JMI Journal of Medical Imaging

EDITORIAL

Networking Science and Technology: Highlights from JMI Issue 3

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Journal of Medical Imaging (JMI) Community,

I am happy to present JMI's 2024 Issue 3! We are in full stride with this issue hitting all focus areas, including Physics of Medical Imaging; Image Processing; Computer-Aided Diagnosis; Image-Guided Procedures, Robotic Interventions, and Modeling; Image Perception; Observer Performance, and Technology Assessment; Biomedical Applications in Molecular, Structural, and Functional Imaging; Ultrasonic Imaging and Tomography; and Digital Pathology. The issue cover highlights research from The University of Chicago by Douglas et al. This week, I discovered a handy feature on SPIE's platform where we can see the "current issue" as it comes together and receive alerts on updates.

I deeply enjoy the academic freedom to explore, create, and discover that summer affords. For motivation, I'm excited that the call for papers for SPIE Medical Imaging 2025 has been released (to be held in San Diego, California, on February 16-20, 2025). While our building is much quieter than during the academic term, our lab's corner of the world is jam-packed and hard at work on new ideas ranging from optic nerves to renal structures. The structure of an end of summer deadline crossed with the incentive of deep academic collaborations near a beach works miracles on creativity and productivity. I receive many e-mails asking to get involved with JMI. I appreciate this enthusiasm! A great way to get involved with JMI is through the SPIE Medical Imaging event and its program committees. I look forward to continuing to connect through SPIE and other conference venues. For example, we will continue our tradition of holding our fall

editorial meeting in conjunction with the Radiological Society of North America (RNSA) in Chicago, Illinois.

With the excitement of in-person networks, I would like to highlight SPIE's flexible and inclusive stance on journal-conference publishing. SPIE JMI allows for dual submission of conference articles and permissive use of pre-publication archives. Specifically, the author guidelines state (emphasis is mine):

> **SPIE publication policy permits manuscripts based partly or entirely on scientific content previously reported in SPIE proceedings to be submitted to SPIE journals.** Furthermore, SPIE permits manuscripts based partly or entirely on scientific content previously reported in a non-SPIE conference to be submitted to SPIE journals so long as the copyright policies of the non-SPIE conference are properly adhered to (see below). In most cases, it is anticipated that the journal submission will represent a substantively expanded, refined, or otherwise revised manuscript relative to the proceedings paper to fully satisfy the standards of significance, originality, and presentation quality expected in a journal submission that is being considered for acceptance through the journal peer-review process. A manuscript submitted to an SPIE journal that incorporates minimal or no revisions over a ***prior or concurrent*** SPIE proceedings paper ***may be considered for publication*** in an SPIE journal and admitted into the peer-review process provided the submission fulfills the requirements of significance, originality, and completeness expected in a journal submission. **SPIE does not consider publication of an accepted journal article based on a prior proceedings paper to constitute double publication.**

However, transparency in publication and review is essential. Our author guidelines also state:

> If a manuscript (or portion of a manuscript) was previously published in a conference proceedings or is under consideration for publication in a conference proceedings, this information ***must be disclosed*** when the manuscript is initially submitted to an SPIE journal. **Authors should also reference or acknowledge the prior proceedings paper within the submitted journal article.**

Hopefully, you also see that these guidelines reflect SPIE's nonprofit mission to advance science: "SPIE partners with researchers, educators, and industry to advance light-based research and technologies for the betterment of the human condition."

In addition to closing Issue 3, I want to thank Baowei Fei, Metin Nafi Gurcan, Yuankai Huo, Pinaki Sarder, and Aaron Ward for their guest editorship of the first special section that I have the pleasure of announcing: **Computational Pathology**. "The development of large-scale pathological image analysis algorithms is essential for enhancing patient outcomes and propelling advancements in healthcare. With the burgeoning availability of big data in computational pathology, there exists a significant opportunity to craft more precise and individualized diagnostic and treatment strategies. However, the complexity and diversity of digital pathological images and their varying modalities present substantial challenges in devising scalable image processing frameworks capable of managing inter-subject variations and delivering robust, timely medical image analysis. . . . This JMI special section welcomes original research papers that develop new methods for computational pathology with large-scale data, models, and infrastructures. We also welcome high-quality submissions from work presented at top conferences, such as MICCAI, IPMI, MIDL, CVPR, ICLR, ICML, and others, that propose new methods and techniques for leveraging patient-centered clinical image analysis with large-scale data, models, and infrastructures." Submissions are now open, closing January 15 (just in time for a complete issue for SPIE Medical Imaging 2025).

As a last reminder, our special issue **Photon-Counting: Detectors Applications** is in the process of closing and the submission window for the special issue **Celebrating Digital Tomosynthesis: Past, Present, and Future** closes soon.

To celebrate the increasing role of AI in JMI and our research, I updated my profile picture (visible in the PDF) with three "neural filters" from Adobe Photoshop, which claim to match the styles of artists/paintings. While perhaps interesting, I am not sure if any master would even accidently claim these works. I posit that we still have a bit of way towards understanding what AI can and cannot do for us in research.

Warm regards,

Bennett Landman, JMI Editor-in-Chief