

Informatics and Imaging Data Management

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There is significant interest in the utilization of imaging and related clinical data for use in AI/deep learning, medical image analysis, medical image optimization, medical imaging informatics, and observer performance studies to assess the impact of these applications on medical decision making. There are however significant challenges associated with medical imaging data collection, management, and access.

The theme of this JMI Special Section is acquisition, curation, de-identification, storage, and distribution/sharing of medical imaging datasets, including but not limited to methods, technologies, policies, and ethics that highlight a wide spectrum of research areas dedicated to medical imaging databases including, but not limited to:

- Database design & construction
- Open-source database management tools
- Creation, curation and FAIRification of datasets and databases
- Harmonization and inclusion in datasets
- Increasing diversity and reduction of bias in datasets
- Data security and maintenance of patient privacy
- Data sovereignty
- Governance and regulation
- Database dissemination strategies
- Data sharing policies
- International database issues
- Dealing with 'real world' data & metadata
- Impact of data quality on learning and outcomes
- Ethics

Of interest are both review and original papers on approaches that apply to databases containing images from all types of imaging modalities including x-ray, CT, MRI, ultrasound, nuclear medicine, ophthalmologic, dermatologic, histopathologic, macroscopic, and microscopic imaging, as well as a combination of imaging and non-imaging data. Submissions addressing the challenges of informatics and database management across institutions/organizations are particularly welcomed.

Manuscripts are due **1 August 2022**. For more information, please see the journal web site at <http://spie.org/JMICalls>. Please indicate in your cover letter that the submission is for this special section. All submissions will be peer-reviewed.