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Session Type:

Contributed Talk Presentations

Select the best divisional affiliation for this abstract:

DCB - Comparative Biomechanics

Select Topic: DCB - Comparative Biomechanics:

modeling and computational approaches

Title:

Introducing the Non-Clinical Tomography Users Research Network (NoCTURN)

Abstract:

Digital publishing platforms and internet resources allow access to scientific findings and data at scales never before realized. Unfortunately, researchers sometimes embrace lock-in systems for data generation and analysis because meaningful alternatives do not exist or are challenging to implement in current workflows. Scientific advances still take place when this occurs, but they become fragmented with discordant quality control, interoperability, reproducibility, and democratization of access. To maximize the value of these often-publicly-funded resources, disciplines are turning to FAIR Guiding Principles for data stewardship. FAIR (*Findability, Accessibility, Interoperability, and Reuse*) promotes the additive value of widespread data sharing that is transparent, equitable, and inclusive. Here we present NoCTURN, a recently NSF-funded FAIR Open Science Research Coordination Network for computed tomography users. NoCTURN (the Non-Clinical Tomography Users Research Network) aims to address the fragmentation of tomography toolkits stemming from proprietary software, nonstandard metadata formats, and repeatability limits. In this presentation, we outline how we will achieve this together by: 1) developing a community committed to information sharing; 2) coordinating data analysis, storage, and reporting requirements; 3) highlighting underrepresented voices in the field; 4) organizing standards inclusive of industry, research, education, and outreach stake-holders; and 5) modeling FAIR Open Science strategies for others. NoCTURN is recruiting members, from undergraduates through established investigators, in X-ray-, neutron-, and synchrotron-beam computed tomography communities, including SICB.

Are you a student?:

No

In person meeting and/or SICB+:

Both SICB and SICB+

Primarily Undergraduate Institution:

No

Sign up to be a session chair:

No