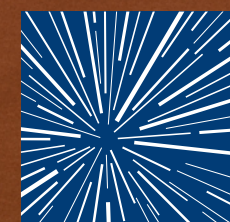


# The Advanced Prototyping Center (APC) At Wright Laboratory



James Nikkel



**Wright**  
**Laboratory**



## Mission:

At the Advanced Prototyping Centre (APC), our mission is to provide an advanced fabrication facility and design support for custom instrumentation within the Yale community. We also aim to help researchers develop design skills and educate them about modern prototyping techniques. The APC complements other research shops at Yale that provide traditional machining services and training.





# CNC Cutting Capabilities:



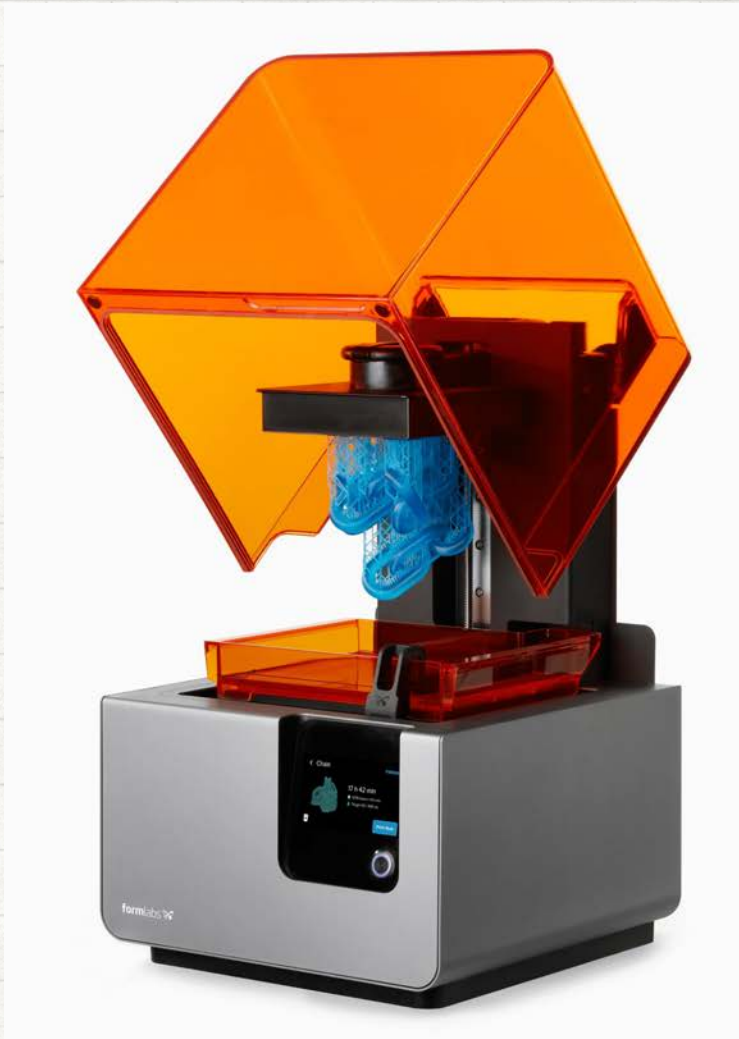
250W laser cutter  
for acrylic, wood, etc.  
122 x122 cm cutting area



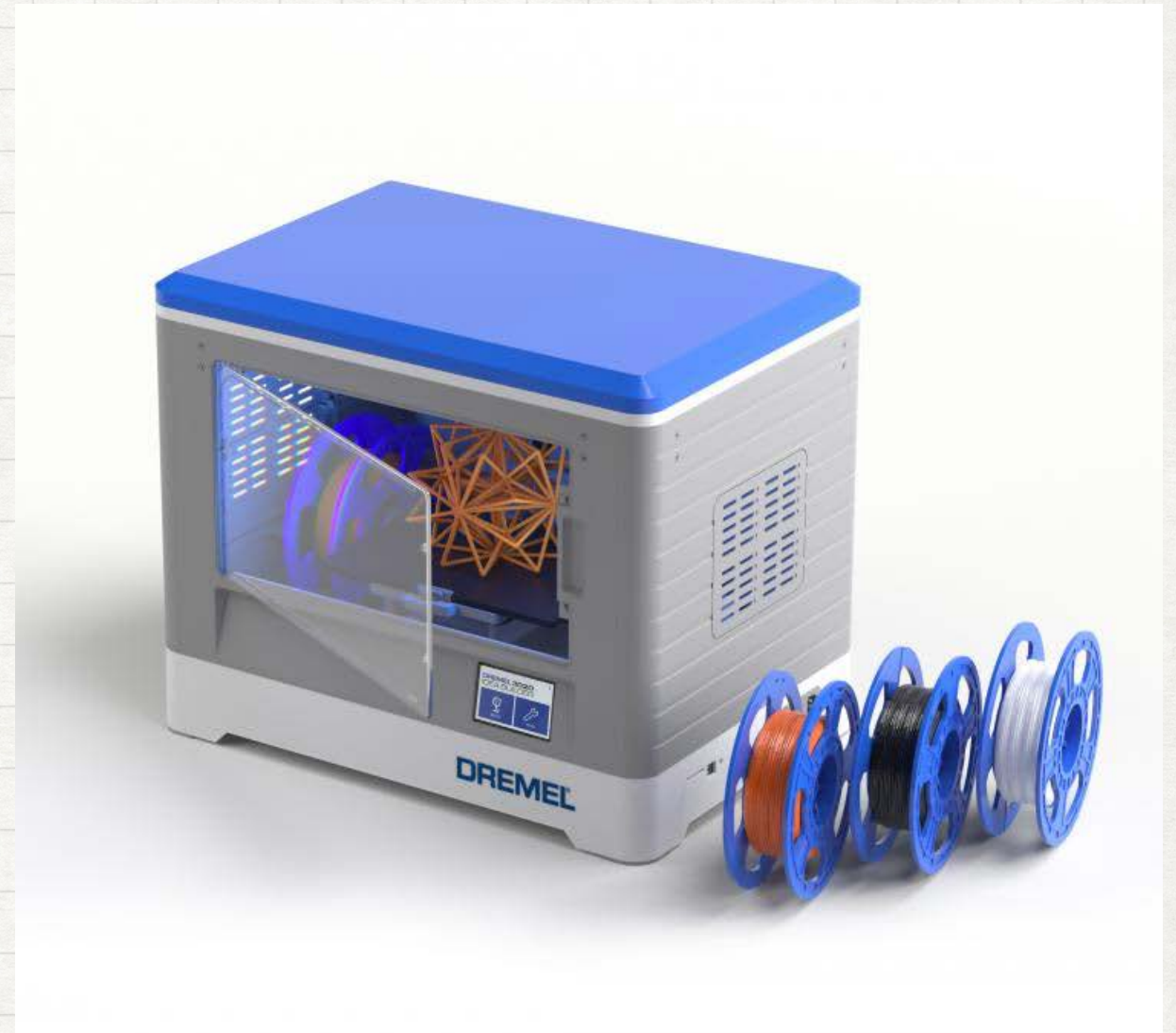
94kpsi abrasive water jet cutter  
for everything else  
60 x100 cm cutting area



## 3D Printing Capabilities:



Formlabs  
Form 2 SLA Resin Printer



Dremel  
Filament Printer



Operations began April 2018

We have had over 500 hours of user contact

From 38 different groups across campus

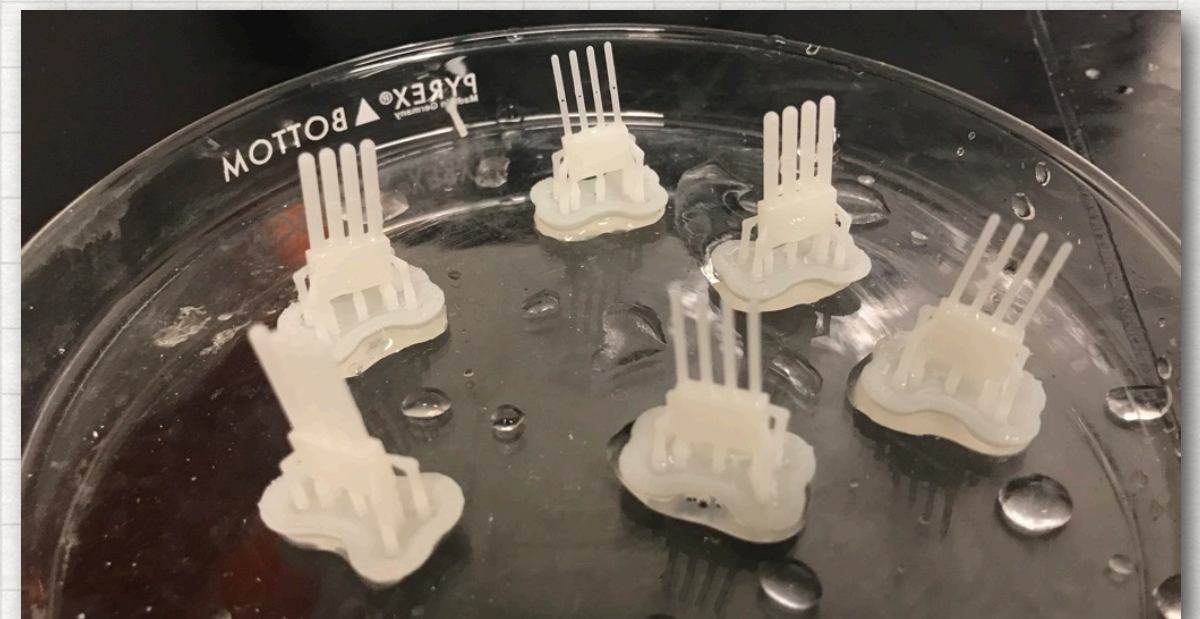
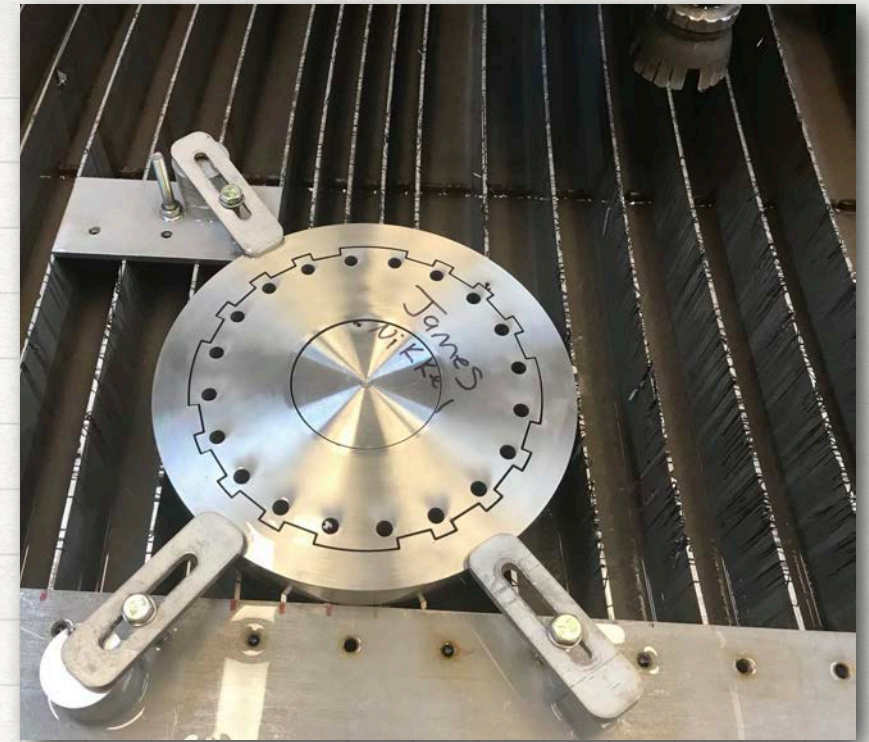
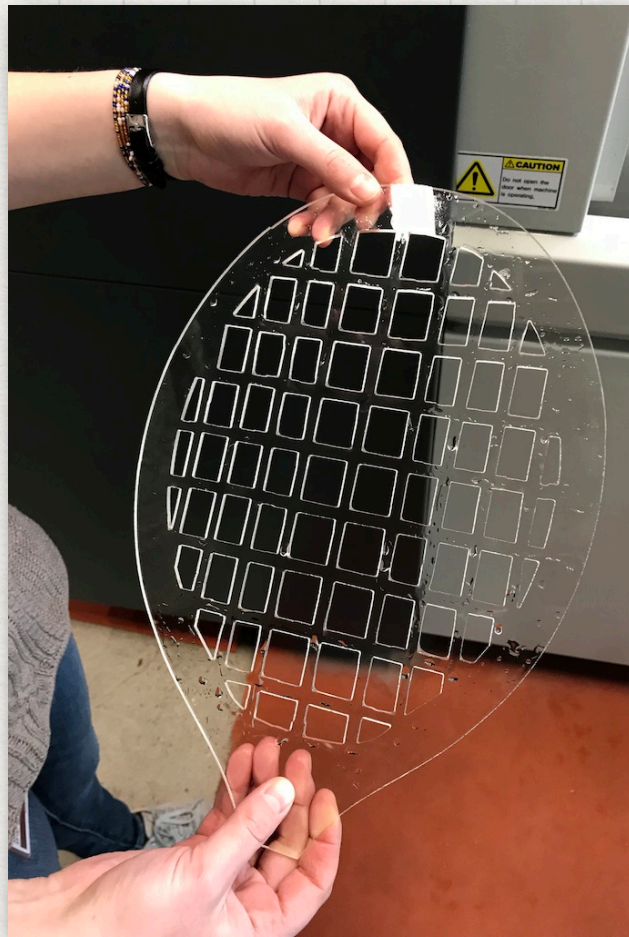
- Anthropology
- Applied Physics
- Biochemistry
- Biophysics
- BulldogRacing
- Center for British Art
- Chemistry
- Computer Science
- Engineering
- Peabody Museum
- Physics
- Political Science





We also provide support  
and collaborate with  
other shops and cores

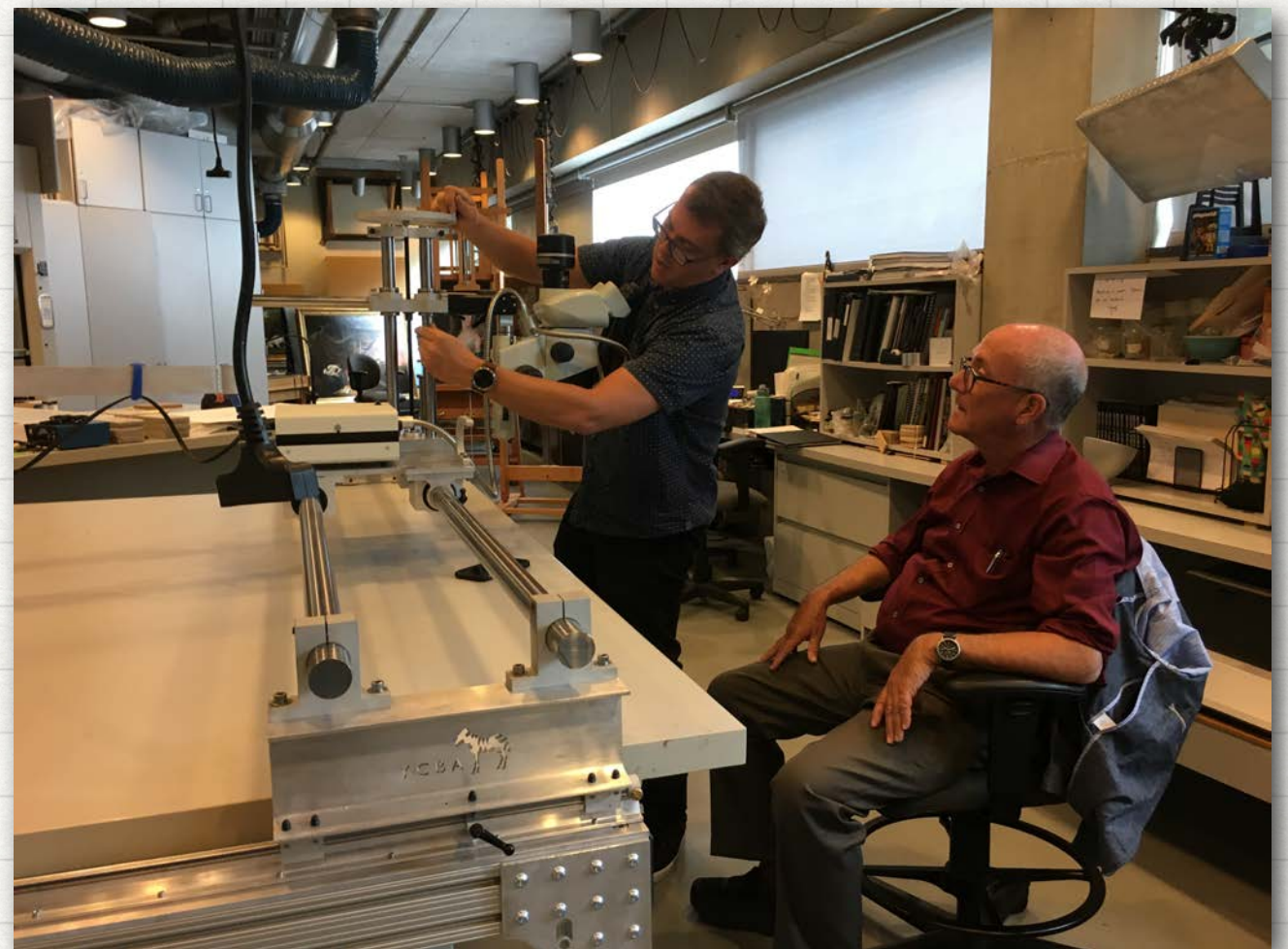
Gibbs Shop  
Glass Blowing Shop  
Neurotechnology Core







Our first large project/commission was the design and fabrication of a microscope bridge for the Yale Centre for British Art.



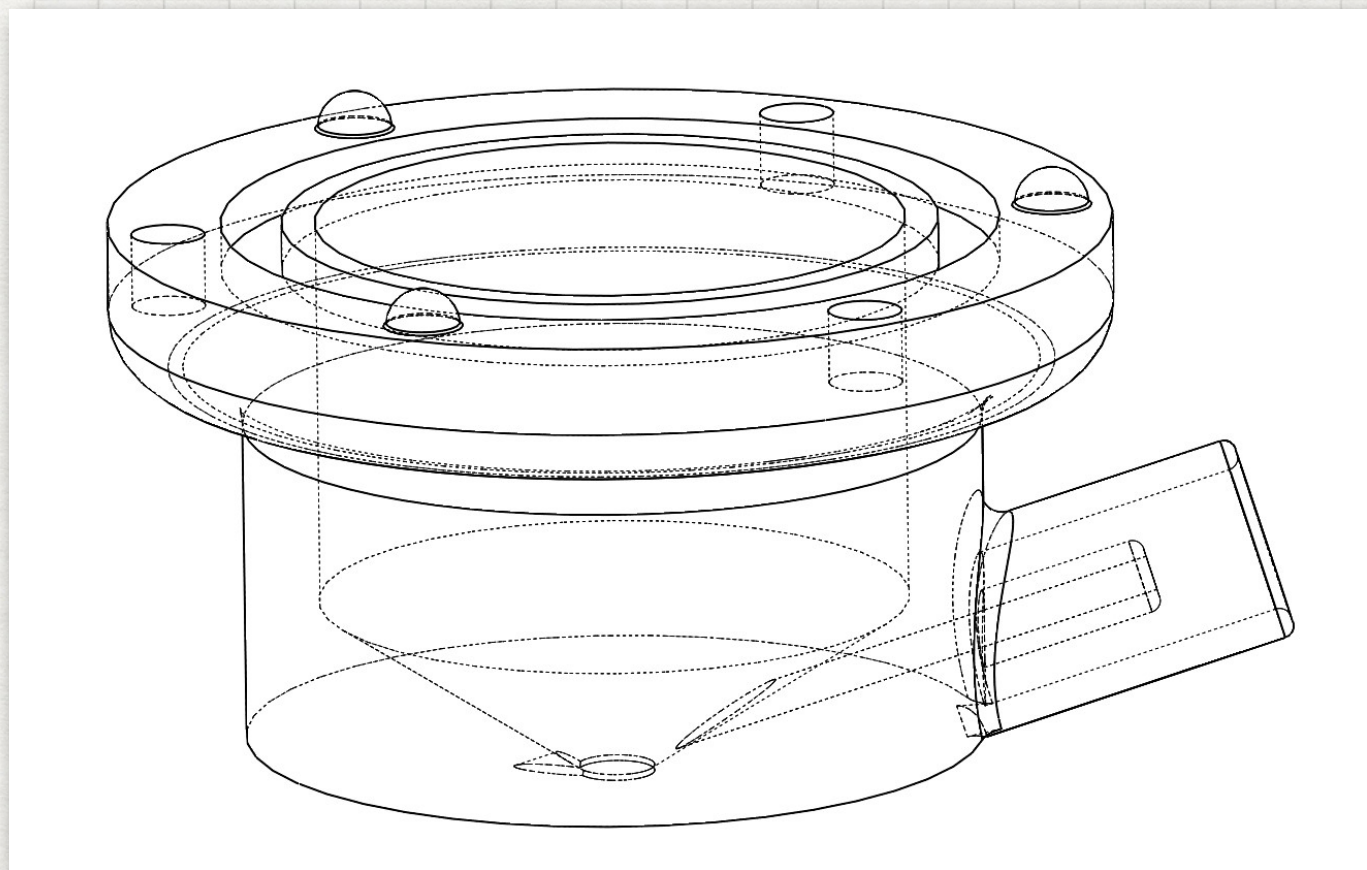
Arina Telles



We have worked with the Peabody museum on a few projects, including this 1:8 scale architectural model to help visualize one of the new additions







One current project is assisting in updating the design for a “Portable UV Laser Ablation Micro-sampling for Elemental and Isotopic Studies of Glass and Ceramic Art” with a group at the Yale Institute for the Preservation of Cultural Heritage.

(Alice Knaf, Pablo Londero, Richard Hark, Anikó Bezur, all Technical Studies Lab, IPCH)



## Workshops for design and introduction to CAD/CAM for:

- 3D printing
- Laser cutting
- Abrasive water jet cutting
- Microcontroller workshop this spring
- The APC sponsored a workshop developed and run by former APC Deputy Supervisor, Arina Telles, for the conference for undergraduate women in physics



Victoria Misenti



If you need to  
make a box, the  
APC@WL is a  
vital resource!





