Winter 2025
#103

the Pathologist®

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the Pathologist
POWER List

Leading Voices EDITION

Thought-provoking answers to the field's biggest questions – and a celebration of those shaping its future

11 – 22

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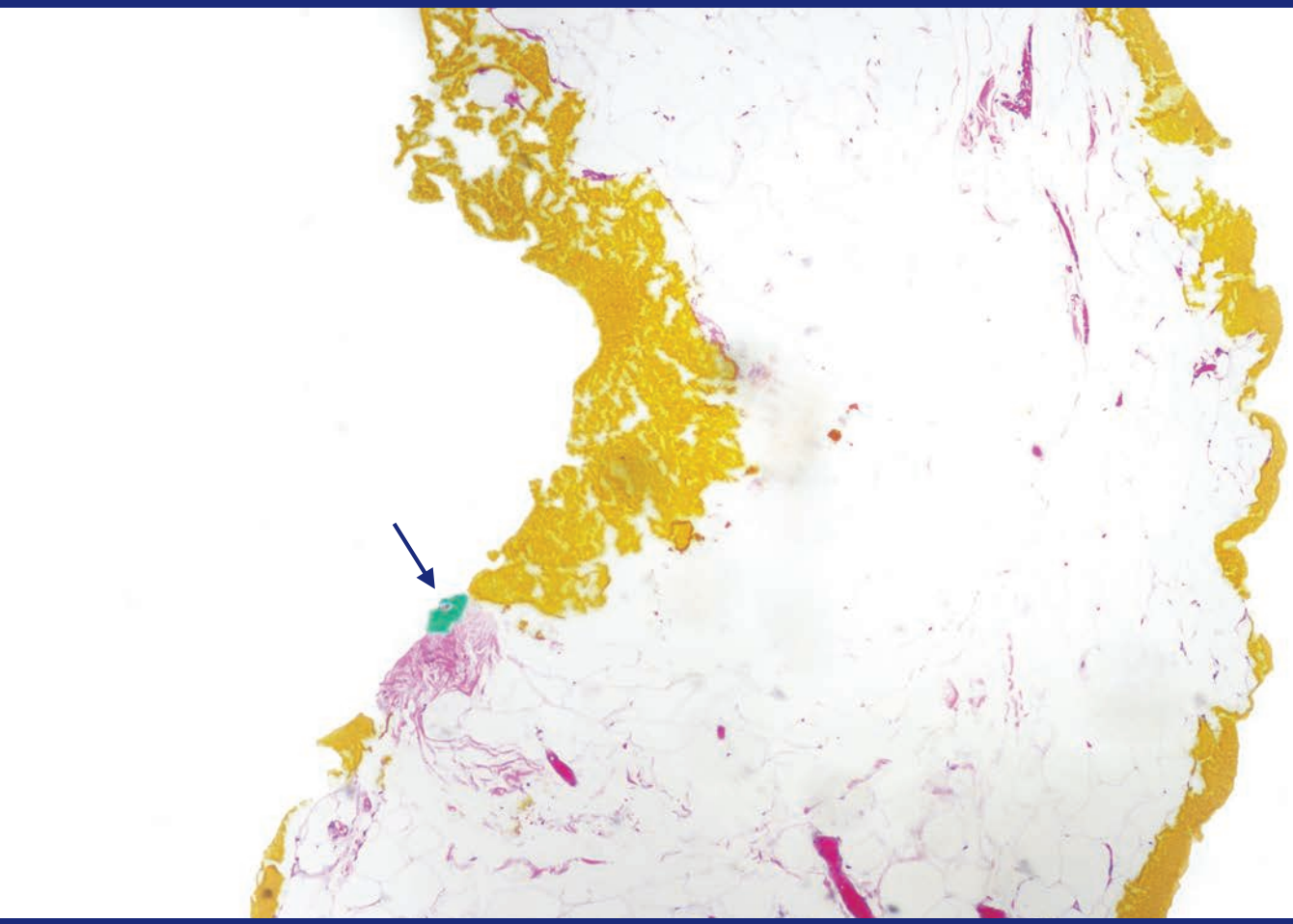
Lumidex™ PATH

Biopsy Marking Dye

Protect the Fidelity of Specimen Information



Lumidex PATH Biopsy Marking Dye is a novel method to mark small and minute (<0.5 mm) diagnostic tissue such as prostate cores, breast cores, gastrointestinal biopsies and other solid tissue biopsies. **Lumidex PATH** can help prevent error in specimen handling.[1] The image above shows yellow **Lumidex PATH** applied to benign breast tissue. Evidence of contamination is easily identified by the malignant breast cells marked with green **Lumidex PATH** (arrow).

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 | References (1) Demetrick DJ. Molecular auditing: an evaluation of unsuspected tissue specimen misidentification. *Arch Pathol Lab Med.* 2018;142(11):1407-1414. | SM-112

Who are the Leading Voices in Laboratory Medicine?

…and what can we learn from them?

Amidst a sea of challenges in health care, this year's Power List celebrates those individuals who are finding solutions and inspiring others to do the same. This Leading Voices edition empowers the problem-solvers of laboratory medicine to (metaphorically) shout about their work in their own words.

Collectively, their work is responsible for creating – in the words of Barnali Das – "a paradigm shift from Unsung Warriors in Lab Coats to Leaders in the Health Care Ecosystem." Varsha Manucha and Amit Gokhale, for example, explain how they are leading drives towards patient-facing diagnostics and consultations. Recognizing a common perception of the laboratory as the "black box" of secondary care, Gokhale says, "Through my hemotherapy service, I've shown how pathologists can step out of that box and into direct patient care."

Visibility via innovation is also a strong theme this year. Many entrants described how their innate problem-solving instincts led them to advance technology in the lab. Malak Althgafi summarizes this drive, saying, "I believe we must create the tools we wish existed – especially when existing systems are too slow to adapt."

Other finalists are leveraging new technologies to advance the profession in low resource settings. Ahmed Kalebi, Talat Zehra, and Xiaorong Sun all highlight their efforts in lab transformation in lower-income countries. Kalebi's mission is clear: "To advance laboratory medicine in Africa so that diagnostics are accessible, affordable, and of the highest quality – rivaling global standards."

Explore more insights from the finalists on page 11.

Helen Bristow,
Editor

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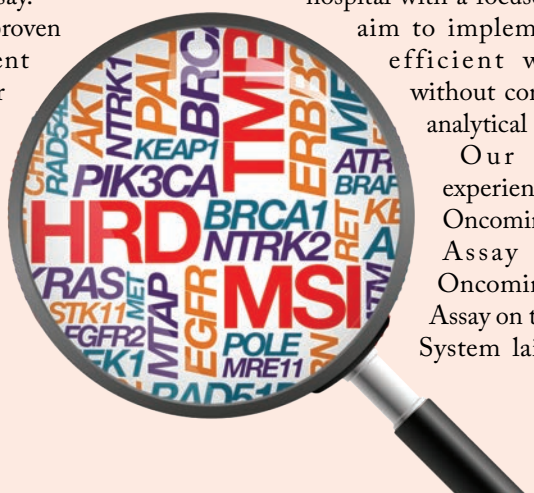
Optimizing the Molecular Workflow in the Research Lab

In conversation with Sebastian Dintner, Head of Molecular Pathology at the Institute of Pathology and Molecular Diagnostics, University Hospital Augsburg, Germany, on his experience with the Oncomine Comprehensive Assay on the Genexus System

What is the focus of your laboratory, and how does next-generation sequencing (NGS) fit into the molecular workflow?
As one of Germany's most recently founded university hospitals, established in 2019, we specialize in comprehensive molecular profiling of solid tumors and hematologic neoplasms.

Initially, we implemented a hybrid-capture-based NGS approach for genomic profiling of tumor research samples. However, we faced logistical limitations due to the complexity and batching requirements of high-throughput assays. To increase flexibility and turnaround speed, we adopted Thermo Fisher Scientific's Ion Torrent™ Genexus™ System, integrating the Oncomine™ Precision Assay and the Oncomine™ Myeloid Research Assay.

This platform has proven to be highly efficient in our molecular workflow. We currently perform up to five NGS runs per week on the Genexus System with minimal hands-on time and rapid turnaround times.



Which cancer types necessitate the use of comprehensive genomic profiling (CGP) in your laboratory for research purposes?
We apply CGP across a broad spectrum of tumor types, including colorectal, melanoma, breast, ovarian, pancreatic, and prostate cancers, non-small cell lung cancer, and cancers of unknown primary. CGP provides valuable insights when smaller panels yield no relevant variants or when we are dealing with rare or complex tumor entities.

What interested you about the Oncomine Comprehensive Assay Plus on the Genexus System?
Automation and turnaround time were key drivers in our evaluation process. Given our structure as a young university hospital with a focused team, we aim to implement highly efficient workflows without compromising analytical depth.

Our positive experience with the Oncomine Precision Assay and the Oncomine Myeloid Assay on the Genexus System laid a strong foundation. Now that the Oncomine™ Comprehensive Assay Plus is available, we're excited to explore its potential to deliver broad genomic profiling with minimal hands-on time and no need for batching.

A major benefit of this amplicon-based CGP approach is its ability to deliver robust results from limited input material

"CGP provides valuable insights when smaller panels yield no relevant variants or when we are dealing with rare or complex tumor entities."

"The high level of automation significantly reduces hands-on time and enables us to allocate more focus to thoughtful analysis of the results."

– a common challenge in prostate cancer and other tumor types. In contrast to hybrid-capture-based NGS assays, which often require higher input, the Oncomine Comprehensive Assay Plus allows us to include samples that would otherwise be excluded.

Which features of the Oncomine Comprehensive Assay Plus most enhance your molecular workflow?
In our first runs, the workflow has been remarkably straightforward. The setup takes less than 20 minutes, after which the Genexus System handles the entire process autonomously over 30 hours.

The fully integrated software environment streamlines data analysis and reporting, including visualization of complex genomic alterations like tumor mutational burden, microsatellite instability, genomic instability metric, copy number changes, and mutational signatures. This stands in contrast to other platforms that often require multiple manual steps and additional bioinformatic tools.

Even more impressive was the assay's performance with low-input samples – we successfully sequenced three cases with DNA concentrations as low as 1 ng/µl, and the results were consistent with orthogonal methods. This underlines the assay's robustness and future clinical utility in challenging cases.

How would you summarize your experience with the Oncomine Comprehensive Assay Plus on the Genexus System?
Our initial experience with the assay has been very promising. The high level of automation significantly reduces hands-on time and enables us to allocate more focus to thoughtful analysis of the results. We see great potential in the system's ability to deliver comprehensive genomic information within a short timeframe – making it a valuable addition to our molecular workflow.

Learn more about the Oncomine Comprehensive Assay Plus at thermofisher.com/oncomine-ocaplus

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From Glass to Cloud: The Next Leap for Pathology

It's time to embrace new platforms to close workforce gaps and improve diagnostic consistency

By John Groth, Pathologist at Endeavor Health, Illinois, USA

Pathologists play a key role in accurate diagnoses, treatment plans, and ultimately, patient outcomes. But despite how important our work is, most of us rely on tools and workflows that are stuck in the past.

Glass slides and light microscopes – largely unchanged for more than a century – remain central to anatomic pathology. While reliable, these methods have limitations that affect not only the speed of diagnosis but also collaboration with clinicians and communication with patients. Traditional pathology workflows are slow and cumbersome; for example, physical slides must be shipped for consultations, stored in bulky archives, and reviewed manually. These steps also make it harder to share results seamlessly with other clinicians or to involve patients in their diagnostic journey. The question is: how can we preserve the strengths of established methods while also taking advantage of the opportunities digital technology now provides?

Moving toward digital pathology is not just about upgrading microscopes or scanners. It should represent a full shift in how we approach diagnosis and collaboration. In recent years, pathologists have increasingly adopted digital platforms that allow whole-slide imaging, cloud-based storage, and remote access. My own institution recently launched such a system in partnership with Google Cloud. Cloud platforms hold promise for faster, more accurate diagnoses – especially when combined with AI – and for improved communication across specialties, regardless of location.

This transition mirrors what radiology underwent a few decades ago, when the field moved from film-based X-rays and physical printouts to fully digital imaging stored in picture archiving and communications systems (PACS). That shift transformed radiology, improving efficiency, image quality, and collaboration with the wider care team. Pathology now stands at a similar crossroads, and the lessons learned in radiology – adopting new technologies while reshaping workflows – can help guide the way forward.

Switching to digital pathology comes with challenges. Interoperability between systems, agreement on data standards, and integration into existing workflows remain significant hurdles. Pathology images are large and complex, so secure and efficient sharing is essential. Implementing these tools also requires training for staff and close collaboration with IT and clinical teams.

From a clinical perspective, digital pathology could also enhance patient engagement. Traditionally, patients have had limited access to their pathology results beyond what physicians communicate. Digital platforms could change this by allowing patients to view their images, ask questions directly, and gain a clearer understanding of their diagnosis. Greater transparency may build trust and improve satisfaction, but it also requires careful communication to ensure findings are explained clearly and sensitively.

In my view, however, one of the greatest advantages of digital pathology is scalability. Digital platforms make it easier to share cases across departments and institutions, giving smaller or resource-limited laboratories access to expert opinions without geographic barriers. Cloud-based systems can handle large volumes of data and users, supporting growth without the need for extensive local infrastructure. This enables laboratories to process more cases efficiently – an important consideration given the rising demand for pathology services and the shortage of active pathologists. Greater scalability could help address workforce gaps, shorten turnaround times, and improve diagnostic consistency across regions.

Moving to digital pathology requires more than new technology. It calls for cultural and organizational change in how we work. Success will depend on leadership within the pathology community, strong collaboration with technology partners, and a commitment to thorough validation and standards.

This is a pivotal moment for our field. By embracing digital tools thoughtfully, pathologists can strengthen accuracy, collaboration, and patient care – ensuring that pathology remains vital, adaptive, and patient-centered well into the future.

Breaking Silos, Building Futures

Uniting every member of the lab team for an event where groundbreaking science, shared challenges, and collaboration take center stage

By Gregory Sossaman, President of the American Society for Clinical Pathology

The ASCP Annual Meeting is one of the most significant events for pathologists, laboratory professionals, and residents from the US and beyond. This year promises to be particularly momentous, with two of the most iconic figures in biomedical science, Francis Collins and Craig Venter, headlining the keynote sessions.

Collins and Venter have played pivotal roles in the revolution of genomic medicine and modern biomedical research, and their appearances at the Annual Meeting in Atlanta this November, offer a chance to hear directly from the pioneers who helped map the code of life. They have been passionate advocates for personalized healthcare and have successfully bridged the gap between the laboratory and public leadership.

Having both of these leaders in the same space underscores just how vital our disciplines are in the future of healthcare. No doubt they will inspire us, and help set the tone for the meeting, but let's not forget that the underlying strength of the ASCP Annual Meeting lies in its community and breadth of opportunities to learn and meet the people who, like you, are essential in shaping the future of patient care.

The ASCP Annual Meeting breaks down the barriers that so often can keep us siloed, bringing together all members of the laboratory team, from medical students, to those new in practice, to seasoned experts. It's a time to collaborate, and to have conversations that spark ideas, solutions, and open doors. These interactions can invigorate your professional outlook and expand your sense of possibility.

One of the things that has always struck me about the ASCP Annual Meeting is the energy that people bring: robust dialogue in panel discussions, conversations and connections between sessions or over coffee, and a busy expo floor. All of it combined is a reaffirmation that pathology and laboratory medicine are not background disciplines, they are central to the delivery of effective, modern healthcare. It is a reminder to share our mission to provide accurate diagnoses, enable effective treatments, and provide high-quality care for our patients. It is also a reminder that we are not alone in that mission. We are one part of a whole, working toward the same goals, facing similar challenges, and asking the same questions.

Whether you're seeking to deepen your expertise, build your network, or simply be reminded of why you chose this path in the first place, this is the place you need to be – I hope you'll join us in Atlanta this November.

"It's a time to collaborate, and to have conversations that spark ideas, solutions, and open doors. These interactions can invigorate your professional outlook and expand your sense of possibility."

Pathology's Precision Oncology Mandate

The expanding role of pathologists as stewards of precision medicine for bladder cancer

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By Eva Compérat and Markus Eckstein

In the past, therapeutic choices for patients with bladder cancer were limited. While patients with superficial bladder cancer often endured repeated cystoscopies and surveillance procedures, which are both burdensome and costly, those with advanced bladder cancer were usually offered only chemotherapy. Today, precision medicine advances have identified biomarkers that are driving innovation in both diagnostics and drug development for superficial and advanced stages of bladder cancer.

Advances in next-generation sequencing (NGS) have revealed distinct molecular profiles in non-muscle-invasive bladder cancer (NMIBC), muscle-invasive bladder cancer (MIBC), and both locally advanced (LA) and metastatic urothelial carcinoma (mUC) with therapeutic relevance – including FGFR, HRAS, ERBB2, PIK3CA, and TP53 (1,2). Each of these alterations may potentially correspond to unique pathogenic pathways – and be associated with varying prognoses.

Therapeutic innovations such as antibody-drug conjugates, PD-1 and FGFR inhibitors will continue to transform the treatment landscape for patients with NMIBC, MIBC, and LA/mUC. In the metastatic setting, molecular testing is already a requirement for selecting patients eligible for targeted therapy after progression on immunotherapy.


Eva Compérat


Markus Eckstein

Guidelines highlight the increasing role of biomarker-driven precision medicine

In Europe, bladder cancer testing guidelines such as those from ESMO and The European Association of Urology include (3,4):

- Applying PD-L1 testing to support decision making for:
  - first-line therapy in patients with metastatic bladder cancer if platin ineligible
  - adjuvant nivolumab treatment following radical cystectomy in curative intent.
- Testing for susceptible FGFR3 gene alterations in patients with mUC or unresectable tumors, ideally upon progression to first-line standard of care.
- The use of HER2 overexpression status to guide treatment decisions in metastatic disease.
- The importance of a multidisciplinary approach to patient care, alongside the need for shared decision-making to ensure treatment choices reflect both clinical and personal priorities of patients.

These guidelines indicate we're at a critical point where patient needs, industry guidelines, and biomarker breakthroughs are converging for a new era of precision-based approaches in bladder cancer treatment.

The evolving precision medicine landscape

Despite significant advances in the molecular characterization of bladder cancer, many unanswered questions remain. Along with variation in how biomarkers appear and behave between patients, there are gaps in our understanding of their ability to guide care. This has led to disparities in testing protocols across the European region.

Another pressing challenge is diagnostic turnaround time. In advanced bladder cancer, patients are often under intense therapeutic pressure. Waiting two to four weeks for NGS results can be a critical delay in a disease where every week matters, especially if visceral metastases are present or the overall metastatic burden is very high.

And, while precision medicine advancements are exciting, they require clinicians to navigate an increasingly intricate landscape. This is where pathology plays a pivotal role: ensuring that the right test is performed, interpreted, and communicated so that patients receive the appropriate therapy.

Pathology: leading the way in personalized care

Pathologists play a vital role in recognizing and understanding the implications of actionable genetic mutations. Looking ahead, it will be crucial to consult pathology early in the development and implementation of personalized medicine strategies, ideally in the phase of early clinical development.

In the clinic, strong communities comprising oncologists, urologists, and pathologists advocating for fairer reimbursement, while also pooling resources – for example, by funding shared sequencing facilities – could significantly reduce the costs of genetic biomarker testing. This, in turn, would make it easier to justify testing expenses to regulatory agencies – which, overall, are much lower compared to very high drug costs.

There is also a real need to reach out to smaller hospitals and community settings, where awareness and resources may be

"In the clinic, strong communities comprising oncologists, urologists, and pathologists advocating for fairer reimbursement, while also pooling resources – for example, by funding shared sequencing facilities – could significantly reduce the costs of genetic biomarker testing."

limited. Bringing pathology expertise and education into these environments will help ensure that all patients – no matter where they are treated – benefit from advances in personalized care and can be treated according to current standard of care.

The precision medicine model is well established for patients with breast and lung cancer (5, 6), where companion diagnostics are widely understood and pathologists are frequently involved as integral parts of (molecular) tumor boards. These successes show that best practice in biomarker testing depends not only on the scientific validity of a marker, but also on how seamlessly it can be integrated into existing pathology workflows.

The route to enhanced personalized care

To improve accessibility to biomarker testing, building greater testing capacity could be the way forward. High-volume centers can process samples more efficiently, filling sequencing machines faster and reducing turnaround times compared to smaller laboratories.

At the same time, there may be value in implementing rapid, lower-cost testing modalities alongside NGS. For example, for certain biomarkers with defined variants of interest, PCR-based assays can deliver reliable results quickly.

Other questions arise around whether reflex testing should be implemented – that is, performing molecular testing automatically on every patient with advanced bladder cancer at diagnosis, rather than waiting for a clinician to request it. Though cost and workforce must be considered, reflex testing can save valuable time, allowing clinicians to initiate targeted therapy sooner.

There are also promising initiatives exploring liquid biopsy testing in some European countries. As NGS technologies become more sensitive, liquid biopsy will likely become more widely used. For now, however, it is generally viewed as a complementary tool to tissue-based testing rather than a replacement, and comes along with own limitations, such as non-ctDNA-shedding tumors.

AI-driven multi-omics and data integration approaches may significantly accelerate the identification of therapeutic vulnerabilities in cancer – greatly accelerating drug development. For this reason, education must be central to pathology's role in precision medicine.

The bladder cancer forecast

The future of personalized care in advanced bladder cancer will require speed, collaboration, and education. By strengthening infrastructure, embracing rapid testing alongside comprehensive sequencing, and embedding pathology more deeply into multidisciplinary care, the field can move closer to delivering timely, accurate, and individualized treatment for every patient.

In short, pathology will remain the foundation of diagnosis while also leading the integration of new testing approaches. To succeed, we must combine technical rigor with ongoing education. Only then will we ensure that every patient has access to timely, personalized care, and, therefore, optimal treatment outcomes.

Eva Compérat is Chair of Uropathology at the Medical University of Vienna, Austria.

Markus Eckstein is Managing Senior Physician and Research Group Leader at the Institute of Pathology, University Hospital Erlangen, Germany.

References

1. *M Ferro et al., "Emerging biomarker in bladder cancer: translating molecular advances into precision oncology," Crit Rev Oncol Hematol, 215 (2025). PMID: 40712901.*
2. *L C Kompier et al., "FGFR3, HRAS, KRAS, NRAS and PIK3CA mutations in bladder cancer and their potential as biomarkers for surveillance and therapy," PLoS One, 5, 11 (2010). PMID: 21072204.*
3. *EAU, "EAU Guidelines on Muscle-invasive and Metastatic Bladder Cancer" (2025). Available at: https://uroweb.org/guidelines/muscle-invasive-and-metastatic-bladder-cancer.*
4. *T Powles et al., "Bladder Cancer: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up," Ann Oncol, 33, 3 (2022). PMID: 34861372*
5. *H Jeon et al., "Update 2025: Management of non-small-cell lung cancer," Lung, 203, 1 (2025). PMID: 40133478.*
6. *A T Jacobs et al., "Targeted therapy for breast cancer: an overview of drug classes and outcomes," Biochem Pharmacol, 204 (2022). PMID: 35973582.*

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the Pathologist

POWER List

Leading Voices EDITION

If The Pathologist intends to give a voice to the laboratory medicine community, then perhaps its annual Power List should be less about power and more about ideas and action.

In that spirit, we've turned the 2025 Power List on its head. Instead of the usual nominations process, we've invited entrants to respond directly with their insights on one of five burning questions for the field.

So, who are the Leading Voices in pathology in 2025? The 50 faces on the following pages – selected blind by a panel of your peers – represent some of the big ideas and bold initiatives that are moving the profession forwards.

What follows are curated excerpts to whet your appetite; to read each essay in full, simply scan the QR code below.

Read the full-length essays online – and vote for your favorite!

What's the biggest challenge facing your specialty right now, and how are you addressing it via leadership?

Alan Rampy
Texas, USA

The growing shortage of pathologists is the greatest challenge facing our specialty. By embedding pathology throughout the curriculum and providing mentorship and exposure, I hope to increase awareness and enthusiasm for our field – and in doing so, help address the workforce shortage through education, advocacy, and outreach.

Andrew Janowczyk
Switzerland

Pathology stands at a pivotal crossroads in modern medicine, with digital tools offering unprecedented potential to improve diagnostic accuracy, efficiency, and patient outcomes. Yet few have successfully transitioned into routine clinical use. This gap – between innovation and implementation – led us to examine the barriers to translation in depth.

Constantine Kanakis
Illinois, USA

In Illinois, I have positioned myself as a liaison between transfusion medicine and state, local, and national EMS/trauma societies to ensure effective communication. Working closely with the Illinois Department of Public Health, we are addressing regulatory hurdles and streamlining approval processes for pre-hospital transfusion programs. This work reflects the growing intersection of transfusion medicine and public health.

Fiona Maclean
Australia

It is vital that we prioritize peer support and create environments that foster resilience. Effective leadership is not about standing alone but about lifting others, creating space for growth, and working for the greater good.

Equally important is ensuring that under-resourced settings are not left behind. AI has the potential to expand access to pathology services in these regions.

Marilyn Bui
Florida, USA

I am proud to have established two academies – the Digital Anatomic Pathology Academy and the Precision Medicine Academy – as part of my leadership legacy with the DPA and FSP. They provide limitless opportunities for pathologists to learn, teach, network, and grow – ensuring our profession remains current, competent, and prepared to deliver the highest quality patient care.

Marisa James
Kansas, USA

Today, many long-standing programs face serious challenges in recruiting qualified directors and faculty. Without them, programs risk closure.

As a former Medical Laboratory Science Program Director, ASCP Career Ambassador, and NAACLS volunteer, I understand these challenges firsthand. My passion for the profession – and for supporting those who educate the next generation – now fuels my work at NAACLS. I focus on empowering program directors, strengthening existing programs, and supporting the development of new ones.

Rohit Jain
India

I am a pathologist practicing in India for the past 17 years, and for the last 13 I have been actively involved in policy development for laboratories. One of the greatest challenges facing pathology in India is widespread quackery in diagnostics, which contributes to inaccurate lab reports at every stage – from pre- to post-analytical – affecting a population of 1.4 billion.

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Steven Springer
Arizona, USA

One of the most valuable leadership lessons I've learned came from a mentor: "Your candle doesn't burn any dimmer by lighting another – it only shines brighter." This ethos drives my approach today as I work to share opportunities, open doors, and guide the next generation of laboratory professionals – so that our field can shine brighter together.

Syed T. Hoda
New York, USA

Over the past year, I've been totally modernizing the NYU language pathology program by making it fully digital – meaning no glass slide distribution. This is a unique thing for any program in the United States. I was told it couldn't be done, that we're just going to have a hybrid approach where it's part glass, part digital. Not true at all!

Watch Syed's video entry here

Theodore T. Brown
Arkansas, USA

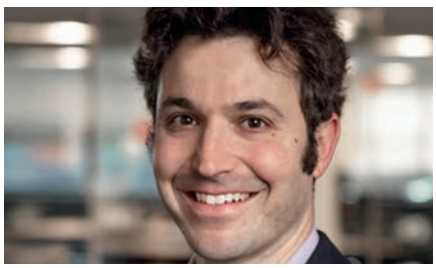
With ASCP leadership, we are beginning work to identify where students who match into pathology come from. By combining surveys, existing data, and input from residency programs, we aim to create a heat map that highlights "hot spots" and "deserts" in pathology recruitment. We will also study the structure, timing, and delivery of pathology education, as well as opportunities for mentorship, research, and clinical exposure.

Why should pathology be repositioned as the leader of modern medicine, and what have you done to raise the profile of the speciality?

Alae Kawam
New York City, USA

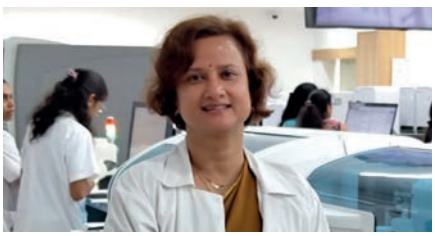
To raise the profile of pathology, I've looked far beyond the lab, drawing insights from sources like Gallup and The Wall Street Journal that explore how "human problems" impact performance. But these perspectives often reduce wellness to productivity. True purpose, growth, and meaning are rarely the focus.

This disconnect became a mission for me. I asked: How do we find balance in a world designed to do the opposite? I started with the laboratory…



Andy Beck
Massachusetts, USA

The future of medicine depends on getting the right answers, at the right time, for the right patients. No field is better equipped to deliver that clarity than digital pathology. But recognition must catch up to reality. Through innovation, partnership, and a commitment to excellence, I am proud to help lead that shift in my role as CEO of PathAI.



Barnali Das
India

During COVID times, we were unsung lab warriors as we often worked behind the instruments, laptops, or microscopes. Yet our oversight underpins accurate evidence-based treatment plans, antimicrobial stewardship, and healthcare safety. Therefore, there is a paradigm shift from Unsung Warriors in Lab Coats to Leaders in the Health Care Ecosystem.

AKT1, BRAF, PTEN, RET are tumor profiling biomarkers

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* Timing varies by number of samples and type of run.

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Blessing Oyeleye

Nigeria

After graduating, I expanded my mission globally by founding the Pathology Awareness Foundation (PAF), a non-profit organization dedicated to promoting the value of pathology. At PAF, we bridge the gap of disinterest by highlighting how pathology underpins and connects with every field in healthcare. We do this through workshops, campaigns, outreach, and mentorship programs.

Today, PAF has teams of ambassadors in Nigeria, India, and Cameroon, all working to promote pathology in their communities and inspire students to consider it as a specialty. Some of our recent initiatives include campaigns on the role of pathology in zoonosis and public health, as well as exploring the different subspecialties within pathology.

Deeksha Sikri

North Carolina, USA

I advocate for and represent pathology's voice in the curricular chorus. Appreciation for the field must begin early, not in a subspecialty elective.

I am working towards a shared, open-access resource hub for educators and learners to help them navigate similar curricular challenges. The colors of disease will continue to shift, and our task as educators is to translate them into lifesaving action by turning pictures into stories – across disciplines, from the first day of training.

Iris Barshack

Israel

Driven by a deep commitment to innovation, I have led efforts to incorporate artificial intelligence into diagnostic pathology. In collaboration with academic laboratories and technology start-ups, we have developed advanced machine learning algorithms that operate directly on scanned pathological slides to identify molecular markers and predict treatment response, especially in the context of non-small cell lung cancer. These tools have been implemented into laboratory routines, significantly reducing diagnostic turnaround times and facilitating faster therapeutic decisions.

Malak Althgafi

Massachusetts, USA

As one of the few female pathology chairs in the United States, I remain focused on pushing boundaries: integrating pathology into value-based care, strengthening educational pipelines, mentoring the next generation, and expanding our reach through digital and molecular platforms.

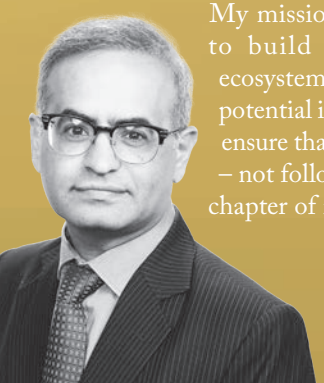
My influence style has always been through storytelling. I encourage colleagues to share the stories behind the slides. Pathologists do so much for patients – but unless we tell those stories, no one will ever know.

Rajendra Singh

New Jersey, USA

We are entering an era where pathology can not only diagnose – it can predict, personalize, and even guide therapeutic decisions in real time. With each innovation, we move closer to repositioning our field as the true engine of modern healthcare.

My mission remains clear: to build the tools and ecosystems that transform potential into progress, and ensure that pathology leads – not follows – in this next chapter of medicine.



Saswati Das

India

To me, pathology is the connection between medicine, science, and society. It has the potential to forecast disease before it manifests, inform the public before health crises emerge, and adapt technologies for both deep space and underserved remote communities. My mission is to reposition pathology not just as a diagnostic discipline, but as a strategic engine of innovation, sustainability, and digital health.

Swikrity Baskota

California, USA

The future of medicine is diagnostic, data-driven, and deeply dependent on pathology. To secure its rightful place, we must reshape perceptions.

To elevate the field, I founded MatchToPath.com – a first-of-its-kind platform designed to inform, inspire, and guide medical students toward careers in pathology.

MatchToPath connects aspiring pathologists with mentors, programs, and residents, offering a supportive space to share experiences, ask questions, and learn.

What gaps in technology/training/processes concern you most, and how are you addressing them via innovation?

Ahmed Kalebi
Kenya

At Garissa, I encountered a profound challenge. Basic tests such as full blood counts and liver or kidney function tests were unavailable. Equipment was broken, reagents depleted, staff demoralized, and clinicians distrusted the lab. Reviving it required more than technical knowledge – it required leadership, advocacy, and community engagement. By working with the hospital's management team, lobbying for resources, and rebuilding clinicians' trust, I transformed the lab within three months into a functioning center of excellence.

Bamidele Farinre
UK

For me, this work is more than a career; it is my purpose. Yes, progress can be slow, and advocacy can be exhausting. But change begins with a seed. Through every act of mentorship, visibility, and advocacy, I continue to plant seeds of transformation. Even if I don't see every tree grow, I know I am helping to create a forest that will flourish for others.

Cullen Lilley
California, USA

As a pathology resident, educator, and co-founder of PathElective.com, I've seen how digital tools can transform learning by improving access, flexibility, and engagement. Built during the early days of the COVID-19 pandemic, PathElective quickly grew into a global resource with more than 25,000 users across 100+ countries. That experience revealed both the potential of digital innovation and the reality that we've only scratched the surface.

Fatma Alzahraa A. Elkhamisy

Egypt

To connect theory with clinical practice, I introduced real-world applications into the curriculum. Students participated in "guess the disease" challenges with virtual patients, interactive case videos, role-plays, case-based learning, and even medical TV series. Project-based activities included reflective writing, pathology memes, and public health awareness events linking classroom knowledge to community health.

Olaleke Folaranmi

Nigeria

When my center started a dermatology service but lacked a dedicated dermatopathologist, I drew motivation from leaders I followed online, such as Philip McKee and Jerad Gardner. Their work inspired me to pursue dermatopathology and invest in high-quality imaging tools to share cases more effectively. My efforts eventually caught the attention of the University of Michigan Department of Pathology, whose Daily Diagnosis Challenge on X became a cornerstone of my learning. Their media team later profiled my journey in "Education Beyond Borders."

Matthew Goldberg

New York, USA

Innovation is about more than creating new tests – it is about redefining the laboratory's role in modern medicine. By pinpointing where histopathology falls short prognostically, and where molecular diagnostics add clarity, we are helping reshape care pathways to be more precise, evidence-driven, and patient-centered.

Our commitment – rooted in science, guided by clinical need, and supported by education and policy engagement – is how we are addressing critical gaps in laboratory medicine and shaping the future of personalized care.

Rama Gullapalli

New Mexico, USA

I firmly believe that pathology, at its core, is an information management specialty within healthcare. I first had this realization in 2001, at age 26, when I came to the United States to pursue a PhD in Immunology at Penn State. Finding immunology less rewarding from a data perspective, I shifted to engineering, earning a master's in optical engineering and a PhD in bioengineering. The idea I carried back then – that healthcare could benefit from a more quantitative approach – has paid off immensely.

Soufiane Z. Azdad

France

Realizing that the traceability of the fast food I ordered was technologically superior to what I had in the lab for patient safety deeply frustrated me. I told myself, "we must do better than this."

So I took an unorthodox path. I set aside my medical career to tackle these issues head on.

Watch Soufiane's video entry here

Talat Zehra

Pakistan

In our own work, we sought to push forward using the resources available. By connecting simple cameras to microscopes, we digitized slides at various magnifications to capture regions of interest. These images were then applied to education, research, and knowledge-sharing efforts. We used open-source tools to stitch images into whole-slide formats and applied AI models for tasks such as mitosis identification. Despite limited resources, these projects demonstrated that innovation is possible outside high-income settings.

Xiaorong Sun

China

To me, the AI cloud platform is more than technology – it is a bridge to health equity. Our work has been recognized by China's National Health Commission. But the most meaningful achievement is knowing that we have helped prevent cervical cancer in tens of thousands of women who once had no access to screening.

What needs to change in order to maximize pathology's impact on patient care, and how has your work advanced patient impact?

Aadil Ahmed

Illinois, USA

I teach my mentees and junior colleagues that microscopic descriptions can be detailed, but the comment must deliver the exact actionable message. This approach empowers clinicians and clarifies next steps. I make it a priority to reach out regularly to referring physicians – not just to answer questions but to anticipate them. By being proactive and informed about treatment pathways, we become true partners in patient care rather than passive report generators.

Amit Gokhale

Texas, USA

Through my hemotherapy service, I've shown how pathologists can step out of that box and into direct patient care. By being present in the OR, making intraoperative and postoperative testing and transfusion recommendations, and engaging in multidisciplinary rounds, I demonstrate pathology's active role in patient outcomes. Patients and colleagues alike value this visibility and involvement.

Elaine Cloutman-Green

UK

My work focuses on co-creating with patients to recognize their voice and impact. To acknowledge that they have key insights into how our services are delivered, and to undertake patient engagement activities, both working with patients, but also to train healthcare staff in order to develop their own practice. Thus benefiting the system and creating legacy practice.

João Martins da Gama

Portugal

Essay submitted by a third party

Let's imagine that Surgical Pathology is a living organism and in order to maximize its impact on healthcare, we need to start with the structure. In other words, taking care of its musculoskeletal system, among the facilities and equipment that give it support and shape. And, of course, we want technological innovations, but our first priority must be ergonomic workbenches and chairs. While more comprehensive upgrades await, a simple interim measure, like anchoring the interns' shelving to the wall so it cannot topple, can already prevent accidents. That is precisely what João implemented.

Kayode Balogun

New York, USA

In HIV and pediatric health research, I highlighted the unique needs of HIV-exposed but uninfected children – now a population of 16 million worldwide. Collaborating with clinicians and people living with HIV, I showed that antiretroviral therapy alters pregnancy hormones, increasing risks of preterm birth and low birth weight.

Lisa-Jean Clifford

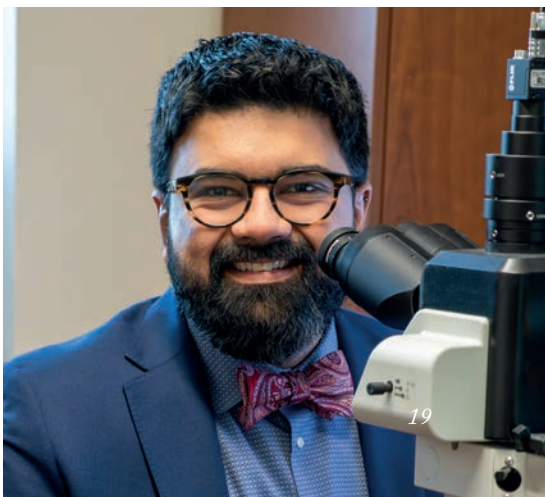
Massachusetts, USA

I've helped drive the development of digital pathology and AI platforms built for system neutrality and seamless interoperability. One milestone was the launch of a pathology-optimized enterprise viewer that integrates LIS, EMR, and AI tools. This technology is already enabling faster, more accurate diagnoses and reducing the risk of missed findings in high-volume labs.

Kamran Mirza

Michigan, USA

To move the field forward, I have focused my work on building bridges. One of the most meaningful ways I have done this is through my involvement with the ASCP Patient Champions program. This initiative pairs patients and caregivers with pathology professionals to share stories, raise awareness, and humanize the science of diagnosis. Through educational events and storytelling, I have helped bring patient voices into our community, reminding us that every slide we read represents someone's life.



Michele Mitchell
Michigan, USA

Lija Joseph and I began discussing the idea of creating a formal educational certificate program to support pathologist-led clinics. I pitched the idea to ASCP, and was incredibly grateful when they embraced and funded the concept. They assembled the expert team we recommended, and the education branch is now developing a companion workshop, currently in review. I also recorded my story to personalize the training with lived experience.

Sophia Bertse Bellegarde
Massachusetts, USA

One thing that always strikes me is how often people forget we're part of the team. I've seen families waiting for answers after a fetal autopsy, I've coordinated with organ banks at odd hours, and I've worked with clinicians who didn't realize how much the lab could actually offer. That gap? It's not just logistical. It's cultural. And it's something I'm working to change.

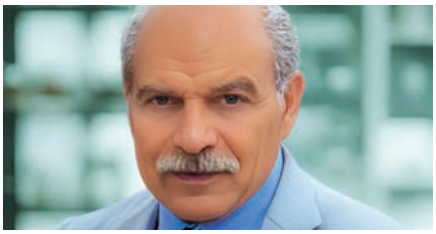
Varsha Manucha
Mississippi, USA

In addition to cytopathology, I practice surgical pathology with special interests in areas of head and neck and urologic pathology. I have regularly contributed to multidisciplinary tumor boards in these areas and have realized that active participation by a pathologist has direct influence on diagnostic and management decisions. When pathologists consistently show up, speak up, and engage, our clinical colleagues respond with appreciation and collaboration.

What are the key lessons you have learned during your career, and how are you using those learnings to mentor others?

Andres Restrepo
Barbados

Knowledge must be shared, questioned, and continually renewed. In a field where precision saves lives, true strength lies not in guarding expertise but in using it to elevate others. Whether teaching residents, guiding medical students, or collaborating with colleagues, I have found that humility, lifelong learning, and generosity are essential to building a more equitable and compassionate medical community.



Gamal Dawood
Egypt

Beyond direct mentorship, I organized three international pathology conferences to encourage global knowledge sharing. After retirement, I founded the Egyptian Society of Dermatopathology, which hosts workshops and conferences. *My Color Atlas of Gross and Microscopic Pathology*, with more than 1,430 photographs from my four-decade career, also serves as a lasting educational resource.

Laura Severs
Missouri, USA

As a mentor, I see it as both a responsibility and a privilege to help future leaders excel not only in their technical roles, but also in their broader purpose: improving lives through science and service. I coach a team of emerging and established leaders to keep the patient at the center, innovate through collaboration, and use their influence to drive change across traditional boundaries. I encourage them to tell their stories with confidence, align their work with system-wide goals, and build strong relationships – because that's where transformation truly happens.

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Your work in the laboratory doesn't always make headlines, but it **saves lives every single day**. Your dedication as a pathologist doesn't just support healthcare—it *defines* it. As an ASCP member, you will stand with thousands of dedicated professionals shaping the future of diagnostic medicine.

Now more than ever, we need your voice, your skill, and your leadership back in the community.

Renew today and stay part of a community that saves lives—every single day.

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María del Rocío Martín López

Spain

Pathologists should be active in hospital life – attending meetings, committees, and molecular tumor boards. We should share our work with the public through press, radio, television, and direct conversations with patients and families. Our reports are not automatic outputs; they are complex, integrated analyses with significant therapeutic and prognostic impact.

Melissa Duong

Pennsylvania, USA

By strengthening leadership communication, laboratory leaders can better align teams, reinforce social messages, improve engagement, and foster resilience – bridging the purpose gap within their organizations. Through conference teaching and mentorship, I aim to help raise these skills across the laboratory community.

Neha Seth

New York, USA

For me, mentorship is about sharing not just knowledge but also the excitement and wonder of the field. Every case, every #HemeGems, every conversation is a chance to remind trainees that pathology isn't just data – it's stories, it's puzzles, it's answers. And it's worth exploring together.

Nicole R. Jackson

Washington, USA

Choose quality over quantity. In demanding workplaces and training programs, many try to stand out by joining every project or committee. But time is our most precious commodity, and we are more than our CVs. For each case I handle, I think first of grieving families, not professional recognition. As Maya Angelou said, "Your legacy is every life you touched."

I remind mentees that impactful work takes time and that our training often conditions us to rush. Ask about deliverables before committing. Learn to say no, because quality often requires declining less meaningful tasks. I try to model that leadership includes immeasurable contributions beyond metrics – like investing time in personal conversations that build genuine relationships.

Shelly Cummings

Utah, USA

One thing my mentor shared has stayed with me: the primary reason people leave jobs are lack of career development, limited advancement opportunities, or ineffective leadership. From that moment, I was determined to lead differently – to invest in people's growth and create opportunities.

Taryn Waraksa-Deutsch

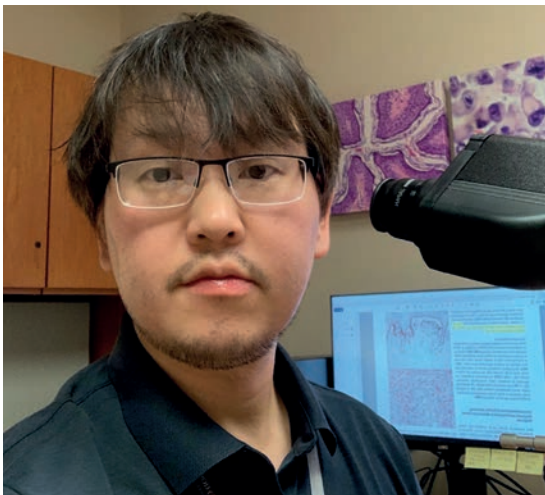
Pennsylvania, USA

The signs appeared early: "Try this, I think you'd be good at it," or "I need your feedback – what do you think?" Soon, I was learning senior-level tasks, assisting with managerial responsibilities, and contributing to business decisions and delegation. Years later, I no longer recognized the shy cytologist who once hesitated to speak up. I was driving goals, encouraging buy-in, and – most importantly – mentoring others. When my mentor announced his retirement, he gave me a knowing look and said simply, "You're ready."

Woo Cheal Cho

Texas, USA

One of the most important lessons I learned early is that diagnostic skill is not measured by a CV, the number of publications, or national presentations. While academic contributions are valuable, they do not necessarily reflect diagnostic thoroughness. I emphasize this to my trainees: what matters most is the quality and integrity of the work at the microscope.



Accelerating Precision Oncology: How Next-Generation Diagnostics Are Transforming Patient Care

Next-generation sequencing test accelerates precision oncology, enabling rapid tumor profiling, streamlined workflows, and supports timely treatment decisions.

In the evolving landscape of oncology, one truth is becoming increasingly clear: the right treatment at the right time can alter patient outcomes. Yet, achieving this vision of precision oncology requires tools that can keep pace with the complexity and urgency of modern cancer care.

This was the central theme of a recent webinar introducing the Ion Torrent™ Oncomine™ Dx Express Test on a Genexus™ Dx System – a solution designed to close long-standing gaps in tumor profiling and facilitate faster, more informed treatment decisions.

The precision oncology imperative

The explosion of biomarkers included in professional guidelines across multiple tumor types – lung, colorectal, breast, ovarian, and beyond – has made NGS-based genomic profiling essential. For patients with advanced or metastatic cancers, the difference between identifying the relevant biomarker and missing it could mean a missed opportunity for targeted treatment.

While traditional single-biomarker tests are valuable, they are increasingly inadequate, as well as slow, expensive, and unable to capture the full molecular complexity of tumors. Next-generation sequencing (NGS) has emerged as the clear enabler, offering broad, simultaneous biomarker analysis from a single sample, often in less time and at lower cost than serial single-gene assays.

Despite its promise, widespread NGS adoption has been hindered by significant barriers. Clinical laboratories, particularly community and hospital-based ones, face challenges including:

- *Lengthy validations* requiring substantial time, expertise, and resources.
- *Financial uncertainty*, with reimbursement complexities often leading to delays or out-of-pocket patient costs.
- *Manual, labor-intensive workflows* that strain staff and prolong turnaround times.
- *Long time-to-results* hinder clinicians' abilities to make timely and informed decisions.

These barriers mean that clinicians often wait weeks for results, delaying critical treatment decisions.

The time to embrace NGS is now

The Oncomine Dx Express Test aims to dismantle these barriers. As an FDA-approved in vitro diagnostic solution for both companion diagnostics and tumor profiling across 46 genes, it represents a new benchmark in clinical genomics.

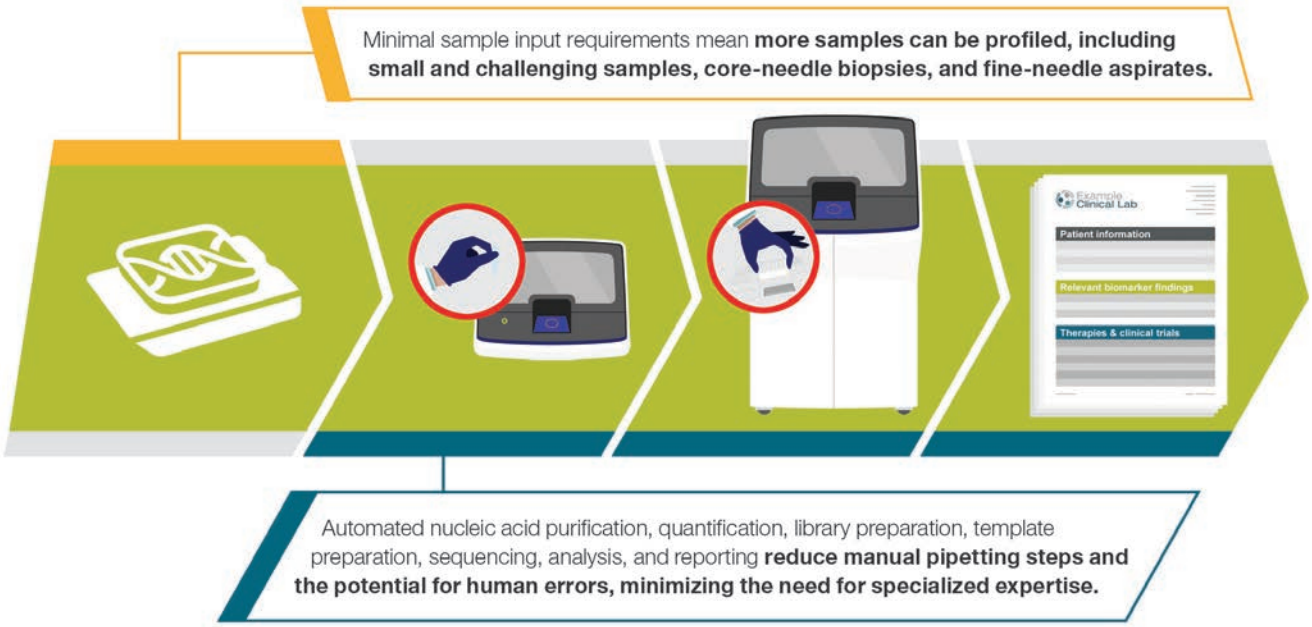
"Laboratory personnel reported strong satisfaction with automation of the workflow, saying they were "very happy with the two touch points.""

Key benefits include:

- *Rapid results:* From extraction to report in as little as 24 hours.
- *Minimal hands-on time:* Around 20 minutes, thanks to automation across nucleic purification, library prep, sequencing, and reporting.
- *Automated bioinformatics and reporting:* It uses only one software across the whole workflow, in which you enter the samples, set up the run, and obtain the result – biomarkers classified by level of clinical significance into 3 levels, powered by the Oncomine™ Knowledgebase.
- *Validation done by the manufacture:* There is no need for complex and time-consuming validation; any lab can implement the test after simple verification within a few weeks.

Dr David Chi from Thermo Fisher Scientific pointed out that this solution is specially designed to reduce the expertise and infrastructure burden usually associated with NGS, enabling broader access to this across laboratories of varying size and capacity, including those without previous expertise:

"The Oncomine Dx Express Test



1
vendor

One vendor for the end-to-end *in vitro* diagnostic (IVD) workflow simplifies integration, operation, troubleshooting, and maintenance, **supporting consistent performance and optimal system uptime.**

46
genes

Substitutions, insertions, and deletions in 42 genes, copy number variants in 10 genes, and fusions or splice variants in 18 genes covering **tumor profiling biomarkers recommended by professional guidelines for multiple solid tumors.**

<24
hours

Results are generated in as little as 24 hours* **from sample to report, to enable timely therapy decisions.**

"Labs only have to perform streamlined verification which is significantly easier versus traditional validation"

unlocks NGS for a broad spectrum of laboratories. As a validated IVD solution, labs will only need to perform a streamlined verification, which is significantly easier versus traditional validation. The automation, low hands-on time, and automated bioinformatics and reporting mean labs do not need to hire specialized labor, which may be difficult to find and costly to keep. As an IVD and CDx test, this system supports future payer coverage and reimbursement. And last, but certainly not least, this test returns results in as little as 24 hours* – allowing clinicians to make timely treatment decisions."

From theory to practice

Early experiences from CAP/CLIA-certified laboratory Biodesix in Colorado, presented by Dr Gary Pestano, Chief Development Officer, Biodesix,

"The reliability and increased turnaround times (of NGS) are now comparable to other routine pathology methods."

underscore the technology's impact:

"At the variance level, we saw a high degree of concordance. With 89 eligible variants out of 91, this bodes well not only for clinical testing, but for when we do our CAP proficiencies. I expect The Oncomine Dx Express Test to perform exceedingly well."

In a concordance study of 48 formalin-fixed paraffin-embedded specimens conducted in Biodesix, the Oncomine Dx Express Test demonstrated 98 percent variant-level agreement with established multimodal assays, coupled with turnaround times as short as 24 to 48 hours.

Laboratory personnel reported strong satisfaction with automation of the workflow, saying they were "very happy with the two touch points": reducing operator burden, and the speed with which results could be delivered. Further feedback included commentary on the "convenience for operators to have the same systems to extract and test plasma or FFPE," and "automation of the major steps of NGS workflow, including sample purification and quantification, library preparation, sequencing, bioinformatics analysis, and reporting are very welcome!"

From the pathologist's viewpoint, as Professor Bence Sipos, Head of Molecular pathology laboratory in Baden-Württemberg, Stuttgart, presented, the need is simple yet profound: deliver complete, clinically relevant molecular insights as quickly as possible, even from limited tissue samples. In the region served by his lab it used to take 2 to 3 weeks for oncologists in community hospitals to see NGS results. Now, he says, he can deliver them the results in as little as 2 days:

"I feel that a quiet revolution has taken place in NGS. The reliability and increased turnaround times are now comparable to other routine pathology methods. The final results are generated within 3 days in 86 percent of cases, between the weekly tumor boards, which accelerates the decision making and is optimal for patients."

Real-world case studies presented by Bence during the webinar illustrated this imperative vividly. One example includes a 71-year-old female with a 40 year smoking history. She presented with multiple lung tumors, lymph node metastasis, and brain metastasis. The histology from the transbronchial biopsy showed pulmonary adenocarcinoma with a high PD-L1 expression: TPS 80 percent and ICS 3 percent.

"Oncologists with these results would start chemotherapy, but with the option of reliable and rapid NGS, you will have a significant impact on the course of the disease," explains Sipos. "In this case, we were able to detect targetable biomarker in a sufficient number Aof reads with the NGS results completing on the third business day. The overall processing time – from sending the sample to reporting – was six business days.

"The patient responded well to treatment, showing a complete responses in the lung tumors and an almost complete response of the brain metastasis." For patients with targetable biomarkers-driven non-small cell lung cancer, rapid NGS enabled timely initiation of targeted therapies, often within days of biopsy, dramatically improving treatment alignment.

A new way for oncology diagnostics

The Oncomine Dx Express Test and Genexus Dx System together mark a quiet but significant revolution: making high-quality NGS testing as accessible and routine as immunohistochemistry or polymerase chain reaction. With validated workflows, minimized turnaround times, and accessible automation, this solution has the potential to democratize precision oncology diagnostics, moving them out of elite centers and into everyday practice.

The ultimate vision, as echoed by the presenters, is a world where every patient with cancer has access to rapid, accurate, and comprehensive molecular testing, ensuring clinicians are provided with the right information to make timely treatment decisions.

Watch the webinar: Introduction of a new FDA approved rapid NGS solution for Companion Diagnostics and tumor profiling in oncology

For In Vitro Diagnostic Use. In US the Oncomine Express Test is indicated as a companion diagnostic (CDx) to identify non-small cell lung cancer (NSCLC) patients with EGFR exon 20 insertion mutations for treatment with EGFROVY™ (sunvozertinib) in accordance with the approved therapeutic product labeling. The Oncomine Dx Express Test detects biomarkers recommended by professional guidelines for multiple solid tumors, including substitutions, insertions, and deletions in 42 genes, copy number variants in 10 genes, and fusions or splice variants in 18 genes. For indications in other countries learn more at www.thermofisher.com/oncomine-express-test

** Timing varies by number of samples and type of run.*

ThermoFisher SCIENTIFIC


"You have to take responsibility, advocate for your field, and fight for its recognition and advancement."

Representing the Field, Internationally

Sitting Down With…
Peter Schirmacher, Professor of Pathology and Director of the Institute of Pathology, Heidelberg, Germany, and President of the European Society of Pathology

How would you describe your contribution to the field of molecular diagnostics?
Looking back, I'm particularly proud of what we – specifically crediting our head of molecular pathology, Albrecht Stenzinger, and his team – have built up in Heidelberg in the field of molecular diagnostics. Together, we've established what I believe is one of Europe's top molecular diagnostics centers – internationally competitive in scope, diagnostic quality, and research performance.

Another major achievement has been the implementation of the Centers for Personalized Medicine, both in Heidelberg and across Germany. This is the first consortium of its kind worldwide: a nationally coordinated, fully healthcare integrated and financed network offering high-end molecular diagnostics and tumor boards across all centers. With this structure, we can provide advanced diagnostics and treatment options even for patients outside the current clinical guidelines.

It's important to emphasize that molecular diagnostics is not just about applying existing assays. You have to develop new tests, ensure quality assurance, and integrate these tools into clinical trials. Without connecting all these elements, you cannot complete a full innovation chain.

You've held leadership positions in many national and international pathology societies over the years. Why is it important to you to be able to speak for the pathology community?
The range of expertise we must master is enormous, and the demand for interdisciplinary collaboration continues to grow. We are expected to contribute to clinical guidelines, to participate in clinical trials, to be active in political discussions and decisions that affect healthcare. But we do this with a very limited workforce and a heavy workload. As a result, only a few pathology institutions – and only a few pathologists – have the capacity, expertise, and resources to represent the field at the national and international levels.

I'm fortunate that in Heidelberg we have one of the largest and most visible pathology departments in Europe, with around 400 staff members. This provides resources, background, and expertise that many colleagues don't have – but it also comes with a responsibility. If I – and the handful of others in similar positions – don't speak up for pathology, no one else will.

It's not enough to stay in your office. You have to take responsibility, advocate for your field, and fight for its recognition and advancement – not just for your own institution, but for the entire pathology community.

What are the biggest challenges currently facing pathology, in your opinion?
More than 20 years ago, we began integrating professionals from other disciplines into our pathology departments to address emerging challenges – molecular diagnosticians, bioinformaticians, biobankers, and other specialized professionals. We have to develop ways not only to formally integrate them into the pathology framework, but to ensure they feel valued within our field, and provide them with high-level education and career perspectives in pathology.

A second major issue is the shrinking workforce. In many countries, the number of trained pathology diagnosticians and technicians is declining, while the demands placed on the discipline continue to grow. Meeting this rising need with fewer skilled professionals is extremely difficult. We strongly believe pathology is an attractive field – but we need to show that to the next generation and attract the most talented. Without this outreach, we won't have the quality of personnel we need to move forward.

Finally, there's the issue of visibility and representation. Pathologists lack visibility not only in public and political arenas, and sometimes among our clinical colleagues, but also within funding bodies. If we remain unseen, we risk being underfunded and underrepresented at critical decision-making tables.

What advice would you give to an early-career pathologist who wants to pursue an academic career?
First, you need a clear sense of purpose. That motivation is essential in order to help build a tolerance for frustration. Not every grant will be funded, not every project will succeed.

Second, surround yourself with people you can learn from. Choose mentors and peers carefully – those who are strong in research, diagnostics, leadership, or administration. Watch them closely. You don't have to idolize them, but you can learn a great deal from their strengths – and from their shortcomings. Identify what works well, and also what you'd do differently. From that, you'll begin to develop your own leadership style and academic path.

Third, you need the right environment. Your success will be limited if your institution cannot offer the necessary resources or opportunities. To pursue an academic career – especially one that includes leadership – you need to be in a place that supports your ambitions.

This doesn't mean you must only aim for the largest or most prestigious institutions. A good leader can elevate a smaller or under-resourced institution. If you're at a smaller institution, the key is focus. You may not be able to cover the entire spectrum, but you can still do internationally competitive work if you concentrate on a specific disease area or technology.

See the full article online

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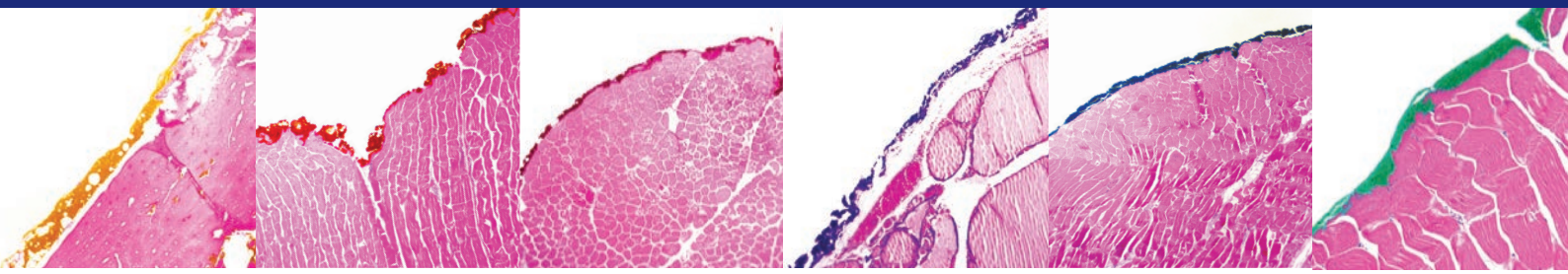

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