



Ed-Tech Tuesday

University of Oklahoma Health Sciences Center

3D Printing

Tuesday, February 27, 2018

Presented by Kari Boyce, Ph.D., RDMS and Bradford Gildon, M.A., BSRT, RT(R)

Campus Resources

ROBERT M. BIRD HEALTH SCIENCES LIBRARY

The HSC Bird Library has 2 Craftbot+ 3D printers available for printing objects for students, faculty, and staff of the OUHSC campus. **The printers are intended to support the education, research, and prototype needs of the OUHSC campus.** The 3D printer prints in PLA plastic and currently we do not have any other type of materials in which to print.

If you would like to have something printed on the 3D printer, please fill out the form on the Library website <http://library.ouhsc.edu/3dprintpolicies> and send the 3D file (.stl filetype) via email to the library at bhslnpm@ouhsc.edu. Be sure to read the Policies & Guidelines tab for more information and pricing info.

3D DESIGN PROGRAMS

If you would like to design your own 3D print, there are lots of different options below and on the Resources tab on the Library website:

1. **Tinkercad** <https://www.tinkercad.com/> is an online based program - Has the lowest learning curve. [Tutorials on Tinkercad and how to design 3D objects](#)
2. **Onshape** <https://www.onshape.com/> - online based program. CAD software with precise measurements.
3. **Blender** <https://www.blender.org/> - free download, large learning curve.
4. **Pixologic Sculptris** <http://pixologic.com/sculptris/> - free download for sculpting. Starts with a ball of clay and creates shapes from there.
5. **OpenSCAD** <http://www.openscad.org/> - free download. Learn unique programming commands to design stuff with specific distances and ratios.

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MIRS 3D PRINTING LAB

The MIRS 3D Printing Lab (AHB 1034) provides a work-space for the Co-Directors, Dr. Boyce and Professor Gildon, to build 3D printed anatomic models, patient specific surgical aids and prototypes. The current 3D printer (Form 2 SLA) uses several types of light sensitive resins. Each resin has unique physical properties and is opaque or translucent (see images below). The MIRS 3D Printing Lab, in the College of Allied Health is planning to accept print orders from other units on our campus by 2nd Qtr of 2018 through the Allied Health Clinic.

Visit their website at: <http://alliedhealth.ouhsc.edu/CentersLabs/MIRS3DPrintingLab.aspx>