July 9: Darrell Hurt, Ph.D.: The NIH 3D Print Exchange

SYNOPSIS:



In support of government initiatives in 3D printing, the NIH is making high-quality, scientifically accurate 3D printable files available through an online, open access portal. Few such files can be found on the Web, and most users lack the necessary 3D modeling skills to design custom scientific 3D models. The NIH 3D Print Exchange allows users to discover, share, and create bioscientific and biomedical 3D models that are ready to download and print in 3D. The site already includes hundreds of 3D models, and users are empowered to create their own 3D models through open source, web-based tools and video tutorials, and to share tips and tricks with the community in a discussion forum. Physicians and patients can also use the Exchange to visualize disease processes and treatments through 3D prints of medical imaging data. Students, teachers, and parents will find accompanying worksheets and lesson plans for use in STEM education. In the coming months, the Exchange will announce a nationwide challenge, calling on students to create their own 3D bioscientific models, to encourage use of 3D prints and 3D modeling techniques in the classroom.

Session details...

BIO:

Darrell Hurt, Ph.D., heads the Computational Biology Section of the Bioinformatics and Computational Biosciences Branch in the Office of Cyber Infrastructure and Computational Biology at the National Institute of Allergy and Infectious Diseases (NIAID). Dr. Hurt focuses on computational structural biology, including protein folding, docking, and molecular dynamics. He also provides special expertise in 3D printing, visualization, and modeling. Before working at NIAID, Dr. Hurt did postdoctoral work in lipid signaling and cell trafficking using X-ray crystallography with Dr. James Hurley at National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK). His educational background includes a B.S. in Chemistry with honors from Brigham Young University and a combined M.S./Ph.D. in Chemistry from Cornell University under the mentorship of Dr. Jon Clardy. His doctoral work was recognized with the Pauling Award from the American Crystallographic Association, and he is the author of several scientific research articles.

SUMMARY:

Topic: The NIH 3D Print Exchange

Speaker: Darrell Hurt, Ph.D., Section Head, Computational Biology, Bioinformatics and Computational Biosciences Branch, National Institute of Allergy and Infectious Diseases, National Institutes of Health

Date: Wednesday, July 9, 2014

Time: 11 AM - 12 PM EDT

You are invited to listen to Dr. Hurt's presentation in Room 2W908 in the NCI Shady Grove Building on Medical Center Drive or via WebEx.

Presentation: A screen cast of the presentation will be available for viewing after the event on the NCI CBIIT Speaker Series YouTube Playlist &

About the NCI CBIIT Speaker Series:

The National Cancer Institute (NCI) Center for Biomedical Informatics and Information Technology (CBIIT) Speaker Series is a bi-weekly knowledgesharing forum featuring both internal and external speakers on topics of interest to the biomedical informatics and research communities. For additional information, including past speaker series presentations, visit the CBIIT Speaker Series page.

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