

# PI SUMMIT 2024 PROGRAM

## Realizing Next-Generation Pathology Informatics



Ann Arbor Marriott at  
Eagle Crest Resort

May 20-23, 2024

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<b>11-13 INTREPID WARRIORS - WOMEN IN PI</b> Interview with M.E. (Doc) DeBaca and other women in pathology and pathology informatics	<b>36-37 API GOVERNING COUNCIL - JOIN API!</b> Meet some of the people behind the Association for Pathology Informatics (API)
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## REGISTRATION DESK HOURS (Located in the Ballroom Gallery)

Monday: 7:30 am - 5:00 pm

Tuesday-Wednesday: 7:00 am - 5:00 pm

Thursday: 8:00 am - 12:00 pm

## EXHIBITOR BALLROOM ACTIVITIES/HOURS:

Tuesday, May 21 (7:00 am - 7:30 pm)

10:20 - 11:20 am Break, Browse Exhibits, Posters

12:00 - 1:00 pm Lunch

2:50 - 3:30 pm Break, Browse Exhibits, Posters

5:15 - 6:15 pm Tasting Event

6:15 - 7:30 pm Trivia Game

Wednesday, May 22 (8 am - 3:30 pm)

7:00 - 8:00 am Breakfast

10:20 - 11:20 am Break, Browse Exhibits, Posters

12:00 - 1:00 pm Lunch

3:05 - 3:45 pm Break, Browse Exhibits, Posters

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# WELCOME TO PI SUMMIT 2024!

J. Mark Tuthill, MD  
Conference Co-Director

Lisa-Jean Clifford  
Conference Committee

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Conference Committee

Omar Baba, MD  
Conference Committee

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Beth Gibson  
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**ULYSSES BALIS, MD**  
CONFERENCE DIRECTOR

Welcome to the Pathology Informatics Summit 2024, showcasing a transformative era in the field of Pathology and Laboratory Medicine Informatics. As we celebrate the remarkable journey of this summit, this year promises an infusion of groundbreaking content and an array of emerging stars in informatics who will enlighten us with their cutting-edge insights. True to our mission, a greatly expanded organizing committee has crafted a program featuring educational sessions that reflect the state-of-the-art in our discipline, addressing your requests for more knowledge on large language models and their potential to positively impact our work.

This year's meeting stands as a testament to our commitment to providing you with a profoundly updated and expanded educational experience. We've tapped into the zeitgeist, bringing a focus on the increasing use of digital pathology for primary diagnoses and the revolutionary application of artificial intelligence to derive actionable diagnostic data. As these technologies advance, the significance of data standards and interoperability becomes ever more pivotal. We proudly highlight initiatives such as the Shield Project, which are at the forefront of promoting interoperability, ensuring that our systems can seamlessly communicate and support the continuum of care.

At this summit, you'll experience a diverse array of sessions and workshops delving into the intricacies of AI and machine learning, the practicalities of digital pathology deployment, and the critical role of data management standards in enabling high-quality patient care, just to name a few. By participating, you'll come away with a nuanced understanding of how these topics intersect and the ways in which informaticians can drive the future of healthcare.

The Pathology Informatics Summit 2024 also underscores the API's dedication to Diversity, Equity, and Inclusion (DEI), ensuring that our community reflects the diverse voices and perspectives that enrich our field. In our pursuit to nurture the next generation of informaticians, we have reached out to many classes of learners, inviting them to embark on this exciting career path and join our ranks.

Furthermore, our choice of a new and engaging venue underlines the API's dynamic approach to this year's summit — a place where minds can meet, discuss and be inspired amidst Eagle Crest's state-of-the-art facilities tailored to foster learning and collaboration. This year, our meeting also features live musical entertainment on Wednesday, following the President's Reception.

Join us in this celebration of innovation and educational excellence, as we not only reflect on 40 years of progress but also forge new paths in Pathology Informatics. Engage with industry pioneers, explore trailblazing technologies in our exhibit hall, and contribute to a future where the promise of informatics is fully realized for the betterment of patient care. We look forward to welcoming you to a milestone event that will redefine what it means to be at the forefront of Pathology Informatics.

Sincerely,

Ulysses G. J. Balis, MD, FCAP, FASCP, Fellow AIMBE

Pathology Informatics Summit 2024 Conference Director

on behalf of The Conference Planning Committee and the API Governing Council



**Special thanks to our Diamond Level Exhibitor:**  
**Roche**



# API'S 2024 LIFETIME ACHIEVEMENT AWARD

## Mary E. Edgerton, MD, PhD



The Association for Pathology Informatics proudly announces Dr. Mary Edgerton as the distinguished recipient of this year's Lifetime Achievement Award. Dr. Edgerton, a prominent figure in the field of pathology informatics, has been recognized for her exceptional contributions to pathology and laboratory medicine over an illustrious career.

A past president of the API and longstanding Journal of Pathology Informatics editorial board member, Dr. Edgerton has been instrumental in steering the organization towards its current thriving state. Her leadership was marked by a dedication to education, innovation, and the fostering of a collaborative community among informatics professionals. Her efforts have significantly enhanced the society's mission to advance the field of pathology through cutting edge informatics.

# API'S 2024 DISTINGUISHED SERVICE AWARD

## Ulysses G. J. Balis, MD

Dr. Ulysses Balis is currently the Director of Pathology Informatics and is the inaugural A. James French Professor of Pathology Informatics at Michigan Medicine. He is a founding member of the Association for Pathology Informatics and served as API President in 2007. He has also chaired and served on numerous API Committees and has been the Co-Conference Director/Co-Chair of the Pathology Informatics Summit Planning Committee since 2014. In addition, he has long served on the JPI Editorial Board and as a JPI reviewer. His contributions to the association, the meeting, and the journal are numerous and unparalleled. We are grateful for his ongoing involvement and participation in supporting the organization and are pleased to recognize him with this Distinguished Service Award.



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# TRAVEL AWARDEES



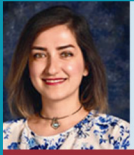
**Samir Atiya, MD**  
Mayo Clinic  
Rochester, MN



**Katherine Crawford, MD, PhD**  
University of Washington  
Seattle, WA



**Mustafa Deebajah, MD**  
University of Pittsburgh Medical Center  
Pittsburgh, PA



**Parnaz Daneshpajouhnejad, MD**  
University of Pennsylvania  
Philadelphia, PA



**Christopher Familusi, MD**  
Northwell Health  
New York, NY



**Matthew Luo, MD**  
University of Utah  
Salt Lake City, UT



**Chace Moleta, MD, MS**  
University of California, Los Angeles  
Los Angeles, CA



**Emii Matsuoka, MD, MS**  
Memorial Sloan Kettering Cancer Center  
New York, NY



**Nuha Shaker, MD, MS**  
University of Pittsburgh Medical Center  
Pittsburgh, PA



**Chance Walker, MD**  
University of Utah  
Salt Lake City, UT



**Christopher Zarbock, MD**  
Washington University School of Medicine  
St. Louis, MO

## SPECIAL THANKS TO OUR DONORS



**DR. EDWARD KLATT**  
Mercer University  
Long Time Donor

"I have supported the PI Summit for many years through funding for travel awardees. My grandfather always advised we should enable the next generation to become better than us. The future of API begins with those who have not only the desire but also the opportunity to participate in API events. New attendees are introduced to the invigorating environment of API for career development."

- Dr. Ed Klatt, 2023



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**DR. RAND ABOU-SHAAR, TRAVEL AWARDEE 2023**







# PRE-CONFERENCE BOOTCAMP

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MONDAY, MAY 20 - AUDITORIUM 2

Time	Topic	Presenter
8:00 - 9:00	<i>Breakfast</i>	<i>Atrium</i>
9:00 - 9:10	Welcome	Ronald Jackups, MD, PhD
9:10 - 9:55	Evaluating and Implementing Operational AI Tools Images	Chris Garcia, MD
9:55 - 10:40	Cybersecurity Preparedness	David McClintock, MD
10:40 - 10:55	<i>Refreshment Break</i>	<i>Atrium</i>
10:55 - 11:40	Genomics Informatics Competencies That Every Pathology Informaticist Needs	Srikar Chamala, PhD
11:40 - 12:25	Beyond the LIS: The Technical and Leadership Skills Needed to Manage Modern Laboratory Informatics Teams	Noah Hoffman, MD, PhD
12:25 - 1:15	<i>LUNCH</i>	<i>Atrium</i>
1:15 - 2:00	Large Language Models: Application And Implications for Pathology Practice	Steve Hart, MD, PhD
2:00 - 2:45	AP and CP: Blurred Lines for Pathology Informatics Practice and The Evolution of Patient Care	Michelle Stoffel, MD, PhD
2:45 - 3:05	<i>Refreshment Break</i>	<i>Atrium</i>
3:05 - 3:50	Laboratory Stewardship: Essential Dependency on Informatics	Khalda Ibrahim, MD
3:50 - 4:35	You Want a Job: How To Demonstrate The Value Of Pathology Informaticists	Simone Arvisais-Anhalt, MD
4:35 - 4:45	Conclusion	Michelle Stoffel, MD

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# PRE-CONFERENCE HIMA WORKSHOP

MONDAY, MAY 20 - AUDITORIUM 1



Time	Topic	Presenter
8:00-9:00	<i>Breakfast</i>	<i>Atrium</i>
9:00-9:05	Introduction	Metin Gurcan, MD
9:05-9:55	Learning Representations of Cellular Morphology Images	Juan C. Caicedo, PhD
9:55-10:45	Navigating The 2D And 3D Microenvironment of Colorectal Cancer in The Era of Digital Pathology & Personalized Medicine	Inti Zlobec, PhD
10:45-11:00	<i>Refreshment Break</i>	<i>Atrium</i>
11:00-11:50	Nondestructive 3D Pathology and Analysis for Precision Medicine	Jonathan T.C. Liu, PhD
11:50 - 12:40	The Role of Evaluation In AI-Driven Computational Pathology Pipelines	Weijie Chen, PhD
12:40 - 1:15	<i>Lunch</i>	<i>Atrium</i>
1:15 - 2:05	HIMA/API Best Dissertation Award Winner: A Population-Level Digital Histologic Biomarker Exceeds Pathologist Performance for Invasive Breast Cancer Prognosis	Mohamed Amgad Tageldin, MD, PhD
2:05 - 2:55	Bringing Digital Pathology into The Radiology Domain and The Power of AI Methods - To Bridge The Radiology-Pathology Gap	Mirabela Rusu, PhD
2:55 - 3:15	<i>Refreshment Break</i>	<i>Atrium</i>
3:15 - 4:05	Image Search in Histopathology - The Past, Present, and the Path Forward	Hamid R. Tizhoosh, PhD
4:05 - 5:00	Panel Discussion	Panel Discussion



# PRE-CONFERENCE R-INTERMEDIATE LANGUAGE PROGRAMMING WORKSHOP

MONDAY, MAY 20 - ELIZABETH ANN



Time	Topic	Presenter
12:25 - 1:15	Lunch	Atrium
1:15 - 2:00	Database Concepts Demystified	Joe Rudolf, MD
2:00 - 2:45	Databases with R: A Marriage Made in the Tidyverse	Patrick Mathias, MD, PhD
2:45 - 3:05	Refreshment Break	Atrium
3:05 - 3:50	Joining Forces: Data Merging Techniques in R	Amrom Obstfeld, MD, PhD
3:50 - 4:00	Refreshment Break	Atrium
4:00 - 4:45	Getting Your Feet Wet with Clinical Research Data with REDCap and R	Stephan Kadauke, MD, PhD

## Lost in Processing

60's, 70's & 80's Classic Rock and Blues

WEDNESDAY, MAY 22

GRAND MARQUEE, 7:00-9:00 PM



LET'S ROCK  
TOGETHER

Lost in Processing is an Ann Arbor based band founded by faculty from the Department of Pathology at the University of Michigan. They interpret guitar oriented classics from artists like Eric Clapton, Cream, Neil Young, Van Morrison, The Rolling Stones, Fleetwood Mac, The B52s, Bonnie Raitt, and Guns N Roses, among many others. Their current lineup includes: Ulysses ("UI") Balis (data scientist, bassist and master clockmaker, keeping time any way that he can . . .) and Jeffrey Myers (surgical pathologist and lead & rhythm guitar player) teamed up with local artists Ed Cackett (astrophysicist and drummer, who works on the "big bang" in everything he does), Laura Nisenson (singing psychologist on lead and harmony vocals), Jorge Livingston (vocalist, keyboardist and percussionist), and his lovely wife Alison (lead and harmony vocals). Joining the band on special guest appearances is the incomparable multi-instrumentalist Alex Johnson. Together, these dedicated musicians strive to create a unique sound familiar to those of a certain age.

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# SPECIAL CONFERENCE EVENTS



MAY, TUES 20

Mentoring Monday

5:15 PM - 6:00 PM EDT

Pathology/CI Fair

6:00 PM - 7:00 PM EDT

Conference Room D, Second Floor

Orly Ardon, PhD, MBA, Director Digital Pathology Operations, Memorial Sloan Kettering Cancer Center

*Emceed by Kareem Hosny, MD, MPH, University of Washington*

Conference Room D, Second Floor

Trainees and invited program directors and mentors welcome

MAY, TUES 21

Mentoring Round Table

12:00 PM - 1:00 PM EDT

Tasting Event

5:15 PM - 6:15 PM EDT

Trivia Game

6:15 PM - 7:30 PM EDT

Women's Networking Nightcap

7:30 - 9:30 PM EDT

Pre-Function B

Trainees and invited program directors and mentors welcome

Exhibitor Ballroom

Meet our exhibitors, enjoy beer, wine and food tastings

Exhibitor Ballroom

Participate in our trivia game, hosted by Dr. Ronald Jackups (API President-Elect) for prizes!

Conference Room D

All women attendees are invited to join this event and network with female leaders in pathology informatics

MAY, WED 22

API President's Reception & Live Music in the Grand Marquee

Reception

5:30-7:00 pm

Live Music with "Lost in Processing"

7:00-9:00 pm

Come for more networking and enjoy the company of fellow attendees and exhibitors



# INTREPID WARRIORS: WOMEN IN PATHOLOGY AND PATHOLOGY INFORMATICS

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## M.E. (DOC) DE BACA AND KAREN MUDD

M.E. (Doc) de Baca has been a long-time champion of pathology informatics, with a passion in structure disease reporting, healthcare data management, laboratory data standards, laboratory interoperability, and clinical decision support. She was API's 2019 President and continues to be active in the *College of American Pathologists* as a member of the Board of Governors and as Chair of the new Council on Informatics and Pathology Innovation. She is vice president for medical affairs at *Sysmex America*, founder of *MDPath*, and a hematopathologist at *Pacific Pathology Partners* in Seattle.

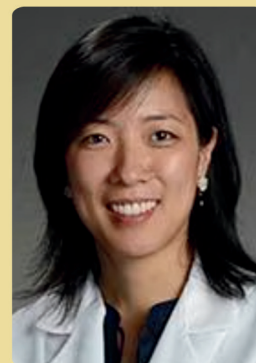
Doc has long understood the significance of pathology informatics for patient care and has been working hard to ensure that the pipeline of qualified individuals grows and remains resilient. Doc wants to see pathologists front and center when it comes to ensuring that these new technologies have been properly validated and are appropriately applied to modern health systems. In a December 2023 "CAP Today Roundtable," Doc remarked "that pathologists aren't blowing our own horns loudly enough: We're the physicians who understand how tests and data work and how they work together. We can see where data are adequate or inadequate in a way other specialties are not as well equipped to do. If people start using our data for algorithms without involving us, their algorithms have the potential to be less safe than they would if we were invited to or forceful about being included in those conversations."

As part of her enduring commitment to support pathology informaticists and encouraging them to "[blow] their own horns", Doc and her wife Karen, have supported the *Women's Networking Event* at API's annual PI Summit financially since 2020. Doc and Karen direct their philanthropy dollars through a *Pride Foundation* donor advised fund, so that they are "assured that our donations fund organizations that have LGBTQ+ policies that align with our values."

Nova Smith, API's Executive Director, was the co-creator of the Women's Networking Event at PI Summit and this gathering has always been near and dear to her heart. Nova, along with Dr. David McClintock (2018 API President) were instrumental in ensuring that this became a permanent feature of the PI Summit through API's formal support of the meeting since 2018. The Women's Networking Event has been instrumental for women pathology informaticists to come together to share their experiences and offer support for one another, gleaming proof that grass-roots leadership amongst API's leaders is crucial in developing an assertive and confident community of pathology informatics experts.

Below is an excerpt of my interview with Doc, as well as excerpts from my interviews with Dr. Uttara Joshi (AIRA Matrix) and Dr. Audrey Bennett (Roche). API is also proud to announce that it has received, for the first time, exhibitor funding from AIRA Matrix and Roche in support of the Women's Networking Event! Thank you!:

"I strongly believe everyone benefits from having diversity in leadership teams, because exposure to multiple styles of excellence helps us learn, adapt and get better, rather than becoming calcified in a single approach. Women in pathology informatics and STEM fields are the minority, and at the same



time, there's a lot of meaning that comes with being a visible agent of change. For me, the Women in Pathology Informatics socials have been a strong source of support and encouragement, and an ongoing reminder to continue to work through the changes required in our society for progress."

- Ji Yeon Kim, MD (API 2023-2024 President)



## 12 **“PATHOLOGISTS AREN’T BLOWING OUR OWN HORNS LOUDLY ENOUGH: WE’RE THE PHYSICIANS WHO UNDERSTAND HOW TESTS AND DATA WORK AND HOW THEY WORK TOGETHER.” - M.E. (Doc) De Baca**



### **WOMEN’S NETWORKING EVENT, PI SUMMIT 2023**

**Grace:** “Doc, thank you for taking some time in your busy schedule to speak a little bit about your professional and personal journey into pathology informatics. Can you tell me what drew you to this field?”

**Doc:** I was once a patient facing ophthalmologist and the recipient of many pathology reports. And I’m a polyglot. Now, as a pathologist, I recognize that what we pathologists write and think we are communicating isn’t always understood by our colleagues as we intended. As a polyglot, I understand that communication is only as effective as the shared (correct) comprehension of the message.

This disconnect, plus the fact that I’ve been computer-obsessed since my dad took me along to the “Stats Lab” at Iowa State University as a small child, created opportunity. I’ve been thinking about structured pathology reporting as a means to standardize information transfer and improve communication for years. That— plus, as a CAP Jr member on the SNOMED International Editorial Board having met the right people (Dr John Madden from Duke and Mary Kennedy [API’s 2022 Lifetime Achievement Awardee] at CAP)-- led to our founding the CAP Pathology Electronic Reporting Committee (known as PERT) to create electronic

representations of the CAP Cancer Protocols. CAP has been creating and curating their eCC for about 20 years now.

The draw to the field was organic; the projects have been met with a combination of initial incredulity but have, for the most part, succeeded. It’s a fun and oddly well-timed niche.

**Grace:** “Representation is immensely powerful not only from an advocacy standpoint, but also for following generations to see people from their communities in decision-making positions. Firstly, can you share with us what it was like for you to enter the profession at the time you did? What kind of support did you discover along the way?”

**Doc:** My maternal grandmother’s uncle was a country doctor in Indiana and everyone spoke of him and his profession with high regard. That struck a cord in me – but to your point, I didn’t see a lot of young hispanic women and certainly not LGBTQ folk practicing medicine when I was considering what to do with my life. Representation is key.

After returning from Germany [following ophthalmology residency] and joining a pathology residency in Philadelphia (at Thomas Jefferson University), I was able to go to an APIII annual meeting thanks to a CAP travel award. Let’s just say that the room was mostly male. The meeting was mostly male. There wasn’t a dedicated space that felt like it was consciously lifting women toward success– but the few women who were there and who are still in the pathology informatics space are fast friends and they have done amazing things in their careers. I’m thinking Dr Alexis Carter, Dr Bobbi Pritt, Dr Myra Wilkerson, for example, in alphabetical order.

### **DRS. ILA SINGH, MARY EDGERTON, ALEXIS CARTER Women’s Networking Event, PI Summit 2022**



Along the way I did meet people, mostly men, who recognized my interest, recognized my skills, and helped me believe in myself and what I was doing. Doors opened and I entered. Mentoring is key. I am very grateful for every person who helped me succeed.





"Parenting young kids and practicing as a physician informaticist are both roles where the work is never fully done and progress can seem slow sometimes. Gaining insights from accomplished women in my field is invaluable for perspective. The annual PI Summit women's networking event is a highlight for me, offering a platform to share experiences, advice, and foster new relationships with women at different life and career stages."

- Dr. Michelle Stoffel, 2024

**Grace: "As someone who is now in that visible decision-making/advocacy position, how do you understand the legacy you are forging for young pathologists on the rise?"**

Doc: This is the most important work I do. No one succeeds alone. Ever. Anyone who submits that they succeeded alone is deluding themselves. My only task at this point in my career, as a leader, is to help people shine, help people learn and grow and experience things they couldn't do alone or would not have

**Grace: "In what ways do you think pathology informatics could be more engaged with issues of representation? What kind of changes are you seeing and what more would you like to see?"**

Doc: ....Representation is bi-directional: the insiders (the status quo) must find the courage to throw the doors open and the outsiders must find the courage to enter. Years ago, API needed a dedicated space for women, so we decided to have an ice cream social (now known as the Women's Networking Event). Over time it has become an institution— and it's really fun. If there are other groups who need an ice cream social to create their micro-community— make the space.

**"...the insiders (the status quo) must find the courage to throw the doors open and the outsiders must find the courage to enter." - Doc**

**Read all the full interviews here!**



"The low level of female representation in this subspecialty reflects the larger global picture in STEM. The reasons for this are myriad. The gap begins with the skewed representation of women in STEM studies. Men vastly outnumber women studying and eventually working in STEM fields. And the gap is broadest in computer sciences and engineering. Multiple other related downstream factors like gender

stereotyping, workplace culture, the predominance of men in leadership roles, and the demand on women to maintain a work-life balance, help widen this gap. This is a deep-rooted, multi-faceted problem that does not have a simple solution. What is encouraging though is that organizations are now emphasizing equity and inclusion. And I am glad to be working with one such equal-opportunity employer. Highlighting the achievements of women in leadership roles in STEM would also help the cause by making visible role models that women in this field can aspire to."

- Dr. Uttara Joshi, "Women in Medicine" Interview, March 20, 2024.

"...I acknowledge within informatics and technology, there is a known history of underrepresentation of women, particularly in leadership roles. One way we can improve women representation in pathology and informatics starts with each of us - providing support and education early in life for young students, and throughout our own careers, we as women in medicine can fully support and champion other women aspiring to be medical doctors, pathologists and informaticists. I believe we should encourage an early focus on pathology informatics education, beginning in medical school and residency training, to promote understanding and awareness of this newer aspect of pathology.



- Dr. Audrey Bennett, "Women in Medicine Interview, May 26, 2024



"My fav part of the API Summit is the Women's Networking Event, which I've attended since I was a PGY-1! Every year, we have great discussions with fantastic women in informatics, including challenges and opportunities in the field, work life balance, and other topics. I find support, guidance and we have fun together! If you are an entry-level woman in informatics or you have more years of practice, this event is for you!"

- Dr. Patricia Hernandez, 2024

## MEET OTHER WOMEN PATHOLOGISTS AND PATHOLOGY INFORMATICS AT THE WOMEN'S NETWORKING NIGHTCAP

**TUESDAY, MAY 21  
7:30 - 9:30 PM, CONFERENCE ROOM D**

**SPONSORED BY M.E. (DOC) DE BACA  
AND KAREN MUDD, AIRA MATRIX, AND ROCHE**

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# TUESDAY POSTERS

EXHIBITOR BALLROOM

10:20-11:20 AM, 2:50-3:30 PM

Poster Title	Presenter
Graph-Based Learning for Grading of Cancer Using Whole Slide Images	Milan Aryal
Use of a Rubric and Peer Review to Improve Photographic Quality in a Pathology Residency Program	Malek Asfa, MD
Conversion of Legacy Laboratory Information System (LIS) Cases into Beaker AP cases	Richard Davis, MD. MSPH
The Impact of Artificial Intelligence on Genitourinary Fellowship Training: A Comparative Analysis of Prostate Needle Biopsy Case Diagnoses	Mustafa Deebajah, MD
Evaluating General Large Language Modules Diagnostic Accuracy Using digital pathology Images	Mustafa Deebajah, MD
Enhancing Readability and Clinical Utility of Pathology Reports Using General Large Language Module	Mustafa Deebajah, MD
Scalable HLA Quality Control with Microsystem Architecture Using React and the Django REST Framework	Jacob Kinskey, MD
Impact of Best Practice Advisory Implementation on HIV and HCV Screening Test Ordering in the Emergency Department	Matthew Luo, MD
An International Comparative Study of 116 Pathologists: AI Improves Accuracy for Ki-67 Assessment in Breast Cancer	Eric Steimetz, MD, PhD
A New Approach to Develop Computer-Aided Screening System Using Artificial Intelligence for Gastric Biopsy Specimens	Daiki Taniyama, MD, PhD
Symmunicoding and Transcompiling Algorithmic Natural Language with Large Language Models	Jonathan Von Reusner, MD



# TUESDAY SHORT ORAL ABSTRACTS

## RUNNING CONCURRENTLY (8:00 - 9:00 AM)

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7:00-8:00 am	Breakfast	ATRIUM
<b>Auditorium 1, Moderator: Ronald Jackups, MD, PhD</b>		
8:00 - 8:15	<b>Retrospective Review of Duplicate Order Clinical Decision Support Tool Performance Within A Large, Tertiary Healthcare System</b>	Christopher Zarbock, MD
8:15 - 8:30	<b>Improving Public Health Visibility with an Interactive Dashboard for Respiratory Virus Surveillance</b>	Katherine Crawford, MD, PhD
8:30 - 8:45	<b>A Multi-Analyte Machine Learning Model to Detect Wrong Blood in Tube Errors</b>	Brendan Graham
8:45 - 9:00	<b>Failure Modes and Effects Analyses (FMEA) on Physical and Electronic Workflows for Biopsy and Fluid Specimens</b>	Jenny Weon, MD, PhD
<b>Auditorium 2, Moderator: Myra Wilkerson, MD</b>		
8:00 - 8:15	<b>Assessing The Utility of Artificial Intelligence (AI) To Detect College of American Pathologists Synoptic Report Completion</b>	Samir Atiya, MD
8:15 - 8:30	<b>Building Cancer Data Champions: Making Pathology Data More Accessible</b>	Eric Daley, MS, PA (ASCP)
8:30 - 8:45	<b>Unlocking Insights from a Data Summit on Use of Pathology Data to Enhance Cancer Patient Outcomes</b>	Mary Edgerton, MD, PhD
<b>Elizabeth Ann, Moderator: Mustafa Yousif, MD</b>		
8:00 - 8:15	<b>Cloud Hosting, The Solution to A Storage Debacle: A Large Academic Center Experience</b>	Matan Kadosh, DO
8:15 - 8:30	<b>PIRO, A Web-Based Application for Rapidly Searching the Diagnostic Case Archive</b>	Scott Robertson, MD, PhD

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# TUESDAY MORNING TRACK LECTURES

## Morning Track Lectures - Running Concurrently (9:00 am - 12:00 pm)

TIME	Track 1: Dig Path Deployment and Workflow Rooms: Auditorium 1 Moderator: David McClintock, MD	Track 2: CP Operations Room: Auditorium 2 Moderator: Ji Yeon Kim, MD	Track 3: PI Topics in Public and Global Health Room: Elizabeth Ann Moderator: Ronald Jackups, MD, PhD
9:00 - 9:35	<b>Digital Scanning Operations: Moving Past Clinical Adoption</b>  Orly Ardon, PhD, MBA	<b>Digital Pathology and Machine Learning in the Molecular Pathology Workflow</b>  Jacob Abel, MD	<b>Missing Not at Random: The Implications of American History for Present-Day Clinical Model Development</b>  Khalda Ibrahim, MD
9:35 - 9:45	<b>Ten Minute Break to Switch Lectures</b>		
9:45 - 10:20	<b>Implementing Digital Pathology: A Strategic Plan for Transitioning to an Advanced Digital Pathology Workflow</b>  Mustafa Yousif, MD	<b>Informatics Challenges and Opportunities in Histocompatibility and Organ Transplantation</b>  Nicholas Brown, PhD	<b>Geospatial Analysis in Laboratory Medicine to Identify Equity Gaps in Testing</b>  Vahid Azimi, MD, MS
10:20 - 11:20	<b>Break, Browse Exhibits and Posters in Exhibitor Ballroom</b> <b>Participate in our Exhibitor "QR Challenge" - visit as many booths, scan the QR codes and be eligible to win prizes!</b>		
11:20 - 12:00	<b>What is the Best Scanner for Supporting Digital Initiatives?</b>  Lisa-Jean Clifford	<b>Taking Laboratory Analytics to the Next Level with Purpose-Built Infrastructure</b>  Patrick Mathias, MD, PhD	<b>Decision Support Opportunities for Population Health Management in Primary Care</b>  Daniel Herman, MD, PhD
12:00 - 1:00	<b>Lunch for General Attendees in Exhibitor Ballroom</b>		<b>Mentoring Rountable Luncheon for Invited Mentors and Trainees in Pre-Function B</b>



# TUESDAY AFTERNOON PLENARIES 17

## Auditorium 1 (1:00 pm - 5:15 pm) - Moderated By Ulysses Balis, MD

1:00 - 1:05	Opening Welcome to PI Summit 2024	Ulysses G. J. Balis
1:05 - 1:40	Development and Explainability of AI Biomarkers in Histopathology Images	Beatrice Knudsen, MD, PhD
1:40 - 2:15	Foundation Models and Information Retrieval in Digital Pathology	Hamid Tizhoosh, PhD
2:15 - 2:50	Applications of Large Language Mode Chatbots in The Clinical Practice of Pathology: A User Group Study	Simone Arvisais-Anhalt, MD
2:50 - 3:30	<i>Break/Browse Exhibits and Poster Sessions - Participate in QR Challenge: scan Exhibitor QR codes and be eligible to win prizes!</i>	<i>Exhibitor Ballroom</i>
3:30 - 4:05	Charting the Path: Navigating Patient Journeys through Digital Transformation	John Groth, MD
4:05 - 4:40	Adding Value with Pathology Informatics: Serving Healthcare's New Consumers, New Care Models, New Payment Models, and More!	Robert Michel
4:40 - 4:45	<i>Stand up Break</i>	
4:45 - 5:15	<b>DIAMOND Exhibitor Presentation by Roche</b>  All attendees for ALL Diamond Presentations will be entered into a raffle for a MacBook Air	Mike Rivers VP/Lifecycle Leader, Digital Pathology at Roche Tissue Diagnostics  <i>Introduced by David McClintock, MD, Mayo Clinic</i>

## Evening Events

5:15 - 7:30	<b>"Tasting Event" followed by the Trivia Game - Exhibitor Ballroom</b> Network and enjoy cocktails and tastes, then join a team and play some PI trivia and win some prizes!
7:30 - 9:30	<b>Women's Networking Nightcap - Conference Room D</b> All women attendees are invited to gather and meet female leaders in pathology informatics!



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# WEDNESDAY POSTERS

EXHIBITOR BALLROOM  
10:20-11:20 AM, 3:05-3:45 PM

Poster Title	Presenter
Conformal Prediction and Large Language Model for Medical Coding	Christopher Snyder, MD, PhD
Plasma Metabolomic Profiling of Patients with High Grade Prostatic Intraepithelial Neoplasia Reveals Metabolic Drivers of Invasive Carcinoma Transformation	Robert Chen, MD, PhD
Molecular Correlates of Tertiary Lymphoid Structures and Computer Vision-Derived Signature of Vascular Density is Prognostic of Prostate Cancer Outcome and Associated With Immune Infiltration	Parnaz Daneshpajouhnejad, MD
Enhancing Histology Image Quality Beyond H&E Preparation: Addressing Inter-Laboratory Variability for Improved Image Analysis	Mustafa Deebajah, MD
Comparative Analysis of Ki-67 Marker Quantification Across Different Digital Scanners and Image Analysis Platforms: A Real-World Evaluation of Inter-Vendor Variability	Mustafa Deebajah, MD
Ischemic Stroke Etiology Classification from Clot Histology using Attention-based Multiple Instance Learning	Mustafa Deebajah, MD
Ordering and Order Release Changes to Ensure Accurate Paired Specimen Collection	Grace Kroner, MD, DABCC, FAACC
Database-driven Analysis of Hemoglobin Thresholds in Pediatric Transfusions	Sulakshana Ranjan, MD
AI-Powered Approach for Ki67 Proliferation Index Assessment in Neuroendocrine Tumors of the Gastrointestinal Tract and the Pancreas	Nuha Shaker, MD, MS
Conway Meets Ulam: An Educational Tool for Applying Algebraic Topological Homology in the Study of Dynamical Cellular and Multicellular Automata	Jonathan Von Reusner, MD
Digital, Single-cell, Immunohistochemical Analysis Reveals Tumor Heterogeneity of the Androgen Receptor Pathway in Prostatic Tissue Sections	Chance Walker, MD



# WEDNESDAY SHORT ORAL ABSTRACTS 19

## RUNNING CONCURRENTLY (8:00 - 9:00 AM)

7:00-8:00 am	Breakfast	Exhibitor Ballroom
<b>Auditorium 1, Moderator: Mustafa Yousif, MD</b>		
8:00 - 8:15	Establishment of New Staining Protocols for Digital and Computational Pathology	Emii Matsuoka
8:15 - 8:30	Democratizing Artificial Intelligence in Anatomic Pathology	Thomas Flotte, MD
8:30 - 8:45	AI-Powered Mapping of Eosinophil Distributions in Colorectal Cancer: Towards Prognostic Biomarkers and Precision Oncology Insights	Nuha Shaker, MD, MS
8:45 - 9:00	Generative AI and DevSecOps in Anatomic Pathology	Peter Gershkovich, MD, MHA
<b>Auditorium 2, Moderator: J. Mark Tuthill, MD</b>		
8:00 - 8:15	LEAN Driven Optimization of The IHC Workflow Through Digital Pathology- The Henry Ford Health Experience	Omar Baba, MD
8:15 - 8:30	Beyond the Microscope: Pathologist's Adaptability to Non-Domain Specific Search Tasks	Alana Lopes, BSc
8:30 - 8:45	Ergonomics Challenges Faced by Pathologists and the Potential of Digital Pathology: Mitigating Musculoskeletal Pain	Mustafa Deebahja, MD
8:45 - 9:00	Bringing Calm to Antibiotic Stewardship: Customizing and Automating Antibigram Creation at Houston Methodist Hospital	John Rogers, MD
<b>Elizabeth Ann, Moderator: Ulysses Balis, MD</b>		
8:00 - 8:15	As Fast as Glass: A Next Generation Digital Pathology Rendering Engine	Ryan Landvater, MD, MS
8:15 - 8:30	Tumor Percentage by QuPath Machine Learning Versus Manual Estimation	Mikael Haeggstroem, MD
8:30 - 8:45	Whole Slide Level Subtype Classification and Molecular Prediction of Lung Cancer Using a Nationwide Respiratory Cytology Image Set Leveraging Multiple Instance Learning	Yosep Chong, MD, PhD
8:45 - 9:00	Multi-Center Preliminary Validation of Deep Learning in Urine Cytology Across Diverse Clinical Settings for Rapid Bladder Cancer Screening	Joshua Levy, PhD

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# WEDNESDAY MORNING TRACKS

## Morning Track Lectures - Running Concurrently (9:00 am - 12:00 pm)

TIME	Track 1: AI, Machine Learning, and NLP in Molecular Pathology Rooms: Auditorium 1 Moderator: Ulysses Balis, MD	Track 2: Terminology, Standards, and Interoperability Room: Auditorium 2 Moderator: Myra Wilkerson, MD	Track 3: Contemporary PI Topics Rooms: Elizabeth Ann Moderator: Michelle Stoffel, MD, PhD
9:00 - 9:35	<b>Empowering Precision Medicine: Multimodal Fusion of Clinicopathological and Genomic Features with Machine Learning</b>  Mohammad Alexanderani, MD, MBA	<b>How Systemic Harmonization and Interoperability Enhancement for Laboratory Data (SHIELD) will Affect the Laboratorian</b>  Hung Luu, PharmD, MD	<b>A Comprehensive Guide to PACS Acquisition, Vendor Evaluation, and Contracting a Request for Proposal Framework</b>  Mustafa Yousif, MD
9:35 - 9:45	<b>Ten Minute Break to Switch Lectures</b>		
9:45 - 10:20	<b>Combining Intelligent Document Processing with Natural Language Processing to Extract Elements from Genetic Test Reports</b>  Shannon Haymond, PhD	<b>Reporting Discrete Non-Gynecologic Cytology Diagnoses in Epic Beaker AP Based on Standardized Terminologies</b>  Mohiedean Ghofrani, MD, MBA	<b>Taking The Plunge: Safe Implementation of Generative AI in a Clinical Organization</b>  Niklas Krumm, MD, PhD
10:20 - 11:20	<b>Break/Browse Exhibits and Poster Sessions - Participate in QR Challenge!</b>		
11:20 - 12:00	<b>Advancing Molecular Pathology and Precision Medicine by Integrating Technology and Developing Advanced Workflow Process</b>  J. Mark Tuthill, MD	<b>Seventh Heaven! An International Standardized, Humanly Readable and Computable Pathology Cancer Report</b>  W. Scott Campbell, PhD, MBA	<b>Bridging Gaps: Exploring Diversity, Equity, and Inclusion in AI and Pathology Informatics</b>  Kareem Hosny, MD, MPH
12:00 - 1:00	<b>Lunch for General Attendees in Exhibitor Ballroom</b>		<b>Travel Awardee Luncheon (Invitees only) in Conference Room D</b>



# WEDNESDAY AFTERNOON TRACKS 21

## Morning Track Lectures - Running Concurrently (1:00 pm - 3:05 pm)

TIME	Track 1: Generative AI Including LLMs, in Anatomic Pathology Rooms: Auditorium 1 Moderator: J. Mark Tuthill, MD	Track 2: AI, Including LLMs in Lab Medicine Room: Auditorium 2 Moderator: Amrom Obstfeld, MD, PhD	Track 3: BECICH-FRIEDMAN DISTINGUISHED ORAL PRESENTATION Rooms: Elizabeth Ann Moderator: Lisa-Jean Clifford
1:00 - 1:35	<b>Establishing a Computational Pathology &amp; AI Center</b>  Liron Pantanowitz, MD, PhD, MHA Hooman Rashidi, MD	<b>Development and Validation of Artificial Intelligence-Assisted Flow Cytometry for Diagnosing Hematological Disorders</b>  Zhengchun Lu, MD, PhD	<b>Using Large Language Models to Assign ICD-O Codes to Pathology Reports</b>  Samer Albahra, MD
1:35 - 1:45	<b>Ten Minute Break to Switch Lectures</b>		
1:45 - 2:20	<b>Artificial Intelligence Algorithms for Prostate Cancer Diagnosis and Grading: Challenges and Future Directions</b>  Anil Parwani, MD, PhD, MBA	<b>Come On In, The Model's Fine: Strategies and Use Cases for Bringing Large Language Models into the Laboratory Right Now</b>  Noah Hoffman, MD, PhD	<b>Explorations in Digital Pathology: Preliminary Validation of Apple Vision Pro and Workflow Enhancements by Tagging Slides</b>  Dibson Gondim, MD
2:20 - 2:30	<b>Ten Minute Break to Switch Lectures</b>		
2:30 - 3:05	<b>Using Large Language and Vision Models to Bring Efficiencies and Improve Workflows in Digital Pathology</b>  Rajendra Singh, MD	<b>Generating Reference Intervals from Secondary Data: The Case of Serum-Free Light Chains</b>  Lee Schroeder, MD, PhD	<b>Compliance to Hard Stop Electronic Alerts for Inappropriate C. difficile Testing Vary by Indication</b>  Patricia Hernandez, MD
3:05 - 3:45	<b>Break/Browse Exhibits and Poster Sessions - Last Chance to Participate in QR Challenge!</b>		

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# WEDNESDAY EVENING EVENTS

3:45 - 4:15	<b>TOWN HALL</b> Moderated by Bob McGonnagle, CAP Today - Auditorium 1
4:15 - 5:30	<b>API President's Address - Auditorium 1</b> Stay for our President's Reception Sponsors Dell Technologies, FujiFilm, and Roche to acquire codes to be eligible for a raffle for high-end prizes!
5:30 - 7:00	<b>API President's Reception, Sponsored by Dell Technologies, AIRA Matrix, and Roche - Grand Marquee</b>
7:00 - 9:30	<b>Live Music Event with "Lost in Processing" - Grand Marquee</b>

## THURSDAY MORNING TRACK

**API Focus Session: The Imminent Impact of Machine Learning and AI on LAB 2.0**  
 Moderated by: Dr. Ulysses Balis  
 Room: Auditorium 1

The Lab 2.0 movement already heralds the beginning of a new era for how clinical labs provide services and define value. This transformation will be accelerated by the increasing availability of clinically validated Machine Learning and AI technologies and techniques directed at both diagnostic and logistical challenges. This panel discussion, assembled with luminaries from both clinical labs and industry, will explore this timely topic, with each discussant introducing a thematic thrust, with a panel discussion to follow.

8:00 - 9:00	<i>Breakfast in the Atrium</i>
9:00 - 9:20	<b>Emerging Trends in LIS Architecture Design and Implementation to Enhance the Capture and Documentation of Value-Added Lab Services</b> - Lisa-Jean Clifford
9:20 - 9:40	<b>Navigating the Transition to Value-Added Provisioning of Diagnostic Services; A Management Grimoire</b> - J. Mark Tuthill, MD
9:40 - 10:00	<b>Envisioning Lab 2.0 Across and Between Health Enterprises</b> - Myra Wilkerson, MD, FCAP
10:00 - 10:20	<b>Macroeconomic Trends in the Lab 2.0 Space</b> - Robert Michel
10:20 - 10:30	<i>Standing Break</i>
10:30 - 10:50	<b>What Now with Molecular Testing Following the FDA's Final Rule</b> - Annette Kim, MD, PhD
10:50 - 11:50	<b>Panel Discussion</b>
11:50 - 12:00	<b>Closing remarks and adjournment</b> - Ulysses Balis and J. Mark Tuthill





## Jacob Abel, MD

Physician  
Providence Health & Services

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Jacob Abel graduated from the University of Pittsburgh School of Medicine in 2015 and from the University of Tennessee Health Science Center Pathology Residency (AP/CP) in 2019. With a long-running interest in computers, bioinformatics, and programming, he went on to complete combined fellowships in Pathology Informatics and Molecular Genetic Pathology at the University of Michigan in 2021. As a fellow, he conducted research on the technical assessment and validation of displays in digital pathology and assisted in the selection and validation processes of whole-slide-imaging scanners as well as the selection process for an image management system. During this time, he also fulfilled the role of managing and upgrading the next-generation sequencing pipeline. Additional projects have included the creation of dashboards for tracking COVID-19 testing and blood product inventory management, as well as the use of deep learning and image analysis in histologic and gross images. He currently works as a molecular genetic pathologist at Providence Health and Services in Portland, and his ongoing interests include semi-automated clinical trial matching for oncology patients and the use of digital pathology to improve solid tumor sequencing workflows.

## Mohammad Alexanderani, MD

NIHT32-Fellow in Computational  
Pathology/Pathologist Scientist Track  
Weill Cornell Medicine

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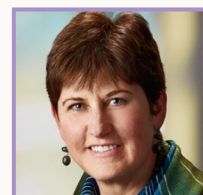


Dr. Alexanderani is a Computational Pathology fellow on the NIHT32 Pathologist Scientist track of the next-generation pathologist program at Weill Cornell Medicine. With extensive training in Clinical Informatics, Digital Pathology, Pharmacogenomics, Immunology, and Pathology residency, he possesses a broad skill set for integrating clinicopathological and genomic data using cutting-edge multimodal machine-learning techniques. Dr. Alexanderani's primary objective is patient stratification and risk identification by leveraging diverse laboratory data sources. His overarching mission is to drive advancements in personalized medicine, aiming to enhance patient care through the integration of comprehensive data analysis and precision-based approaches.

## Orly Ardon, PhD, MBA

Director, Digital Pathology Operations  
Department of Pathology, Memorial Sloan  
Kettering Cancer Center

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Orly Ardon, PhD MBA is the Director of Digital Pathology Operations and an assistant member at the Department of Pathology and Laboratory Medicine at Memorial Sloan Kettering Cancer Center. She has expertise in microbiology, molecular, and digital pathology. Orly completed the degrees of BSc, MSc, and Ph.D. in Microbiology at the Hebrew University of Jerusalem, and an Executive MBA from the University of Utah. Dr Ardon serves as a board member of the Digital Pathology Association.

Dr. Ardon career focuses on diagnostic test advancements and laboratory innovation. Her work in digital pathology is centered on operational aspects of digital technologies and the clinical implementation of laboratory automation. Her interests also include process improvements and healthcare economics.



## Simone Arvisais-Anhalt, MD

Director of Laboratory Medicine Informatics,  
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Simone Arvisais-Anhalt, MD is the director of Laboratory Medicine Informatics, Send Out Testing, and Specimen Processing at the University of California San Francisco. Her interests include operationalizing digital health tools in health care systems, clinical informatics, clinical chemistry, laboratory medicine, and health IT policy.

## Vahid Azimi, MD

Instructor, Pathology and Immunology  
Assistant Medical Director of Laboratory  
Information Systems  
Washington University School of Medicine,  
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Dr. Vahid Azimi is Instructor of Pathology and Immunology at Washington University School of Medicine in St. Louis, where he is Assistant Medical Director of Laboratory Information Systems. Dr. Azimi's primary academic focus is improving health equity through the practice of laboratory medicine. Specifically, Dr. Azimi is interested in identifying and alleviating health disparities that arise due to biases in laboratory test use during clinical care and interpretation of laboratory test results, as well as the use of laboratory in combination with administrative data to identify and address gaps in care.

## Ulysses G. J. Balis, MD

**Director, Division of Pathology Informatics**  
**Director, Pathology Informatics Fellowship Program**  
**Professor of Pathology, Department of Pathology**  
**University of Michigan Health System**

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Ulysses G. J. Balis, MD, Fellow AIMBE, is the A. James French Professor of Pathology Informatics at the University of Michigan, with additional roles as Associate Chief Medical Information Officer and Informatics Fellowship Program Director at Michigan Medicine. He serves as this year's Pathology Informatics Summit conference director. Dr. Balis has longstanding interests in data analytics, natural language processing, digital image analysis, computational pathology, and AI-driven workflow. During his career, he has carried foundational roles in the creation of subspecialty boards for Clinical Informatics, circulating tumor cell microfluidics technology, and in the development of the original DICOM Visible Light (VL) Image Object Definition. He was elected as a Fellow of the American Institute for Medical and Biological Engineering in 2015 for his engineering contributions to laboratory instrumentation, pathology bioinformatics, and computational imaging in histology image search and analysis algorithms. His division is currently deploying all-digital primary diagnostic workflow in support of anatomic pathology, with the development of an associated computational pathology laboratory section.



## Nicholas Brown, PhD

**Nicholas Brown, PhD**  
**Associate Professor**  
**University of Pennsylvania**

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Dr. Brown is the Associate Director of the Histocompatibility Testing Laboratory at the Hospital of the University of Pennsylvania, and an Associate Professor of Clinical Pathology and Laboratory Medicine at the Perelman School of Medicine. Dr. Brown trained in basic immunology research before performing a clinical fellowship in Histocompatibility at the University of Chicago. He joined the faculty at Penn in 2019 where he nurtured a burgeoning interest in informatics. He enjoys combining his old love of immunology with his new love of informatics to solve complex problems in clinical laboratory management, as well as engaging in research on organ transplantation. Dr. Brown is also active in leadership roles of national and international organizations for histocompatibility and transplantation.

## Juan C. Caicedo, PhD

**Assistant Professor and Morgridge Investigator**  
**University of Wisconsin-Madison**

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Juan C. Caicedo is an Assistant Professor and Morgridge Investigator at the University of Wisconsin-Madison. His research work focuses on

the use of deep learning and machine learning to analyze microscopy images and to combine it with other biological data. Previously, he was a Schmidt Fellow and Principal Investigator at the Broad Institute of MIT and Harvard. Before focusing on computational biology, Juan was focused on machine learning and computer vision research and worked as an intern at Queen Mary University of London, Microsoft Research, and Google Research. As a postdoctoral researcher at the University of Illinois at Urbana-Champaign he developed deep reinforcement learning methods for object detection, and later at the Broad Institute he investigated generalizable strategies for cell segmentation.



## W. Scott Campbell, PhD, MBA

**Associate Professor**  
**Department of Pathology and Microbiology**  
**University of Nebraska Medical Center**

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Scott Campbell, PhD, MBA is a tenured, associate professor in the Department of Pathology and Microbiology at the University of Nebraska Medical Center (UNMC) in Omaha, Nebraska, USA. He is also the Director of Informatics for the Nebraska Public Health Laboratory and the Director of Research, Education, Administration and Development for Health Informatics Core for UNMC. Dr. Campbell specializes in clinical informatics with special emphasis in cancer pathology and microbiology. The development of SNOMED CT concept expressions for use in cancer synoptic reporting which includes biomarker and next generation sequencing data comprises significant aspects of Dr. Campbell's research efforts. He currently serves as the Chair of the Cancer Synoptic Reporting Working Group for SNOMED International which is creating the necessary knowledge representation and concepts for the SNOMED CT international release for use in structured cancer reporting. He is a certified SNOMED CT author and is funded by the US Centers for Disease Control to continue development of SNOMED CT content for cancer reporting. He serves on the College of American Pathologists (CAP) Informatics committee and advised the CAP PERT committee. In addition to cancer reporting, Dr. Campbell is actively involved with the US Food and Drug Administration's SHIELD data interoperability effort.

## Srikanth Chamala, PhD

**Director, Center for Pathology Informatics and Data Science**  
**Associate Professor of Clinical Pathology,**  
**Keck School of Medicine of USC**  
**Children's Hospital of Los Angeles**

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Dr. Srikanth Chamala is an Associate Professor of Clinical Pathology at the Keck School of Medicine of University of Southern California (USC), Director of the Center for Pathology Informatics and Data Science at Children's Hospital Los Angeles (CHLA), and Associate Program Director for the Clinical Informatics Fellowship program at CHLA. He oversees the development, implementation, and maintenance of advanced Pathology Informatics solutions across major pathology divisions including clinical, anatomic, molecular pathology, transfusion medicine, and biorepository. Dr. Chamala's integration of sophisticated informatics practices enhance diagnostic and research methodologies,



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elevating healthcare delivery and scientific discovery standards. Dr. Chamala is passionate about leading institutional, national, and international initiatives, training pathologists, healthcare professionals, and researchers in pathology/clinical informatics and precision genomic medicine. His leadership has resulted in significant funding acquisition and the development of translational biomedical informatics research in AI, genomics, and clinical data interoperability standards.

## Weijie Chen, PhD

**Research Physicist**  
**Division of Imaging, Diagnostics, and Software**  
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Weijie Chen, PhD, is a research physicist in the Division of Imaging, Diagnostics, and Software Reliability, Office of Science and Engineering Laboratories (OSEL) at the Center for Devices and Radiological Health, U.S. Food and Drug Administration. He received his PhD from the University of Chicago in Medical Physics. At the FDA, he serves as the Program Coordinator of OSEL's Digital Pathology Research Program. He conducts research and regulatory consults in the areas of artificial intelligence and machine learning devices in radiology and pathology applications and statistical methods in medical imaging. He has published more than 45 journal articles, 40 proceedings papers, and three book chapters. He is a Fellow of SPIE and an associate editor for the Journal of Medical Imaging.



## Lisa-Jean Clifford

**COO and Chief Strategy Officer**  
**Gestalt Diagnostics**

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For more than 2 decades, Lisa-Jean Clifford has been a noteworthy leader in the high-tech healthcare solutions space. Lisa-Jean's passion for making a positive impact on the lives of patients through technology can be traced back to her tenure at McKesson and IDX, now GE Healthcare, where she served in vital business development and marketing roles and to Psyche Systems, an LIS solution provider, where she was the CEO for eleven years. Now, recognized as an industry expert, she actively participates in numerous boards including the Association of Pathology Informatics and MLO's Editorial Advisory Board. She is widely published in many top laboratory publications and noteworthy news sources, such as Forbes, CAP Today, Medical Laboratory Observer, and Health Data Management. Also, she is a highly sought-after speaker and focuses on delivering valuable content in critical areas such as lab automation including software and interoperability, digital pathology, AI in pathology, lab informatics, oncology, and women's health. Lisa-Jean's success can be attributed to her perseverance, integrity, high regard for ethics, and desire to continue to learn, grow, and move technology solutions in a forward direction for healthcare. Her collaboration with industry partners, customers, colleagues, and competitors, combined with her commitment to exceptional customer relationships, is what distinguishes her drive to foster a win-win for the healthcare industry as a whole.

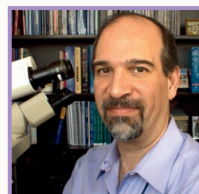
## Christopher Garcia, MD

**Medical Director, Division of Computational**  
**Pathology & AI**  
**Mayo Clinic**

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Dr. Chris Garcia is the Medical Director in the Division of Computational Pathology and Artificial Intelligence at the Mayo Clinic. He is a pathologist (AP/CP) with subspecialty training in Pathology Informatics. He has over 10 years experience in working in industry (Philips Digital Pathology Solutions), for reference laboratories (Labcorp as a medical director and strategic director) and academic medicine (currently at the Mayo Clinic). He is actively involved in the digital pathology and pathology informatics communities. He currently focuses on developing and integrating AI/ML solutions into clinical operations and practice in Laboratory Medicine and Pathology.



## Mohiedean Ghofrani, MD, MBA

**Director, Cytopathology & Women's Health**  
**PeaceHealth Southwest Medical Center**

[mghofrani@yahoo.com](mailto:mghofrani@yahoo.com)

Dr. Mohiedean ("Mohi") Ghofrani is a board-certified Anatomic and Clinical Pathologist, Cytopathologist, and Clinical Informaticist. As an Epic-accredited Pathologist Builder, he played a leading role in the successful implementation of Beaker AP at PeaceHealth, where he practices surgical pathology and cytopathology. Dr. Ghofrani also serves as PeaceHealth's System Laboratory Medical Director and chairs its Laboratory Stewardship Committee, two roles that deeply involve optimizing clinical and laboratory workflows related to Beaker and other Epic modules. He serves on the Laboratory's CareConnect Decision Team that reviews and prioritizes Beaker optimization requests. Dr. Ghofrani is a Trustee of the American Board of Pathology, chairs its Anatomic Pathology Test Development and Advisory Committee and is a member of the American Board of Preventive Medicine Clinical Informatics Sub-board that develops the Clinical Informatics Board Exam. He has served as President of the Washington State Society of Pathologists and President of the Oregon Pathologists Association. He has published and presented on a variety of topics in cytopathology, surgical pathology, clinical informatics, and laboratory stewardship. In his free time, Dr. Ghofrani enjoys developing software. As an Apple Developer, he developed 3 free pathology-related apps for iOS. During his pathology residency, he was a two-time winner of the CAP Foundation Informatics Award and was funded by the Universities Associated for Research and Education in Pathology to develop a web-based educational resource for immunohistochemistry. The latter led him to develop a publicly available website with a variety of pathology resources, including web apps to look up ICD and CPT codes, a CDS tool to assist in management of Pap and HPV results, and demo versions of an online gynecologic/breast pathology atlas and the immunohistochemistry web app.



### John Groth, MD

**Director of Informatics, Innovation and Technology**  
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John Groth, M.D., is a pathologist at NorthShore University HealthSystem, where he is currently the director of informatics, innovation and technology and leading the efforts of a transition to a digital workflow with the incorporation of artificial intelligence, for primary anatomic pathology clinical work and establishing a pathology clinic. He completed his undergraduate studies in chemistry at the University of Virginia and medical school studies at the University of Illinois at Chicago. He completed his anatomic and clinical pathology residency and subsequent fellowships in general surgical pathology with interests in digital pathology, education, gynecologic pathology, laboratory information systems, patient and pathologist safety, and quality, as well as a cytopathology fellowship, from the University of Illinois at Chicago. He is board-certified in anatomic, clinical and cytopathology and is seeking board certification in clinical informatics via the practice pathway. He is currently: a member of the Digital Pathology Association's Regulatory & Standards Task Force, a member of the American Society of Clinical Pathology's Patient Champions Committee, a member of the NorthShore University HealthSystem Digital Health Committee, vice president of the Illinois Society of Cytotechnology, and treasurer of the Chicago Pathology Society. Dr. Groth has been recognized for his academic, educational, mentorship and scholarly efforts and is passionate about the betterment of patient care and pathology practice for improved outcomes.

### Metin N. Gurcan, PhD

**Senior Associate Dean for Artificial Intelligence Research**  
**Director, Center for Artificial Intelligence Research**  
**Wake Forest University School of Medicine**

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Dr. Metin Gurcan is the founding Director of the Center for Artificial Intelligence Research, Professor of Internal Medicine, Pathology, and Biomedical Engineering at Wake Forest University School of Medicine, and Director of the Clinical Image Analysis Lab (<http://tsi.wakehealth.edu/CIALab/>). Previously, he was the founding director of the Center for Biomedical Informatics at Wake Forest University School of Medicine. Dr. Gurcan is an internationally recognized researcher and educator in the fields of medical image analysis, artificial intelligence, and biomedical informatics. His research has been supported by NIH NCATS, NCI, NIDCD, NHLBI, NBIB, NIAID, NLM, and DOD, as well as awards from several nonprofit organizations. He is the author of over 200 peer-reviewed publications and book chapters and was awarded eight patents for his inventions in medical artificial intelligence. Dr. Gurcan received his BSc. and Ph.D. degrees in Electrical and Electronics Engineering from Bilkent University, Turkey, and his MSc. Degree in Digital Systems Engineering from the University of Manchester Institute of Science and Technology, England. Dr. Gurcan is the recipient of several awards, including the British Foreign and Commonwealth Organization Award, NCI caBIG Embodying the Vision Award, NIH Exceptional, Unconventional Research Enabling Knowledge

Acceleration (EUREKA) Award, Children's Neuroblastoma Cancer Foundation Young Investigator Award, The OSU Cancer Center REAP Award, and Pelotonia Idea Award. He is a Fellow of SPIE and a senior member of IEEE and AMIA. In addition to his organizational leadership, he provides professional leadership within multiple organizations. He co-chaired the SPIE Medical Imaging Symposium between 2019-2022. He serves on the editorial boards of the Journal of Pathology Informatics, BJR | Artificial Intelligence, and SPIE Journal of Medical Imaging. He has been organizing the Pathology Informatics Histopathological Image Analysis (HIMA) workshop since 2013.



### Steven N. Hart, PhD

**Associate Professor of Biomedical Informatics**  
**Division of Computational Pathology and AI**  
**Mayo College of Medicine**

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Dr. Steven N. Hart is a seasoned bioinformatics expert with a proven track record of leveraging scientific computing technologies to drive innovation in healthcare. As the architect behind GenomeGPS, the primary DNA sequencing workflow at Mayo Clinic, he demonstrated his exceptional skills in building complex technologies and managing large-scale sequencing projects. Dr. Hart is a Google Cloud Professional Certified Architect, highlighting his expertise in cloud computing and data management. He applied this knowledge to transform the genomics data processing landscape at Mayo Clinic, where he served as the Associate Director of Bioinformatics. His leadership in the Clinical Genome Sequencing Laboratory has propelled the integration of cutting-edge research into clinical practice. An accomplished researcher, Dr. Hart has authored over 100 peer-reviewed papers in high-impact journals, underscoring his significant contributions to the field of bioinformatics. He excels in cancer genomics, inherited cancer risk, and AI in digital pathology. His AI algorithms are directed toward minimizing unnecessary tests and identifying those who would benefit from genetic predisposition testing. With a patient-centric approach, Dr. Hart is at the forefront of bringing new high-throughput technologies into clinical practice. His work in AI, ML, and cloud computing is shaping the future.

### Shannon Haymond, PhD

**Vice Chair, Computational Pathology**  
**Ann & Robert H. Lurie Children's Hospital of Chicago**

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Dr. Shannon Haymond is Vice Chair for Computational Pathology and Director for Clinical Mass Spectrometry at Ann & Robert H. Lurie Children's Hospital of Chicago. She is an Associate Professor of Pathology at Northwestern University Feinberg School of Medicine. Dr. Haymond is the Immediate Past-President of ADLM (formerly AACC). Dr. Haymond's computational pathology efforts are aimed at building the capacity for advanced data analytics in her department through innovations in infrastructure, education, and research to facilitate data-informed decision-making for clinical care, operations, and quality assurance. She completed a Master of Science in Predictive Analytics from Northwestern University.



# FACULTY PROFILES 27



## Daniel Herman, MD, PhD

Assistant Professor  
University of Pennsylvania

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Daniel Herman is a physician-scientist working at the intersection of data science, laboratory medicine, and clinical information systems. He completed his MD and PhD degrees at Harvard Medical School and trained in Clinical Pathology at the University of Washington. He is now an Assistant Professor at the University of Pennsylvania, where he is a practicing clinical pathologist and biomedical informatics researcher. Dr. Herman directs one of clinical chemistry laboratories at the Hospital of the University of Pennsylvania. His research group focuses on leveraging electronic health record data to improve screening for underdiagnosed diseases like primary aldosteronism. This includes training clinical prediction models; upstream computational method development to learn more interpretable, fair, and transferable models; and downstream evaluation of model-triggered decision support in observational and pragmatic trials.

## Noah Hoffman, MD, PhD

Associate Professor  
University of Washington

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Noah Hoffman, MD, PhD, is an Associate Professor at the University of Washington and Head of the Informatics Division in the Department of Laboratory Medicine and Pathology. He also serves as the Specialty CMIO for Laboratory and Pathology services for UW Medicine. Dr. Hoffman has interests in software development to meet the operational and analytical needs of the clinical laboratory, laboratory data analytics, bioinformatics, and clinical and operational applications of AI. As the Co-director of the NGS Analytics Laboratory, Dr. Hoffman helps to supervise the development of analytical pipelines and scientific computing infrastructure supporting clinical assays. His research interests include the development and application of bioinformatic tools to perform nucleic acid sequence-based identification of microbiota in both basic research and clinical settings, including studies of the human microbiome.



## Kareem Hosny, MD, MPH

Assistant Professor, Head of Digital Pathology  
Medical Director of Anatomical Pathology  
Informatics Division  
University of Washington

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Kareem Hosny, MD, MPH is an assistant professor and director of the Anatomical Pathology Informatics Division in the Department of Laboratory Medicine and Pathology. He also serves as the head of Digital Pathology for the Department. Dr. Hosny's clinical and research interests include the clinical applications of machine learning, digital pathology, whole-slide-imaging technology, clinical decision support, and enterprise workflow optimization. As the head of Digital Pathology for the Department, Dr. Hosny is engaged in the supervision and implementation of the digital pathology initiative aimed to digitalizing the anatomical pathology service for the clinical, educational, and research purposes. The applications of Dr. Hosny's clinical and research interests involve the whole spectrum of bioinformatics, pathology informatics, clinical informatics, and public health informatics. In addition, he was appointed as the chairman of Diversity, Equity, and Inclusion (DEI) at the Association of Pathology Informatics (API) and member of various academic DEI committees nationally and internationally. Through these roles, he obtains a very peculiar research interest in unraveling DEI gaps and Health Disparities in Artificial Intelligence Models.

Dr. Hosny received his MD degree from Cairo University, Egypt. He earned his MPH degree from Emory University in Atlanta/Georgia, where he studied public health informatics. He finished his residency in both Anatomical Pathology and Clinical Pathology (AP/CP) at the Hospital of University of Pennsylvania (HUP).

## Khalda Ibrahim, MD

Assistant Clinical Professor, Pathology and Lab  
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UCLA David Geffen School of Medicine

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Khalda A. Ibrahim, MD is an Assistant Clinical Professor in the Department of Pathology and Laboratory Medicine at the University of California, Los Angeles, with subspecialty training in Clinical Informatics and Transfusion Medicine. Dr. Ibrahim is a laboratory medicine informaticist and also serves as a physician informaticist for UCLA Health Information Technology. Her clinical and research interests include operational uses of machine learning models and leveraging informatics in service of historically underserved patient populations.



### Stephan Kadauke, MD, PhD

Assistant Director, Cell and Gene Therapy  
Laboratory  
Children's Hospital of Philadelphia

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Dr. Stephan Kadauke is a licensed physician with expertise in Clinical Pathology, Transfusion Medicine, Cell Therapy, and Clinical Informatics.

He received his Ph.D. and M.D. from the University of Pennsylvania's Perelman School of Medicine, and completed his residency in Clinical Pathology at the Massachusetts General Hospital. He has served as a Transfusion Medicine fellow at Harvard Medical School, and is currently an Assistant Professor of Clinical Pathology and Laboratory Medicine at the University of Pennsylvania School of Medicine. Dr. Kadauke is the Associate Director of the Cell and Gene Therapy Laboratory (CGTL) at the Children's Hospital of Philadelphia (CHOP). The CGTL is a cGMP facility embedded into the hospital that performs various procedures to process cell therapies and is the sole provider of cellular therapies at CHOP. Dr. Kadauke is involved in 50+ active investigator- and industry-sponsored cell therapy clinical trials exploring hemoglobin gene therapies, chimeric antigen receptor (CAR) T cells, hematopoietic stem cell (HSC) transplants, and virus-specific cytotoxic T cells. He also serves as the Associate Director of the Penn/CHOP Cell Therapy Fellowship program. In addition, Dr. Kadauke serves as Attending physician on the Apheresis service, where he treats patients with sickle cell disease and various autoimmune and neurological diseases. He also supervises cell collections for patients who require stem cell transplantation or other cellular immunotherapies. In addition to his clinical work, Dr. Kadauke is the Medical Director of Cell and Gene Therapy Informatics (CGTI). CGTI is an agile team that builds systems to deliver reliable, high-quality, and timely data to Cell and Gene Therapy clinicians and researchers to help clinical decision making, improve and automate quality operations, and accelerate Cell and Gene Therapy clinical research. CGTI currently maintains 25+ separate systems, including REDCap-based clinical trial electronic data capture (EDC) systems, custom-built R packages and R/Shiny web applications, as well as machine learning-based predictive models.

### Annette Kim, MD, PhD

Professor, Molecular and Genomic Pathology  
Henry Clay Bryant Professor of Pathology  
Director, Division of Molecular and Genomic  
Pathology  
Michigan Medicine, University of Michigan

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Annette S. Kim, MD, PhD is the new Henry Clay Bryant Professor and Division Head of Diagnostic Genetics and Genomics at the University of Michigan. Annette S. Kim received her MD, PhD from Harvard in 1998. After a postdoc at Memorial Sloan Kettering Institute and several years at Merck, Dr. Kim completed residency and fellowship in Hematopathology at the University of Pennsylvania in 2008. Dr. Kim has been the Medical Director at Cooper University Hospital (2008-2009) and hematopathologist and molecular pathologist at Vanderbilt University (2009-2015) and Brigham and Women's Hospital (2015-2023). Dr. Kim's research program has focused on the study of hematolymphoid malignancies, including miRNAs in

myelodysplastic syndromes and myeloid mutational patterns, as well as on test utilization management. At the Brigham and Women's Hospital, Dr. Kim served as the Laboratory Director of the Heme Molecular Lab and the Translational Biomarker Core of the Center for Advanced Molecular Diagnostics. She was Co-Director of the Interpretive Genomics Program at the Dana Farber Cancer Institute, the Director of the BH3 Profiling Laboratory, and the PI of the molecular core for the Leukemia SPORE program. She has served on several national pathology committees including the College of American Pathologists Molecular Oncology and Personalized Health Care Committees, the latter as current Vice-Chair, and the Association of Molecular Pathology Board and Executive Committee as well as chairing the Hematopathology Subdivision and the Training and Education Committees. In addition, she is the vice chair of the ASH Precision Medicine committee and served on the Somatic Working Group committee and serves on a number of other national biomarker and pathology committees. She has been awarded several teaching awards and was awarded the CAP Public Service Award in 2019.



### Beatrice Knudsen, MD, PhD

Professor of Pathology  
Medical Director of Computational Pathology  
University of Utah

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Dr. Beatrice Knudsen joined the Department of Pathology in January 2020 as a Professor in the Division of Anatomic Pathology. Dr. Knudsen came to the University of Utah from Cedars-Sinai Medical Center, where she held the rank of Professor in the disciplines of biomedical sciences and pathology & laboratory medicine. Dr. Knudsen's area of expertise is in digital and computational pathology. Although she spent the majority of her career as an academic, translational, laboratory scientist, she switched to the rapidly-moving field of computational science in 2013. Dr. Knudsen's vision is to: empower pathologists to be more efficient and more effective by using algorithmic solutions; assist pathologists to take a leading role in the research community by generating quantitative data from tissue morphology; and form teams of computer scientists, data analysts and pathologists to develop new pathology image analysis software. As is evident in her vision statement, Dr. Knudsen is an advocate for team science.

### Niklas Krumm, MD, PhD

Associate Director Informatics Division,  
Co-Director NGS Analytics, Assistant Professor  
University of Washington

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Niklas Krumm is an MD/PhD with training in human genetics and clinical pathology. He serves as an associate director of informatics in the Department of Laboratory Medicine and Pathology at the University of Washington. His interests are in building software infrastructure that aligns with laboratory use cases, improves workflows, and creates better laboratory processes.



# FACULTY PROFILES 29



## Jonathan T. C. Liu, PhD

Professor of Mechanical Engineering,  
Bioengineering, and of Laboratory Medicine &  
Pathology  
University of Washington

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Jonathan T.C. Liu is a professor at the University of Washington, where his molecular biophotonics laboratory develops high-resolution optical-imaging devices and computational-analysis strategies for guiding treatment decisions. Dr. Liu received his BSE from Princeton and his PhD from Stanford before becoming a postdoc and instructor in the Molecular Imaging Program at Stanford. Dr. Liu is a co-founder and board member of Alpenglow Biosciences Inc., which has commercialized the non-destructive 3D pathology technologies developed in his lab. Dr. Liu's work is funded by the NCI, NIBIB, NIDDK, DoD, NSF, and various foundations.



## Zhengchun Lu, MD, PhD

Resident  
Oregon Health and Science University

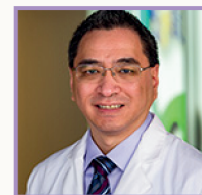
[luzh@ohsu.edu](mailto:luzh@ohsu.edu)

Dr. Zhengchun Lu is a seasoned medical professional with expertise in virology, biomedical science, and pathology. As a resident physician at Oregon Health & Science University, Dr. Lu is dedicated to pioneering research for enhanced patient care. Her diverse training background in virology spans cutting-edge diagnostic tests to B cell repertoire immunology, uniquely positioning her for impactful contributions, particularly in the context of the COVID-19 pandemic. During her first year of residency, Dr. Lu conducted award-winning research correlating wastewater SARS-CoV-2 signals with positivity rates in underserved communities. This project, honored with the 1st prize for the Health Access and Equity Division Outstanding Research Award at the 2022 Annual AACC meeting, significantly broadened her perspective from the lab to the community. Dr. Lu is also an expert in artificial intelligence (AI), serving as the Principal Investigator for the project "Development and clinical validation of artificial intelligence-assisted flow cytometry diagnosis in leukemia, lymphoma, and minimal residual disease testing." This project, funded by The Society of '67, the Association of Pathology Chairs for Pathology Trainee Project Grant in Health Services Research or Education, highlights her commitment to advancing diagnostic technologies and alleviating healthcare disparities. Actively engaged in professional organizations, Dr. Lu has presented her research at numerous academic conferences, showcasing her dedication to staying at the forefront of medical advancements.

## Hung Luu, MD, PharmD

Associate Professor of Pathology  
UT Southwestern Medical Center

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Hung S. Luu, PharmD, MD, FCAP is the Director of Clinical Pathology at Children's Health, a pediatric health care system in Dallas, Texas. He is Associate Professor of Pathology at UT Southwestern Medical Center. He conducts research on interoperability of laboratory data and utilizing clinical decision support to improve healthcare efficiency and patient outcomes. Dr. Luu is an active member of the College of American Pathologist and serves on the Clinical Informatics Committee. He serves on the steering committee for the Food and Drug Administration's SHIELD Community, a multi-stakeholder initiative to improve the quality, interoperability, and portability of laboratory data. Dr. Luu was appointed to a three-year term on the Health Information Technology Advisory Council (HITAC) in 2022 and was also appointed to the Clinical Laboratory Improvement Advisory Committee (CLIAAC) in 2023.



## Patrick Mathias, MD, PhD

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Informatics  
University of Washington School of Medicine

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Patrick Mathias, MD, PhD, is an Assistant Professor who serves as the Vice Chair of Clinical Operations and the Associate Medical Director of the Informatics division in the Department of Laboratory Medicine and Pathology at the University of Washington School of Medicine. He is also the Medical Director of Point of Care Testing for Airlift Northwest (flight transport service covering Washington and Alaska). He is board certified in Clinical Pathology and Clinical Informatics. Prior to postgraduate medical training, he earned his undergraduate degree in electrical engineering from Duke University and completed his M.D. and Ph.D. in bioengineering from the University of Illinois with a research focus on nanophotonics and biosensors. Dr. Mathias's informatics responsibilities cover improving electronic health record systems to improve the ordering and interpretation of laboratory tests and developing infrastructure to support advanced analytical technologies in the clinical laboratory. In addition he supervises departmental analytics efforts to improve laboratory operations and assess the lab's impact on clinical care. His research interests include assessing the cost effectiveness of testing and informatics interventions at a population level. He is also a strong believer in establishing data science as a core skill in medicine and teaches programming and data analysis skills to the laboratory medicine and pathology community.

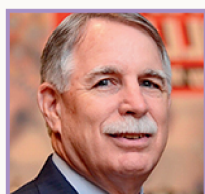
## David McClintock, MD

**Chair, Division of Computational Pathology and Artificial Intelligence**  
**Senior Associate Consultant, Department of Laboratory Medicine and Pathology**  
**Mayo Clinic**

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Dr. David McClintock is Chair of the Division of Computational Pathology and Artificial Intelligence and a Senior Associate Consultant in the Department of Laboratory Medicine and Pathology, at the Mayo Clinic (Rochester). Current professional interests include the use of machine learning and artificial intelligence tools to improve patient care, clinical laboratory workflows, operational efficiency, and scientific discovery. He is currently the Program Committee Chair within the Association for Pathology Informatics.



## Robert Michel

**Editor-In-Chief, The Dark Report**  
**President, The Dark Intelligence Group, Inc.**

Robert L. Michel is Editor In Chief of THE DARK REPORT, an intelligence service and publication providing economic and strategic assessment of the clinical laboratory industry for senior executives and pathologists that was founded in 1995. He produces the Executive War College on Laboratory and Pathology Management, held every May. In 2006, Michel established [www.DarkDaily.com](http://www.DarkDaily.com). His DarkDaily e-briefings are now read each day by more than 24,000 people in 186 different countries around the world. During recent years, Mr. Michel has participated in conferences and visited laboratories in Argentina, Australia, Brazil, Canada, China, Columbia, Egypt, Germany, India, Japan, Korea, New Zealand, Saudi Arabia, South Africa, and the United Kingdom. This has provided an international perspective to his understanding of healthcare trends and developments in laboratory medicine. In 2016, he was recognized with the W.A.D Anderson Award from the University of Miami Department of Pathology, an award given annually to recognize significant contributions to anatomic pathology and laboratory medicine. He attended University of California at Los Angeles (UCLA), earning a B.A. in Economics. He is a winner of the Specialized Information Publishers Association's prestigious "Best Investigative Reporting" Award and is listed in Marquis' Who's Who in Healthcare and Medicine.

## Amrom Obstfeld MD, PhD

**Associate Chair, Pathology Informatics and Hematology Laboratory**  
**Children's Hospital of Philadelphia**

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Amrom Obstfeld MD, PhD, is the Associate Chair of Pathology Informatics as well as the Hematology Laboratory at Children's Hospital of Philadelphia. After receiving his MD and PhD degrees

from the College of Physicians and Surgeons at Columbia University, he went on to train in Clinical Pathology at the Hospital of the University of Pennsylvania. In addition to his duties within the Hematology Laboratory, Dr. Obstfeld's clinical responsibilities include leading the development of analytic tools to aid in laboratory quality management, administration, and operation, and interfacing with other groups throughout the hospital on informatics initiatives. His research focuses on utilizing clinical and pre-clinical laboratory data sets for predicting diagnosis and prognosis using statistical and machine learning techniques. Dr. Obstfeld plays a major role in designing and implementing educational experiences for pathology trainees and faculty at the University of Pennsylvania within the areas of clinical and pathology informatics.



## Liron Pantanowitz, MBBCh

**Chair, Department of Pathology**  
**University of Pittsburgh/University of Pittsburgh Medical Center**

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Dr. Liron Pantanowitz is Chair and Professor of Pathology at the University of Pittsburgh & University of Pittsburgh Medical Center. He received his medical degree and PhD from the University of Witwatersrand in South Africa. He completed his anatomical and clinical pathology residency training at Beth Israel Deaconess Medical Center, Harvard in Boston. He subsequently completed a hematopathology fellowship at Harvard and Cytopathology fellowship at Tufts. He is also board certified by the American Board of Pathology in clinical informatics. He received his MHA from Ohio University. Dr. Pantanowitz is an Editor-in-Chief of the Journal of Pathology Informatics. He is a past president and current council member of the Association of Pathology Informatics, president of the American Society of Cytopathology, and president of the Digital Pathology Association. He is widely published in the field of pathology informatics and cytopathology. His research interests include digital pathology, artificial intelligence and non-gynecological cytopathology.

## Anil Parwani, MD, PhD, MBA

**Director, Pathology Informatics and Digital Pathology**  
**Vice Chair and Director, Anatomical Pathology**  
**The Ohio State University**

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Dr. Anil Parwani is a Professor of Pathology at The Ohio State University. He serves as the Vice Chair and Director of Anatomical Pathology. Dr. Parwani is also the Director of Pathology Informatics and Director of the Digital Pathology. His research is focused on diagnostic and prognostic markers in bladder, prostate and renal cell carcinoma. Dr. Parwani has expertise in the area of surgical pathology, viral vaccines and pathology informatics including biobanking, whole slide imaging, digital imaging, telepathology, image analysis, artificial intelligence and lab automation. Dr. Parwani has authored over 400 peer-reviewed articles in major scientific journals and several books and book chapters. Dr. Parwani is the Editor-in-chief of Diagnostic Pathology and Journal of Pathology Informatics.



# FACULTY PROFILES 31

## Hooman Rashidi, MD, MS, FCAP

Associate Dean of AI in Medicine  
Executive Director of CPACE AI Center  
Executive Vice Chair of Computational Pathology  
University of Pittsburgh

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Dr. Rashidi is a physician scientist, inventor of several well established and validated Data Science Apps/ Machine learning Platforms (e.g. MILO Auto-ML, MILO APT, STNG, etc.) and a prolific author. He is currently the Associate Dean of AI in Medicine at the University of Pittsburgh school of medicine, Professor & Endowed Chair of Experimental Pathology Research, Executive Vice Chair of Computational Pathology and the Executive Director of CPACE (Computational Pathology & AI Center of Excellence, a joint venture of U Pitt and UPMC). In light of his extensive background and experience in the machine learning and bioinformatics fields, he continues to create innovative new tools and resources along with published best practice guidelines that improve clinical practice, research, and education. Dr. Rashidi is also a committed educator with numerous teaching awards and well-established educational Apps. His efforts in the AI-ML & digital space are internationally recognized, as evidenced by his active numerous invited talks (at numerous prestigious institutions and conferences), his various editorial (associate editor of ML for Modern Pathology & associate editor of ML for JPI) & reviewer roles in this domain, his numerous published key invited review articles & his continued national committee roles within this space.



## Joseph Rudolf, MD

Joseph Rudolf, MD  
Associate Professor  
Medical Director, Automated Core Lab, ARUP  
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University of Utah

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Dr. Rudolf is an assistant professor in the Department of Pathology at the University of Utah. He serves as Medical Director of the Automated Core Laboratory at ARUP Laboratories, a national nonprofit and academic reference laboratory. His clinical and research interests focus on the intersection of informatics and clinical operations including clinical decision support, utilization management, and reporting and analytics. He is also passionate about clinical process improvement and initiatives to support quality and safety. Dr. Rudolf earned his medical degree (2012) from the University of Washington School of Medicine in Seattle, Washington. He completed his residency training in Clinical Pathology (2015) and fellowship in Clinical Informatics (2017) at the Massachusetts General Hospital in Boston, Massachusetts.

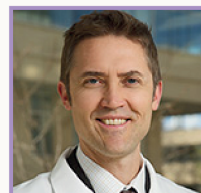
## Mirabela Rusu, PhD

Assistant Professor  
Department of Radiology  
By courtesy, Department of Urology and  
Biomedical Data Science  
Stanford University

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Dr. Mirabela Rusu received her MS and PhD in Computational Biomedicine from University of Texas, Houston, and focused her research on the fusion of biomolecular structural data from different sources (i.e., cryo-electron microscopy and X-ray crystallography). Her postdoctoral training at Rutgers and Case Western Reserve University was focused on developing computational methods for the fusion of medical images, i.e., to register radiology or pathology images, or create population atlases for prostate cancer studies. Following postdoctoral training, Dr. Rusu joined Industry as an Image Analysis Scientist/Lead Engineer. Currently, Dr. Rusu is an Assistant Professor of Radiology, and by courtesy, Urology and Biomedical Data Science, at Stanford University, where she leads the Personalized Integrative Medicine Laboratory (<http://pimed.stanford.edu>). Dr. Rusu's team focuses on developing analytic methods to improve the interpretation of radiology images by taking advantage of existing high-resolution information during training but only needing lower resolution radiology images during inference (e.g., when applied in new patients).



## Lee Schroeder, MD, PhD

Associate Professor  
University of Michigan

leeschro@med.umich.edu

Dr. Lee Schroeder is Associate Professor of Pathology at the University of Michigan where he is Associate Director of the Division of Clinical Pathology, Medical Director of Point-of-Care Testing, and Medical Director of Satellite Phlebotomy. He is also a member of the Patient-centered Laboratory Utilization Guidance Services (PLUGS) Informatics Committee and served on the College of American Pathologist Chemistry Resource Committee. Dr. Schroeder is a recent member of the World Health Organization Strategic Advisory Group of Experts on In Vitro Diagnostics (SAGE-IVD), the committee responsible for the Essential Diagnostics List, and was an author for the Lancet Commission on Diagnostics. Dr. Schroeder's academic focus is at the interface of clinical informatics and health services research, using decision analytic approaches to understand and improve the impact of laboratory medicine. This has included analytic studies of existing health care data to establish reference intervals using indirect methods, characterize the accuracy of point-of-care testing, and predict the accuracy of SARS-CoV-2 assays in different populations using various specimen types. He conducts landscaping exercises of laboratory capacity in low- and middle-income countries and studies the performance of laboratory networks within health systems. He is currently dual-PI on an NIH project to conduct a country-level study in Ghana to create a geospatial model to optimize the tiered laboratory network for several diseases of public health importance.

# 32 FACULTY PROFILES

## Rajendra Singh, MD

Director of Dermatopathology and Digital Pathology  
Summit Health

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Dr. Singh is the Director of Digital Pathology and Dermatopathology at Summit Health in New Jersey. He is the founder of PathPresenter, an online digital platform that has 50,000+ users in 170+ countries and is used by multiple academic departments, private pathology groups, and organizations in the US and all over the world ([pathpresenter.com/](http://pathpresenter.com/)). He was previously Professor of Pathology and Dermatology at Northwell and Icahn School of Medicine at Mt. Sinai. Dr. Singh is the recipient of the "Lifetime Achievement Award" from the College of American Pathologists (CAP) for creating PathPresenter, and the "Teacher of the Year Award" at Mt. Sinai School of Medicine for 5 consecutive years. He served as the Chair of the American Society of Dermatopathology Informatics Committee, Board Member of DPA, Editorial Board of the WHO for Classification of tumors, 5th Edition. Dr. Singh currently serves on the Sulzberger Grant Committee of the AAD, Digital and Computational Pathology Committee of the CAP, Education Committee of DPA, Computational Pathology Subcommittee of the WHO. He has been nominated on the Pathologist "Power List 100" put out by the Pathologist for 2020, 2021 and 2022. Dr. Singh is also the creator and Chief Editor of the app-mydermpath, an online education resource for dermatopathology residents. He also is the Chief Editor of the print book "Surgical Pathology Reimagined", available on Amazon.



## Michelle Stoffel, MD, PhD

Associate CMIO for Lab Medicine and Pathology  
MHealth Fairview, University of Minnesota

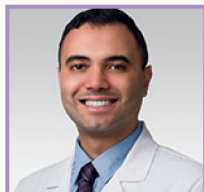
[stoff129@umn.edu](mailto:stoff129@umn.edu)

Michelle Stoffel, MD, PhD, is the Associate CMIO for Laboratory Medicine and Pathology at the M Health Fairview health system and an Assistant Professor in the Department of Laboratory Medicine and Pathology at the University of Minnesota. Her academic and operational focus is on bridging the practice of informatics from the lab to clinicians and patients via the electronic medical record, with additional interests in clinical and pathology informatics education.

## Mohamed Amgad Tageldin, MD, PhD

Resident, Physician-Scientist track  
Northwestern University, Feinberg School of Medicine

[mohamed.tageldin@nm.org](mailto:mohamed.tageldin@nm.org)



Mohamed Amgad Tageldin is a PGY-1 Pathology Resident at the Physician-Scientist track at Northwestern University, Feinberg School of Medicine. He is an aspiring academic pathologist working in the interdisciplinary field of Computational Pathology. He obtained his MD from Cairo University, and his PhD in Computer Science from Emory University in Atlanta, GA under the supervision of Dr. Lee A.D. Cooper. His dissertation work developed highly interpretable models to improve prognosis of invasive breast cancer, with robust validation studies.



## Hamid R. Tizhoosh, PhD

Professor of Biomedical Informatics  
Department of Artificial Intelligence and Informatics  
Mayo Clinic

[Tizhoosh.Hamid@mayo.edu](mailto:Tizhoosh.Hamid@mayo.edu)

Hamid R. Tizhoosh is a distinguished Professor of Biomedical Informatics in the Department of Artificial Intelligence and Informatics at Mayo Clinic, located in Rochester, MN, USA. He is the founder and director of the Rhazes Lab. Prior to his tenure at Mayo Clinic, Dr. Tizhoosh made significant contributions to the field while working at esteemed institutions such as the University of Toronto and Waterloo. Since 1996, Dr. Tizhoosh has dedicated his research efforts to the intersection of artificial intelligence, computer vision, and medical imaging. He has pioneered innovative algorithms for medical image filtering, segmentation, and search. One of his notable contributions is the introduction of the concept of "Opposition-based Learning." Dr. Tizhoosh's expertise extends to the realm of academia, evident through his authorship of two influential books, numerous book chapters, and a substantial body of peer-reviewed journal articles and conference papers. Dr. Tizhoosh possesses a wealth of industrial experience, coupled with over a decade of involvement in commercialization and the creation and guidance of start-ups. Since 2012, his research focus has honed in on image search within medical archives, particularly emphasizing histopathology. His expertise in this domain is underscored by the publication of more than 70 papers on image search, illuminating new pathways for research and development in the field. In summary, Dr. Tizhoosh stands as a trailblazer in the realms of Biomedical Informatics and Artificial Intelligence. His pioneering work, extensive publications, and dedication to advancing medical imaging technologies have left an indelible mark on the research community and continue to inspire future innovations in the field.

## J Mark Tuthill, MD

Department Head, Pathology Informatics  
Henry Ford Health System

[mtuthil1@hfhs.org](mailto:mtuthil1@hfhs.org)



J. Mark Tuthill, MD, completed pathology residency and informatics fellowship training at the University of Vermont College of Medicine-Fletcher Allen Health Care, and created the department's division of pathology informatics. Dr. Tuthill is currently Division Head of Pathology Informatics at Henry Ford Health System in Detroit. Areas of interest include digital pathology implementation, Internet applications for laboratory services, laboratory information systems, business analytics, electronic health records and informatics training and education. Active in organized medicine, he is an advisor to the ASCP Annual Meeting Steering Committee; Delegate, Wayne Medical Society; Director for the API's Pathology Informatics Summit; and Delegate for CDC's CLIAC committee. As a charter member of the Association for Pathology Informatics, Dr. Tuthill has worked for the API from its inception serving as president, of the membership committee, education committee member, and the organization's original planning group and currently, chair, program committee.





## Myra Wilkerson, MD, FCAP

Chair, Diagnostic Medicine Institute  
Chair, Laboratory Medicine  
Geisinger Health

[mwilkerson@geisinger.edu](mailto:mwilkerson@geisinger.edu)

Myra Wilkerson is Chair, Laboratory Medicine Service Line for Geisinger. Dr. Wilkerson is responsible for oversight of all clinical and anatomic pathology laboratory services within the health system. She joined the Geisinger team in 1999 and has helped several medical directorships over Geisinger hospital laboratories as well as the vice chair for the service line. Her subspecialty areas are cytopathology, genitourinary pathology, and laboratory informatics. Her current research interests include tissue microarrays and immunochemistry of the testicular and bladder tumors. Dr. Wilkerson recently edited and contributed four chapters to a book published by the Geisinger anatomic pathology group, the Handbook of Practical Immunohistochemistry: Frequently Asked Questions. She is one of the web authors for the companion web site to this book, [www.ihcfaq.com](http://www.ihcfaq.com). Dr. Wilkerson is a past president of the Association of the Clinical Scientists and a past president of the Association for Pathology Informatics. She also currently serves on the Informatics Committee and the Clinical Informatics Steering Committee for the College of American Pathologists. She is on the editorial boards of three peer reviewed journals, the Annals of Clinical and Laboratory Science, the Archives of Pathology and Laboratory Medicine and the Journal of Pathology Informatics. Dr. Wilkerson received her undergraduate degree in Medical Technology from Marshall University, and then worked in the clinical laboratories at Charleston Area Medical Center before returning to Marshall University to earn a Doctor of Medicine. She completed a combined anatomic and clinical pathology residency and cytopathology specialty training in the PennState Geisinger Health System.



## Inti Zlobec, PhD

Professor of Digital Pathology  
Institute of Tissue Medicine and Pathology  
University of Bern in Switzerland

[inti.zlobec@unibe.ch](mailto:inti.zlobec@unibe.ch)

Inti Zlobec is Professor of Digital Pathology at the Institute of Tissue Medicine and Pathology, University of Bern in Switzerland. Originally from Montreal, Canada she obtained her PhD in Experimental Pathology from McGill University, before completing a post-doctoral fellowship at the Institute of Pathology, University Hospital Basel. There, building upon her background in histopathology, tissue-based research methods and biostatistics, her research focused on discovering and validating translational biomarkers and biostatistical modelling of clinical outcomes for colorectal cancer patients. In 2011, Inti Zlobec joined the Institute of Tissue Medicine and Pathology in Bern, where she established the Translational Research Unit, a core facility for tissue "visualisation" methods and image analysis, and later modernized and led the Tissue Biobank Bern until 2022. Now, she leads an interdisciplinary research group using computational methods to study pathology images, build tools for diagnostic clinical use and gain novel biological insights into colorectal cancers by using the latest spatial (transcriptomic and protein) tissue visualisation techniques. Inti Zlobec is Chair of the European Society of Pathology Working Group for Digital & Computational Pathology, Founder and President of the Swiss Digital Pathology Consortium (SDiPath), and Executive Team member of the Center for Artificial Intelligence in Medicine (CAIM) of the University of Bern. Website: [www.digitalpathologybern.com](http://www.digitalpathologybern.com)

## Mustafa Yousif, MD

Director of Digital Pathology  
University of Michigan

[mustafay@med.umich.edu](mailto:mustafay@med.umich.edu)



Dr. Mustafa Yousif is an Assistant Professor and the Director of digital Pathology at the University of Michigan in Ann Arbor, MI, USA. He received his medical degree from the University of Al-Mustansiriyah in Baghdad, Iraq. He completed his anatomical and clinical pathology residency training at Wake Forest University. He subsequently completed a Gynecologic and Breast Pathology fellowship at the University of Pittsburgh Medical Center and a Pathology Informatics fellowship at the Department of Pathology Informatics, University of Michigan. Mustafa is interested and has deep knowledge in pathology informatics and digital pathology. His research interests include digital pathology and artificial intelligence, as well as gynecologic and breast pathology.



## Meet the people behind JPI!



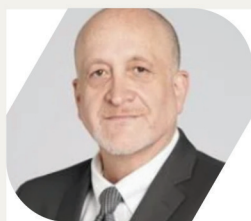
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## Publish your next manuscript with API's Journal of Pathology Informatics!



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 for Pathology Informatics (API). This journal is of interest to pathologists, informaticians, academics, researchers, health IT specialists, information officers, IT staff, vendors, and anyone with an interest in informatics. We publish all types of papers related to pathology informatics including original research articles, technical notes, reviews, viewpoints, commentaries, editorials, symposia, meeting abstracts, book reviews, and correspondence to the editors. All submissions are subject to rigorous peer review by the well-regarded editorial board and by expert referees in appropriate specialties. Peer-review process.

**Members get 30% off publication fees.**

Contact Grace Chae, PhD, Managing Editor  
[grace.chae@pathologyinformatics.org](mailto:grace.chae@pathologyinformatics.org)



# CONTINUING MEDICAL EDUCATION

## CME CREDIT INSTRUCTIONS AND OBJECTIVES

### ACCREDITATION AND CREDIT DESIGNATION



This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of the University of Michigan Medical School and Association for Pathology Informatics (API). The University of Michigan Medical School is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

The University of Michigan Medical School designates this live activity for a maximum of **20 AMA PRA Category 1 Credit(s)™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

### OBJECTIVES

- Define the rapidly evolving field of Digital Pathology and showcase associated opportunities for an expedited adoption of new workflow models leveraging machine learning, artificial intelligence, and hardware solutions
- Discuss tenets of business analytics, machine learning and computational pathology
- Identify the various software and hardware products available in the clinical laboratory and pathology market by interacting with many exhibitors
- Recognize the requirements to deploy informatics solutions in the clinical diagnostic laboratory
- Present new research in pathology informatics based on submitted competitive scientific abstracts
- Provide a forum for basic pathology informatics instruction for house officers and fellows in pathology training programs.
- Provide updated best practices in the rapidly evolving area of digital pathology primary diagnosis

### EVALUATION AND CERTIFICATE



**Attendance must be registered within 7 DAYS to be awarded credit.** Please complete the following steps to fill out the course evaluation and print your certificate:

- Login to your account at MiCME at <http://micme.medicine.umich.edu/>
- Don't have an account? Click on the 'Login or Create a MiCME Account' link at the top of the page and follow the instructions.
  - Note: You must have a MiCME account to claim credit for any University of Michigan Medical School (UMMS) CME activity
- On the Credit Center card on your Dashboard, click on Claim Credits and View Certificates.
- Locate the activity in the Activities Available for Credit Claiming section.
- Under Action, click on Claim.
- Under Action, click on Add Credit.
- Enter the number of credits you're claiming and the "I attest" button. (Note: This number should reflect credits claimed for the entire course, not just a single day.)
- Complete the evaluation form to provide feedback on the activity.
- Click the Submit button.
- Scroll down to the Awarded Credits section to view or print your certificate and/or comprehensive University of Michigan CME transcript.

For more information about this activity, contact Beth Gibson or visit [www.micme.medicine.umich.edu](http://www.micme.medicine.umich.edu).

### CME CREDITS AVAILABLE

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### DEADLINE TO APPLY



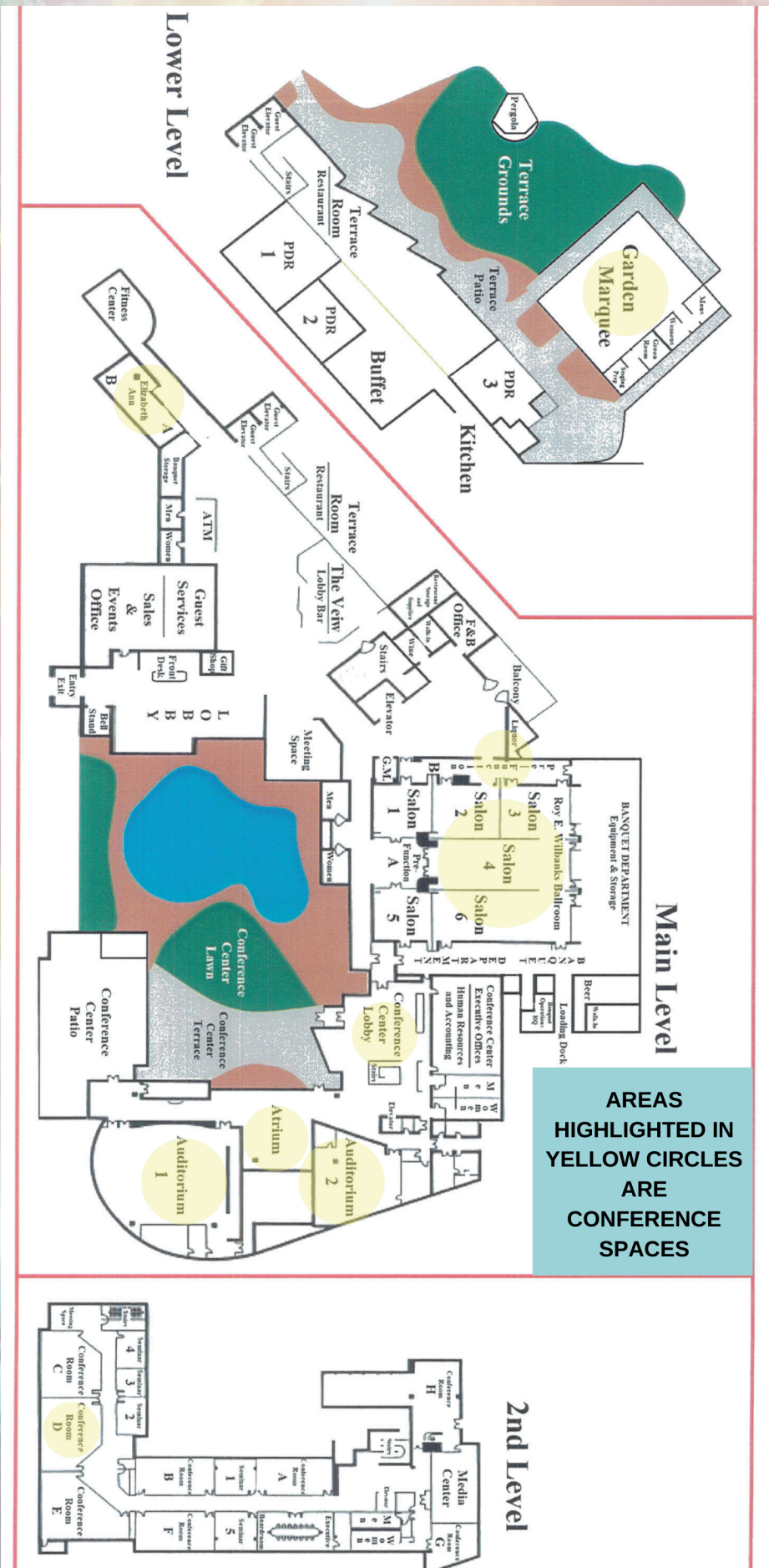
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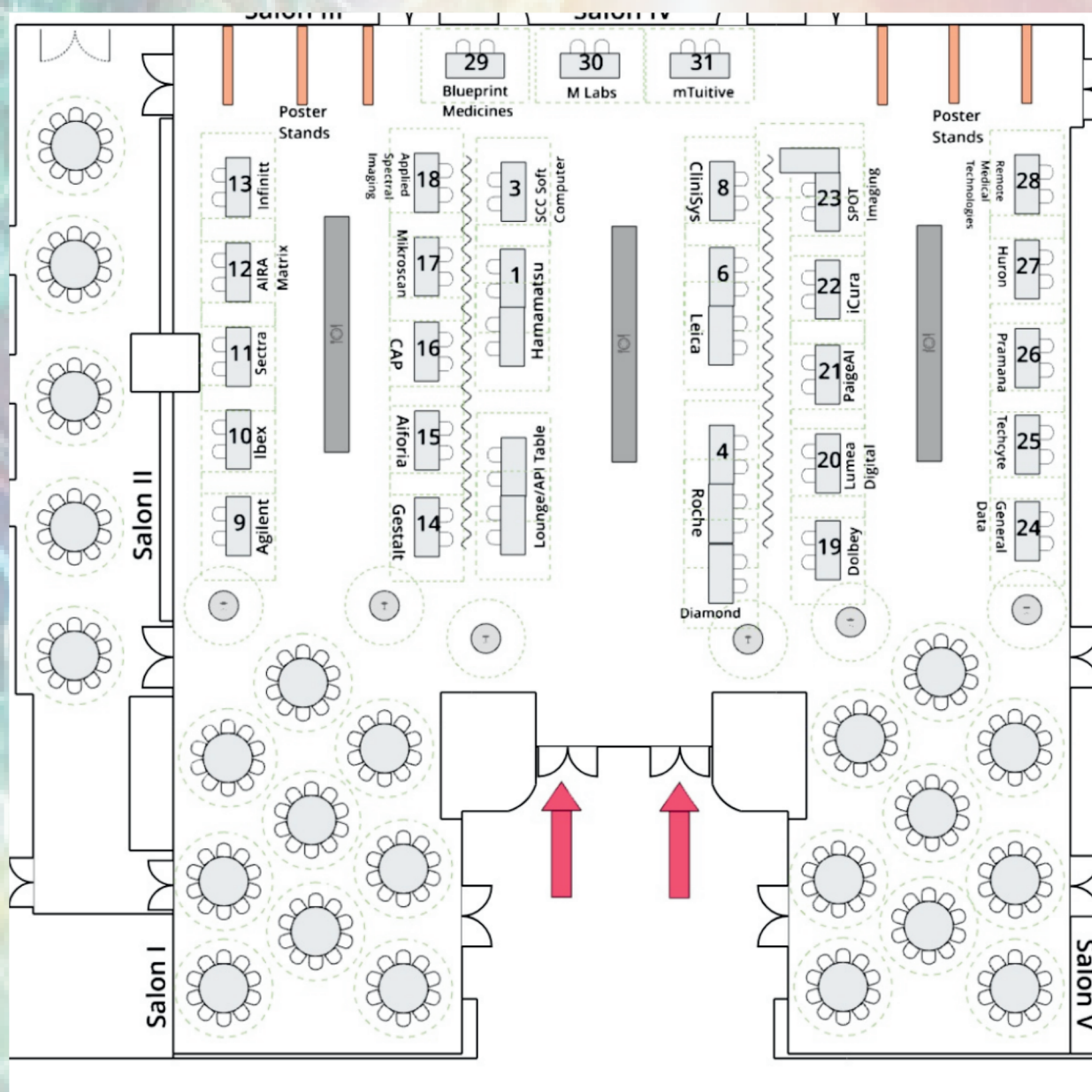
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# CONFERENCE MAP





## EXHIBITOR HALL



- |                            |                           |                                |
|----------------------------|---------------------------|--------------------------------|
| 9 Agilent                  | 1 Hamamatsu               | 31 mTuitive                    |
| 15 Aiforia                 | 27 Huron Digital          | 21 PaigeAI                     |
| 12 AIRAMatrix              | 10 Ibex                   | 26 Pramana                     |
| 18 Applied Spectral        | 22 iCura                  | 28 Remote Medical Technologies |
| 29 Blueprint Medicines     | 13 Infinitt North America | 4 Roche                        |
| 8 Clinisys                 | 6 Leica                   | 11 Sectra                      |
| 19 Dolbey                  | 20 Lumea Dig              | 3 Soft Computer                |
| 24 General Data Healthcare | 17 Mikrosan               | 23 Spot Imaging                |
| 14 Gestalt                 | 30 MLabs                  | 25 Techcyte                    |

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# JOIN



## ASSOCIATION FOR PATHOLOGY INFORMATICS

**Mission:** To promote the field of pathology informatics as an academic and a clinical subspecialty of pathology through education and training.



**Many levels of membership, including:**

**Trainee, Technical Staff, Individual, Teaching Institution, Corporate**

### What is the Association for Pathology Informatics?

The Association for Pathology Informatics (API), is a not-for-profit organization that seeks to advance pathology informatics. Pathology Informatics has been increasing in importance as the demand for, and development of, information systems and technology continue to address healthcare industry needs. Beginning with the collection, processing, and analysis of patient specimens, the field of pathology, as a whole, generates significant amounts of data that require careful interpretation and reliable distribution to fulfill the core mission of supporting patient care.

Since its founding in 2000, API has successfully carved its reputation among laboratory medicine and pathology informatics specialists as a society run by and for the people at the forefront of the field. API members seek to explore and challenge the boundaries of what is available in digital pathology, IT systems, and artificial intelligence for existing hospital and laboratory institutions. Many are deeply involved in API and much of what happens behind the scenes at API involves the “sleeves-up, hands-on” participation of institutional and industry leaders. API’s unique grass-roots collaboration has successfully launched key annual API programs like the PI Summit (spring) and the Digital Pathology and AI Workshops (DP-AI) (autumn).



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API is led by volunteers who are practicing pathology informaticists at top medical institutions and laboratories across the country. Their collective dedication to the subspecialty provides direct access to expert mentoring and training unmatched by other organizations.

### Why Choose API?

- ✓ Our leaders are experienced educators, many of whom are program/division leaders or department chairs at top medical and laboratory institutions - this means they are abreast of training needs and developments in the speciality.
- ✓ API's mission to facilitate training and education means continually developing original and cutting-edge content and workshops.

### What Does API Offer? Access to...

- API's Peer-Review *Journal of Pathology Informatics (JPI)* and discounts on publication fees
- 2 Annual Meetings:
  - Pathology Informatics Summit (PI Summit) (Spring)
  - Digital Pathology-Artificial Intelligence (DP-AI) (Fall)
- Training Workshops like R-Language Programming (Beginner and Intermediate)
- Mentors and “Mentoring Monday” Sessions About Different PI Pathways
- Fireside Chats on Topics like Technical Standards, Work-Flow Management, Case Studies, Applying to Fellowship Programs, How to Successfully Publish, etc.
- Networking Opportunities, PI-Specific Job Posts, etc.
- API List-Serv to 6,000 Members for Expert Insights at Your Fingertips

**Executive Director, Nova Smith**  
[nova.smith@pathologyinformatics.org](mailto:nova.smith@pathologyinformatics.org)



# DP-AI Registration NOW OPEN!



**API FALL MEETING: DP-AI 8.0**  
**MACKENZIE HEALTH**  
September 15-17, 2024  
Cortellucci Vaughan Hospital  
Vaughan, Canada

Photo courtesy of Mackenzie Health

The Digital Pathology-Artificial Intelligence Workshop is in its 8th year (DP-AI 8.0) and continues to emphasize the **practical** considerations for digital pathology and artificial intelligence relevant to all types of pathology practices, including unique site visits to see cutting-edge developments in action! We are excited to announce this year's workshop will be hosted by Mackenzie Health at Cortellucci Vaughan Hospital in Vaughan, Canada, just outside Toronto. This workshop will include topical presentations given by local and international experts in the field with both overviews and deep-dives into multiple aspects of digital pathology and AI implementation in a community hospital setting. **Attendees will have the opportunity to tour the first laboratory in Canada to go fully digital where all pathologists have been using digital pathology for primary diagnosis since 2021!**

API and its meetings are regarded as incubators for new ideas and technological applications facilitated by the grass-roots planning of leaders in the field. Not only does API host meetings that showcase advanced research, it also fosters a community for thought-leaders and stake-holders, practitioners and vendors, in pathology informatics to explore and challenge the boundaries of what is available in digital pathology, IT systems, and artificial intelligence for existing hospital and laboratory institutions. API appreciates that progress is made through close partnerships with the vendor community and leading pathologists and researchers uniquely positioned to identify, implement, and promote cutting-edge projects. **Come share your experiences and see first-hand what is possible!**



Questions? Contact: Grace Chae at [grace.chae@pathologyinformatics.org](mailto:grace.chae@pathologyinformatics.org)  
or Nova Smith at [nova.smith@pathologyinformatics.org](mailto:nova.smith@pathologyinformatics.org)



  **PI SUMMIT 2025**  
**MAY 19 - 22, 2025**  
**ANN ARBOR, MI - MARRIOTT EAGLE CREST RESORT**



 **PI SUMMIT 2026: MAY 18-21, 2026**  
**PI SUMMIT 2027: MAY 17-20, 2027**  
**RENAISSANCE MINNEAPOLIS HOTEL, THE DEPOT**