VIRTUAL REALITY / DIGITAL MAKERSPACE OVERVIEW

Jason Fleming – Information Technology Librarian

Digital Makerspace: Technology

- Virtual Reality (VR)

- 3D Scanning

- Augmented Reality (AR)

- 3D Printing

- Dell Canvas

VR

- 3 HTC VIVEs

- 1 OCULUS RIFT

NEXT ENGINE 3D SCANNER

- Scan objects to convert them into 3D models

Augmented or Mixed Reality

- Magic Leap

3D printing

- 3 LULZBOT TAZ 6 3D PRINTERS
- Dual Head Extruder
- Flexystruder
- Palette 2 Pro

Dell Canvas

- "Bring your ideas to life with a new 27-inch workspace that empowers natural digital creation. Featuring a precise EMR pen, totem, and touch surface."
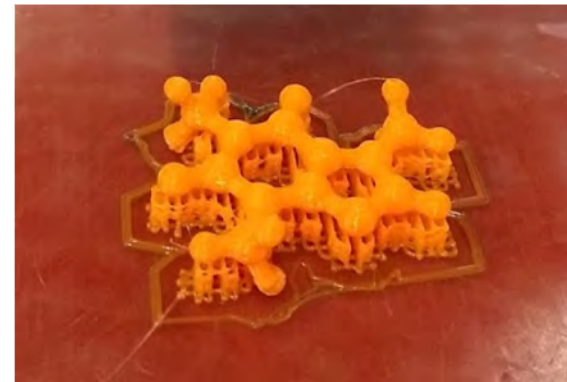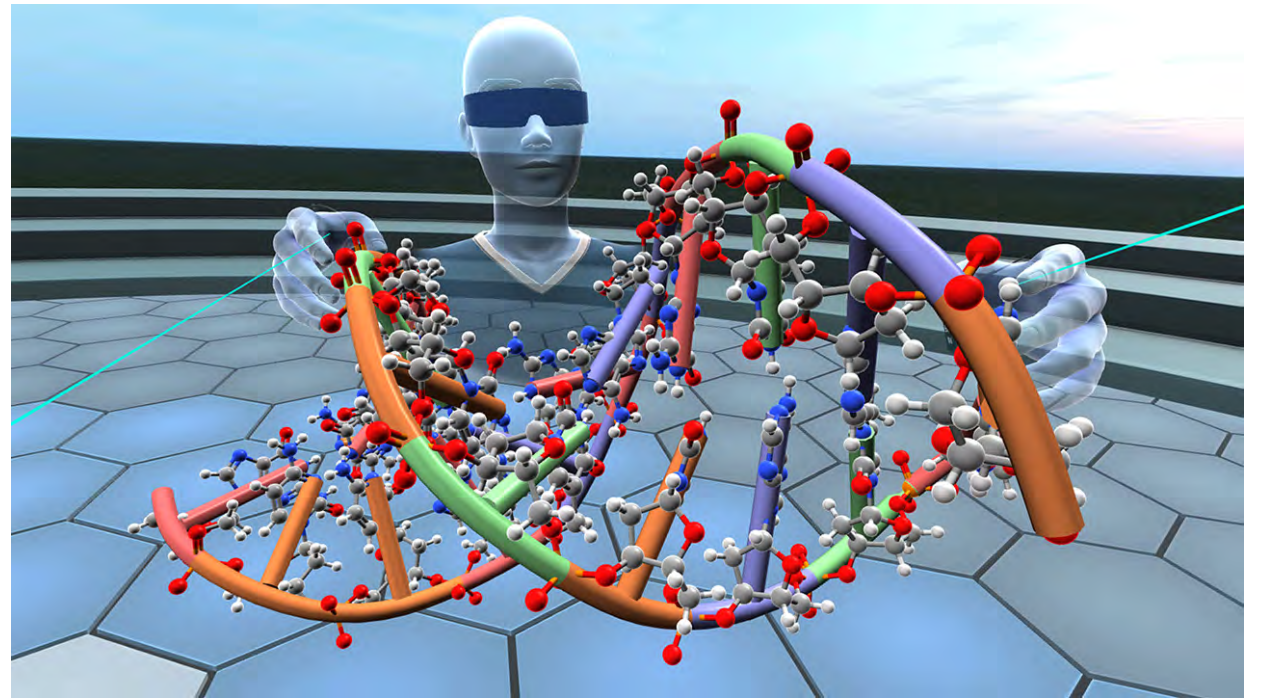
Digital Makerspace: Collaborations

- Chemistry

- Archaeology

- Environmental Sciences

- Biology and Marine Biology

- Digital Arts

- Area Middle and High Schools

- UNCW Summer Camps

CHM350 Dr. Lee

- Nanome (VR)

- 3D printing molecules

ANT207 Dr. Reber

- Virtual field trips
- Baths of Caracalla

EVS 485/592 Estuarine Aquatic Drones – Dr. Dumas
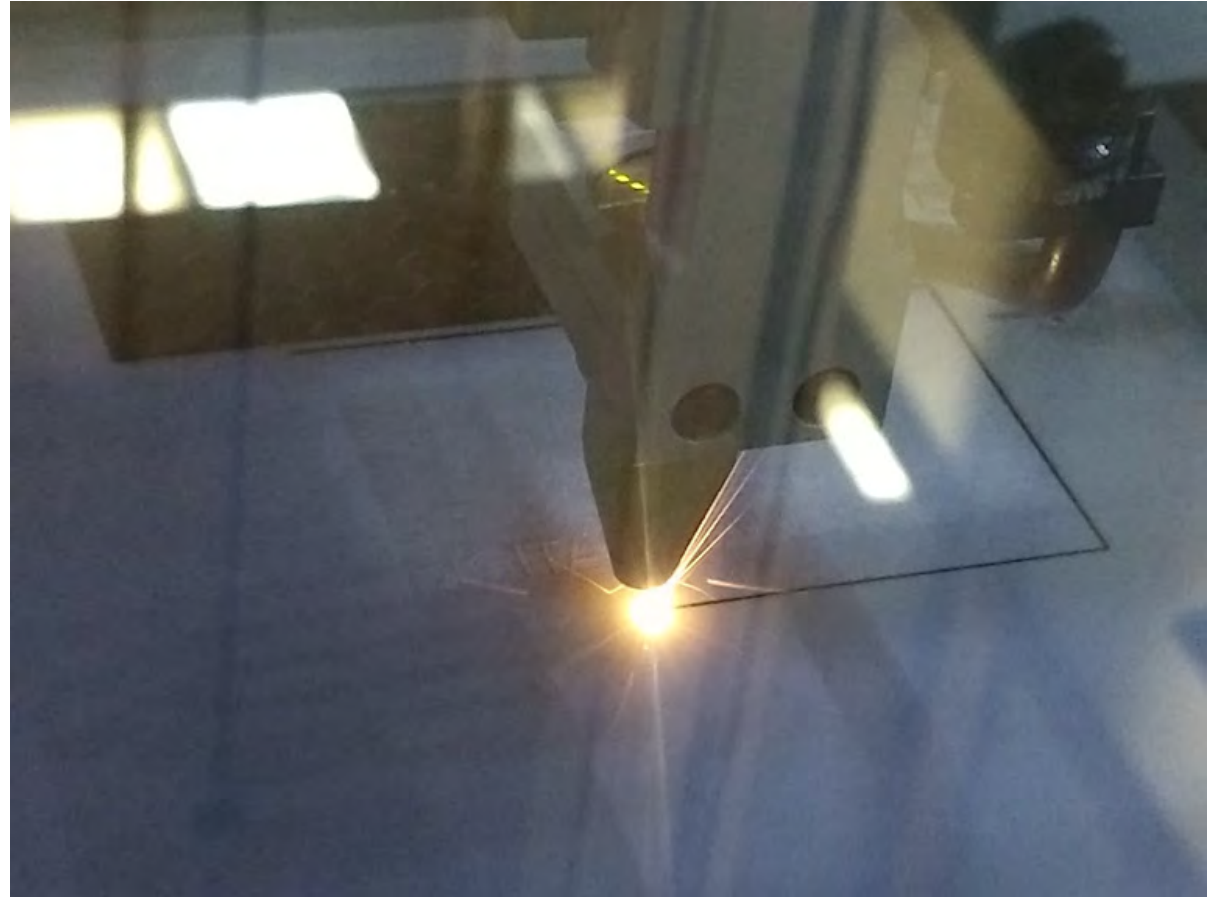
- 3D modeling
- 3D printing

Dr. Yopak

- 3D printing 3D model created at UNCW of a shark brain (2X actual size)
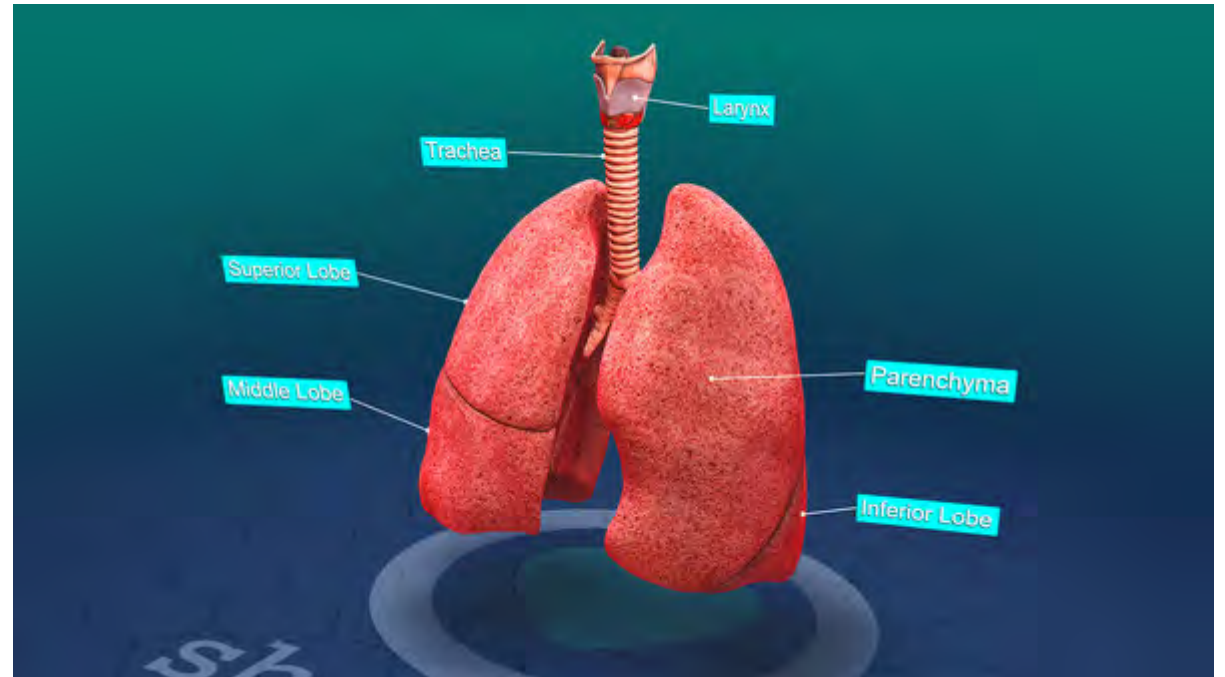
Digital Arts
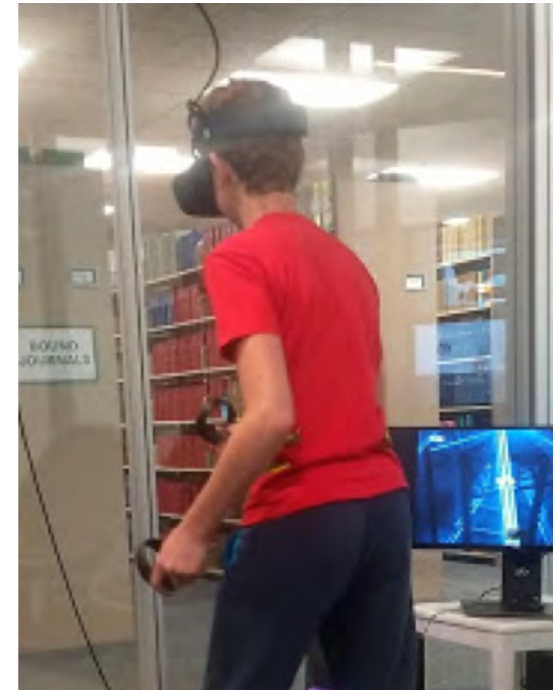
- Laser Cutting

- 3D printing

Anatomy Class (Coastal Christian High School)

- VR title: ShareCare (Anatomical models of Human body)

Summer School

- STEAM
  - Chemistry workshop: 3D printing and VR

- Cameron Business: Youth Entrepreneurship Program
  - Tour of space

Digital Makerspace: Next Steps

- Grants
  - Friends of UNCW: Magic Leap
  - LSTA

- Digital Makerspace Coordinator

- Digital Makerspace Student Fellows

- New Collaborations

LSTA Grant

- **University of North Carolina at Wilmington/Randall Library**
  Makerspace in the Classroom   Award: $41,715.00

- The Digital Makerspace at the University of North Carolina Wilmington's William Madison Randall Library, in collaboration with the Technology Assistance Center, provides access to all UNCW students and faculty, regardless of major, discipline or department affiliation, with new and emerging technologies such as virtual reality, 3D printing, and 3D scanning. Less than a year old, the Digital Makerspace seeks to better integrate with classroom activities through development and implementation of programming and additional technologies for the purpose of: 1) assisting faculty with the design and development of learning experiences that leverage these technologies; 2) supporting faculty in their efforts to integrate these technologies in their courses and in their classrooms; 3) creating applied learning experiences by the creation of a **Digital Makerspace Student Fellows** program; 4) adding technology that can be brought to the classroom in the form of a "mobile makerspace"; 5) sharing with other libraries the outcomes of these activities for adoption at their institutions.

Digital Makerspace Coordinator

Alyssa Wharton starts 10/24

- Supervise Digital Makerspace students/fellows

- Coordinate activities (tours, classes, workshops) in Digital Makerspace

- Coordinating the day-to-day operations of Randall Library's Digital Makerspace or other future technology-driven learning space

- Maintain the space and equipment

- Assist and instruct users

- Evaluate space usage and program effectiveness for continuous improvement

- Facilitates programs, events, outreach, training, and instruction related to the Digital Makerspace or other future technology-driven learning spaces.

- Staff Training, as needed

- Documentation & project tracking

Digital Makerspace Fellows

Victoria White

- 3D Modeling

Oliver Galbraith

- 3D printing

New Collaborations

- Arabic
- Digital Humanities
- Instructional Technology (EDN 303)
- ESL
- Poverty Studies (SOC 260)