management
- We support clinical laboratory operations, enterprise informatics and IT initiatives, academic research, and education



Annual Summit (May 21-24, 2017)

Over the past four decades, our specialty has witnessed a progressive succession from coverage of the fundamentals of computing and information technology, to increasingly sophisticated exemplars where cogent use of information technology can be seen to greatly enhance both patient safety as well and the diagnostic and predictive utility of the primary data generated by the collective fields of Anatomic Pathology and Laboratory Medicine. In consonance with the continuing evolution of the specialty, this year was particularly auspicious in that several watershed events—FDA clearance of whole slide imaging for primary diagnosis, and the explosive growth in understanding of the utility of machine learning techniques for exploration of pathology data—created a very rich substrate for Pathology Informatics to generate valuable data products and tools for our clinical colleagues. This year's meeting in Pittsburgh was a singularly memorable event and we thank all of you who attended this year's Pathology Informatics Summit 2018.

The conference was composed of a one-day pre-conference workshop segment, followed by the three-day meeting proper. The workshops were divided into three instructional segments (API— Pathology Informatics Boot Camp, HIMA—HIMA Imaging Science and International Imaging, and finally, DPA—Computational Pathology: The Next Wave of Digital Pathology), and additionally, a Connectathon Event on the Exhibit Floor, facilitated by senior medical imaging standards experts from the DICOM community, whereby attendees were able to interact with Whole Slide Imaging vendors in our exhibit hall, and in so doing, validated that cross-vendor image and case interoperability is now a reality.

Special thanks to our 23 vendors, in particular our Diamond Level Vendors, Leica Biosystems and Roche Diagnostics, our Platinum Level Vendor, Hamamatsu Corporation, as well as our Gold Level Vendor, Thermo Fisher Scientific.

There were 32 posters, 39 short abstract presentations, and 5 elevated platforms. 306 attendees could also claim 22.75 hours of CME/SAMS credit. An abbreviated agenda for the conference is provided below.

May 21
Pathology Informatics Boot Camp
Workshop A: The LIS – Clinical Pathology; Microbiology and Special Coag; Blood Bank/Transfusion Medicine; Anatomic Pathology; Molecular-Genomics
Workshop B: The Central IT Perspective; ETL and Data Warehouses; Laboratory Data Reporting and Analytics; Machine Learning Fundamentals; Computational Pathology
May 22
Pathology informatics: The Journey
Update on Digital Pathology Workflow, Advanced Microscopy, WSI, Machine Learning, and Reporting
May 23
Implementation Practica
May 24
Optimizing Best Practices: AP, CP, and Molecular



Awards

Trainee Awardees

Jihan Aljabban, BA, MMSc The Ohio State University

Dustin Bunch, PhD Yale-New Haven Hospital

Thomas Chong, MD, MS University of California, Los Angeles

Thomas Durant, MPT, MD Yale-New Haven Hospital

Alex Greninger, MD, PhD University of Washington

Christina Gutierrez, MD **Emory University** School of Medicine

Andrew Norgan, MD, PhD Mayo Clinic

Dinesh Pradhan, MD University of Pittsburgh Medical Center

Keluo Yao, MD Michigan Medicine/ University of Michigan

Laraib Safeer, BS Baylor College of Medicine

Iman Tavassoly, MD, PhD Icahn School of Medicine at Mount Sinai

Naohiro Uraoka, MD, PhD Memorial Sloan Kettering Cancer Center

Drew Williamson, BA Case Western Reserve University School of Medicine

API Trainee Award Donors and Sponsors





INDIVIDUAL DONORS

Raymond Aller, MD, FCAP, FASCP, LFHIMSS, FACMI

Emeritus Director of Informatics and Clinical Professor USC School of Medicine, Department of Pathology

Mary E. Edgerton, MD, PhD

Associate Professor, Breast Pathology and Pathology Informatics **UT MD Anderson Cancer Center**

Edward Klatt, MD

Director of the Biomedical Problems Program Professor of Pathology, Mercer University





API Lifetime Achievement Award

The API Lifetime Achievement Award (formerly called the "API Honorary Fellow Award") was established by the API Governing Council in 2002. The Award recognizes individuals who have made significant contributions to the development of pathology informatics as a clinical and academic subspecialty of pathology. Nominations for the award are solicited from the API membership and the API Council selects the recipient. The 2010 and subsequent awards will be presented at Pathology Informatics conference. (Previous awards were presented at either APIII or LabInfoTech Summit.)



Ulysses J. Balis, MD University of Michigan

The Association for Pathology Informatics presented its Lifetime Achievement Award to Ulysses J. Balis, MD at the 2018 Pathology Informatics Summit in Pittsburgh, PA. The presenter was Dr. David McClintock.

Dr. Ulysses J. Balis graduated from the University of Florida College of Medicine and completed his residency at the University of Utah. After serving as Director of Pathology Informatics at Massachusetts General Hospital and Chief of Pathology and Laboratory Services at the Shriners Hospital for Children, he moved to the University of Michigan to assume his position as Division Director of Pathology Informatics.

Dr. Balis has over 100 articles published in numerous peer-reviewed journals and is an editor of the seminal textbook entitled Pathology Informatics: Theory and Practice (American Society for Clinical Pathology Press, 2012). Known for his creativity and inventiveness, Dr. Balis holds several patents. He has given over 200 invited presentations domestically and internationally.

As a founding API member, Dr. Balis has spent numerous years developing API programming and summit planning, as well as serving as President in 2007. He also represents the field of pathology informatics for the American Society for Clinical Pathology, the College of American Pathologists, and on the standards committee for HL7 and DICOM. Dr. Balis is a founding member of the Clinical Informatics Subspeciality Boards Exam Committee. He also maintains advisory roles on LivingMicrosystems/Verinata Health (Illumina), Aperio, and Inspirata.

Dr. Balis is a preeminent expert on whole slide imaging in image-based analytics and search algorithms, machine learning, Big Data and Federated Enterprise Data Architectures, as well as automation and real-time specimen tracking and patient safety. Dr. Balis has also been instrumental in building nationally recognized residency and fellowship training programs in pathology informatics. He is widely respected in the field of pathology informatics for his in-depth analytical understanding and large-scale appreciation of informatics as it applies to medicine, as a whole. We are grateful for his contributions and ongoing work and, thus, honor Dr. Ulysses J. Balis with API's 2018 Lifetime Achievement Award.





Digital Pathology and Al Workshop: This year featured the first Digital Pathology and Al Workshop. Across two days (December 8 and 9, 2017) 45 registrants attended sessions exploring the practical issues surrounding the deployment of digital pathology in hospital and private practice settings. The series consisted of small group sessions with abundant audience-speaker interaction, as well as a tour of the Henry Ford Health System. 7 exhibitors were also present.

December 8	December 9
"Overview of Digital Pathology at Henry Ford Health Systems and A Detailed Critique of a Whole Slide Imaging Solution"	"Preparing an RFP for a Digital Pathology System"
Mark Tuthill, MD	Liron Pantanowitz, MD
"Implementing High-Throughput, Whole Slide Imaging: Value Proposition and Lessons Learned"	Introduction to the Laboratory Tour
Anil Parwani, MD, PhD, MBA	
"Deploying a Digital Pathology Solution in Dermatopathology Reference Lab"	Corporate Introductions from Supporting Vendors
Michael Kent, MS, PhD	
"Use of LEAN to Plan and Optimize AP Automation and Digital Pathology"	Faculty and Industry Panel
Richard Zarbo, MO	(Philips, Sunquest, Leica, and Visiopharm)
"Recent Insights on Whole Slide Imaging Non- Inferiority Diagnostic Performance"	
Michael Feldman, MD, PhD	
"Survey of the Commercial Digital Pathology Market: Prices, Features, and Solutions"	
Ulysses Balis, MD	

API/Sunquest Educational Webinars: These webinars are free from commercial interests/promotion and covers a range of topics throughout the year. They are available as recordings to API members. Beginning in February 25, 2018, experts discussed challenges associated with pathology informatics in large health systems and enabling precision medicine diagnostics and interoperability with IT. Nabil Hafez, MS, BA, Sr. Director, Product Management, SUNQUEST presented "The Challenges of Enabling Precision Medicine Diagnostics." Two additional talks are scheduled for October 1 and October 23, 2018, as follows:

The Challenges of Pathology Informatics in Large Health Systems:

Part 1: Can you hear me now?

Brian Jackson, M.D., Associate Professor of Pathology, University of Utah Walter Henricks, M.D., Vice-Chair, Pathology and Laboratory Medicine Institute Medical Director, Cleveland Clinic

The Challenges of Pathology Informatics in Large Health Systems: Part 2: Interoperability and IT

Mark Tuthill, M.D., Division Head, Pathology Informatics Henry Ford Health System, K-6 Pathology Brad Brimhall, M.D., Medical Director of Healthcare Analytics & Bioinformatics, University of Texas Health Science Center, San Antonio





Other API Educational Programs: The API was represented at a number of national conferences. API-branded content was delivered at the annual meetings of the College of American Pathologists (CAP) and the Association for Molecular Pathology (AMP). The API will continue to participate as a Companion Society of the United States and Canadian Academy of Pathology (USCAP) at their annual meeting. API-branded content has also been delivered to the Pathology Visions meeting held by the Digital Pathology Association. API will be presenting 19 hours of material at the ASCP Annual Meeting 2018.

Official representatives of the API have also been involved in a number of national initiatives, including, but not limited to the American Society for Clinical Pathology (ASCP), USCAP, and AMP. Select members also participate in multiple standards organizations such as Health Level 7 International (HL7) and Digital Imaging and Communications in Medicine (DICOM) as well as provide guidance on important national topics like the Food and Drug Administration certification of whole slide imaging, computational pathology and algorithm use. Many of our members also provide informatics talks at local, regional, national, and international specialty meetings such as the Companion Society Session, the ASCP Annual Meeting, Digital Pathology Association Annual Session, the American Association for Clinical Chemistry (AACC) Annual Meeting and AACC University Pathology Informatics Boot Camp, Healthcare Information and Management Systems Society, Inc. (HIMSS), and Society for Imaging Informatics in Medicine (SIIM).

Clinical Informatics Medical Subspecialty: Clinical Informatics (CI) is a board-certifiable subspecialty primarily housed in the American Board of Preventive Medicine and co-sponsored by the American Board of Pathology. Pathologists are the only candidates outside of Preventive Medicine who are allowed to register for the exam through their own specialty board. Currently, candidates can qualify for the exam by either completing an ACGME-accredited fellowship or through the Practice Pathway. Since the first exam administered in October 2013, 1,870 physicians from 24 specialties have become boarded, with pathologists comprising 123 (6.6%) of total CI diplomates. The year 2018 featured Cohort 6, consisting of 178 diplomates, 16 of whom were pathologists (representing 9.0% of 2018's diplomates). Of note, 2022 will be the last year one can apply for the CI board exam through the Practice Pathway, barring an extension by the American Board of Medical Specialties.



The Journal of Pathology Informatics (JPI) is an open access, peer-reviewed journal dedicated to the advancement of pathology informatics. This is the official journal of the Association of Pathology Informatics (API). The first issue was published in March 2010. The Journal of Pathology Informatics (JPI) is now in its eighth year and JPI continues to grow. We continue to have high-quality pathology informatics articles being submitted. Dr. Liron Pantanowitz and Dr. Anil V. Parwani wish to thank the editorial board and the API for their continued support.

IPI aims to publish broadly about pathology informatics and freely disseminate all articles worldwide. All types of papers related to pathology informatics are published, including original research articles, technical notes, reviews, viewpoints, commentaries, editorials, book reviews, and correspondence to the editors. All submissions are subject to peer review by the editorial board and expert referees in appropriate specialties.

The journal is registered with the following abstracting partners: Baidu Scholar, CNKI (China National Knowledge Infrastructure), EBSCO Publishing's Electronic Databases, Ex Libris – Primo Central, Google Scholar, Hinari, Infotrieve, National Science Library, ProQuest, TDNet, Wanfang Data. The journal is indexed with, or included in, the following: DOAJ, PubMed Central, SCOPUS.

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PUBMED Listed Articles:

https://www.jpathinformatics.org/browse.asp?date=0-0.

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Anil V. Parwani, MD, PhD, MBA The Ohio State University Columbus, Ohio, USA

MANAGING EDITOR

Nova Marie Smith Association for Pathology Informatics Pittsburgh, PA

The journal charges the following fee on acceptance:

Brief report, Case report, Images, Book reviews, Technical note: US \$300 Original Article, Research article: US \$400 Symposiums and Conference Proceedings - \$40 per page Invited Book Reviews: Free

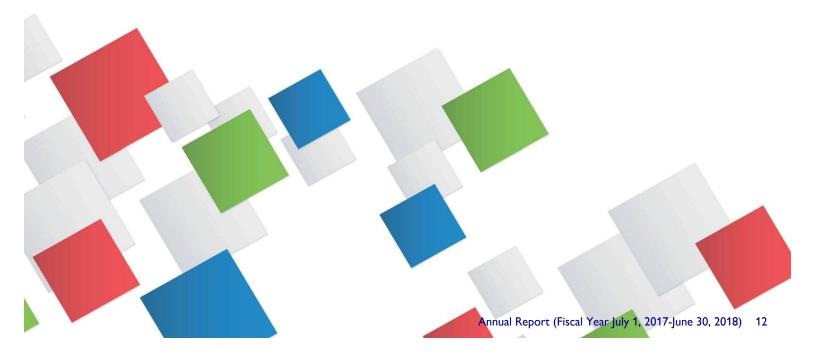
Publication fees are for current members of the Association for Pathology Informatics (API): \$100 US (unlimited per membership year) JOIN API - Become a member today

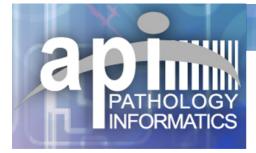


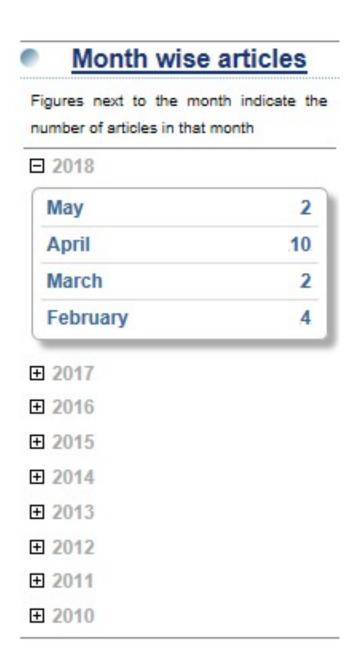


Medknow

2018 Publisher Report Journal of Pathology Informatics





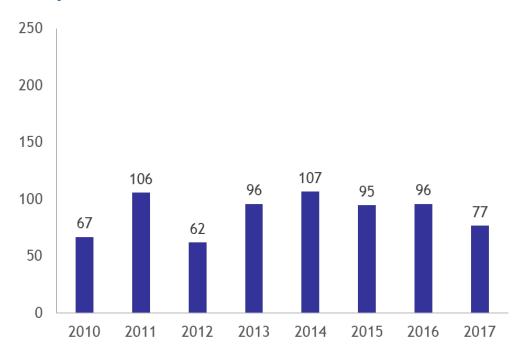


Scopus citation overview for a set of 80 documents gives an h-index as 5.

Indexed with DOAJ, Index Copernicus, PubMed Central, SCOPUS

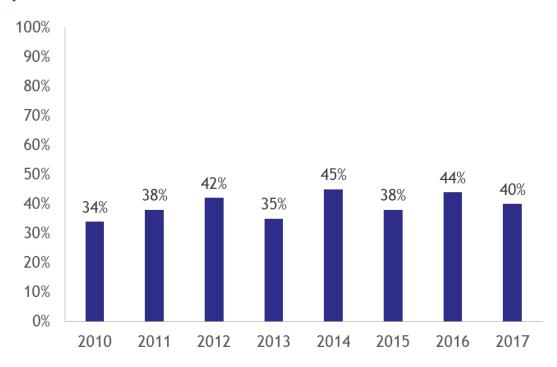


Manuscript Submissions



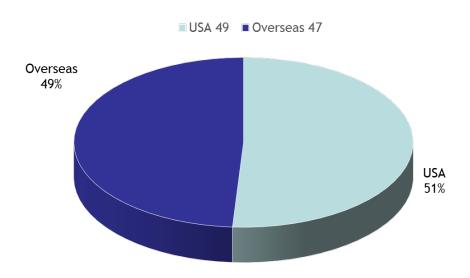
The journal has observed submissions of around 100 manuscripts per year. There were 77 manuscripts submitted in 2017.

Rejection Rates

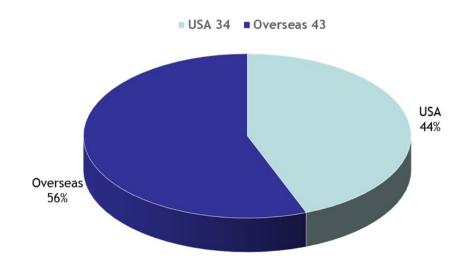


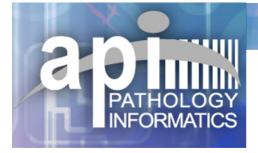


2017



2018





Country Wise Visitors

	Acquisition				
Country ?	Users ? ↓	New Users ?	Sessions ?		
	255,511 % of Total: 100.00% (255,511)	260,500 % of Total: 100.01% (260,461)	355,723 % of Total: 100.00% (355,723)		
1. United States	99,180 (38.18%)	100,134 (38.44%)	141,604 (39.81%)		
2. India	28,171 (10.85%)	28,210 (10.83%)	36,219 (10.18%)		
3. United Kingdom	14,904 (5.74%)	14,849 (5.70%)	20,012 (5.63%)		
4. [Canada	9,215 (3.55%)	9,312 (3.57%)	12,898 (3.63%)		
5. Germany	6,649 (2.56%)	6,621 (2.54%)	9,564 (2.69%)		
6. 🔀 Australia	5,749 (2.21%)	5,763 (2.21%)	7,461 (2.10%)		
7. Japan	4,616 (1.78%)	4,630 (1.78%)	7,181 (2.02%)		
8. China	4,569 (1.76%)	4,528 (1.74%)	5,833 (1.64%)		
9. France	4,329 (1.67%)	4,317 (1.66%)	6,242 (1.75%)		
10. South Korea	4,007 (1.54%)	4,006 (1.54%)	5,121 (1.44%)		



Mobile Device Information

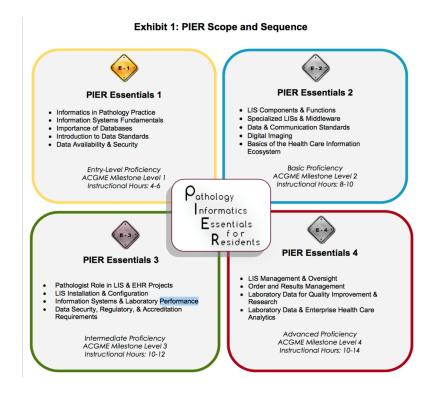
	Acquisition			
N	Nobile Device Info ?	Users ? ↓	New Users ?	Sessions ?
		21,597 % of Total: 8.45% (255,469)	21,527 % of Total: 8.27% (260,450)	28,031 % of Total: 7.88% (355,702)
1.	Apple iPhone	7,164 (33.10%)	7,110 (33.03%)	9,449 (33.71%)
2.	Apple iPad	5,106 (23.59%)	5,087 (23.63%)	6,971 (24.87%)
3.	Google Nexus 5	199 (0.92%)	199 (0.92%)	245 (0.87%)
4.	Microsoft Xbox One	169 (0.78%)	169 (0.79%)	229 (0.82%)
5.	Microsoft Windows RT Tablet	142 (0.66%)	135 (0.63%)	199 (0.71%)
6.	Samsung GT-19300 Galaxy S III	109 (0.50%)	107 (0.50%)	167 (0.60%)
7.	Samsung GT-N7100 Galaxy Note II	101 (0.47%)	100 (0.46%)	132 (0.47%)
8.	Opera Opera Mini for S60	95 (0.44%)	95 (0.44%)	99 (0.35%)
9.	Samsung GT-19500 Galaxy S IV	92 (0.43%)	92 (0.43%)	108 (0.39%)
10.	Google Nexus 7	81 (0.37%)	81 (0.38%)	115 (0.41%)





Presence of API in National Initiatives: The Association for Pathology Informatics believes that pathology informatics is an integral part of the practice of Pathology in the 21st Century and therefore strongly supports informatics education for all pathology residents. This led us into a partnership with the Association of Pathology Chairs and the College of American Pathologists to create Pathology Informatics Essentials for Residents, or PIER. PIER "is a research-based instructional resource that presents training topics, implementation strategies and resource options for program directors and faculty to effectively provide informatics training to their residents and meet ACGME informatics milestone requirements. PIER is also an effective resource for aspiring specialists to develop prerequisite pathology informatics knowledge and skills prior to advanced training or fellowships." ("Pathology Informatics Essentials for Residents (PIER)." Association of Pathology Chairs, Web. 21 June 2018.) Please visit the PIER website for more information.

In further support for pathology informatics education, API has long provided pathology informatics "boot camps" on the first day of the Pathology Informatics Summit. Recordings of the presentations and the presentation slides have been reviewed and mapped to the PIER Essentials to assist pathology residency faculty in the delivery of pathology informatics knowledge to our residents.



Much has been accomplished since the last PIER update. After the initial launch in late 2014, we transitioned leadership from a working group of informatics experts to the PIER Leadership Committee made up of pathology residency program directors (representing the Association of Pathology Chairs) in addition to two informatics experts (representing the Association for Pathology Informatics and the College of American Pathologists). The committee is supported by staff from each association. The CAP also provides project management and instructional design resources to support the work of the committee. The PIER Leadership Committee is charged with carrying the curriculum forward and supporting its further adoption. We've spent the last several years growing the PIER Leadership Committee to include residents, collecting data from stakeholders to understand their needs, using feedback to make curriculum improvements resulting in 3 releases, researching and submitting for grant funding, collaborating with ASCP to 1) pilot test informatics questions for the RISE exam, 2) collect data from residents about their informatics training experiences, and 3) create a separate category for informatics on exam reports so that program directors can monitor resident performance. The committee also provided program director representation to the ACGME Milestones 2 Informatics Work Group.

As a reminder, PIER is a free curriculum and it can be found on the APC website at: www.apcprods.org/pier.



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Membership



Teaching Institutional Members

Since its inception in 2011, API's Teaching Institutional Membership program has been very successful in attracting the 'best-in-class' academic institutions that have collectively demonstrated leadership in adopting and teaching information technology in the medical (and specifically pathology) specialties. API offers unlimited, free publication of all accepted articles in the Journal of Pathology Informatics to any faculty, resident, or fellow employed at an API Teaching Institution.

For a list of institutional members, please contact Nova Smith, API Executive Director (nova.smith@pathologyinformatics.org).

Membership Benefits

- Access to official API Listserv, materials, and broad member expertise
- Access to continually updated educational content and features for those without Pathology Informatics expertise and to help current and future Pathology Informatics faculty save time creating educational content by sanctioned reuse of member content. There are currently over 100 recorded lectures and PowerPoint slideshows available from past API meetings (PI Summit, Digital Pathology and Al workshop, etc.) on the API website for members to access and review for educational purposes.
- Access to training webinars, programs, and PIER content
- Discounted publication fees for the API's Journal of Pathology Informatics
- Reduced registration rate for members at the Annual API Summit Meeting
- Networking connections



Financial Report

	API FY18 Revenue		API FY18 Expenses		API FY18 Net Revenue/(Loss)
	API Membership	\$46,545.85	API Membership & Meeting Expenses	\$132,600.50	
	Pathology Informatics Summit	\$274,219.95	Staff Includes Taxes and Benefits	\$65, 785.87	
	Digital Pathology Workshop	\$65,120.48	Journal of Pathology Informatics	\$18,545.42	
	Journal of Pathology Informatics	\$3,752.90	Other Expenses	\$22,832.24	
	Other Revenue	\$6,350.82			
Subtotal		\$395,990.00		\$239,764.03	\$156,225.97

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