

Research Instrumentation Core Facility

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Mission

The Research Instrumentation Core Facility enables the development of new scientific instruments in order to further research at Harvard Medical School and affiliated institutions. Special preference is given to projects intended to generate novel instruments for cutting-edge research in neuroscience and the root causes of neurological dysfunction.

Services

The focus of the facility is the design and fabrication of electronic, optical, and mechanical devices, as well as software interfaces for these devices. The facility's services include:

Training

Facility staff can train research scientists in the design and fabrication of customized research instruments.

Consulting and referral

Consultations may include design of hardware or software, purchasing decisions, or assistance with implementation.

Design and fabrication services

The facility staff can perform design and fabrication for those projects that are most appropriate to the facility's mission and expertise.

Shared equipment and workspace

The facility provides tools and workshop space for authorized researchers to design and prototype their own electronics, optics, mechanical devices, and software.

Knowledge/technology transfer

Facility staff are knowledgeable about customized research instruments already in use in the community and are able to help interested researchers disseminate their ideas to other labs.

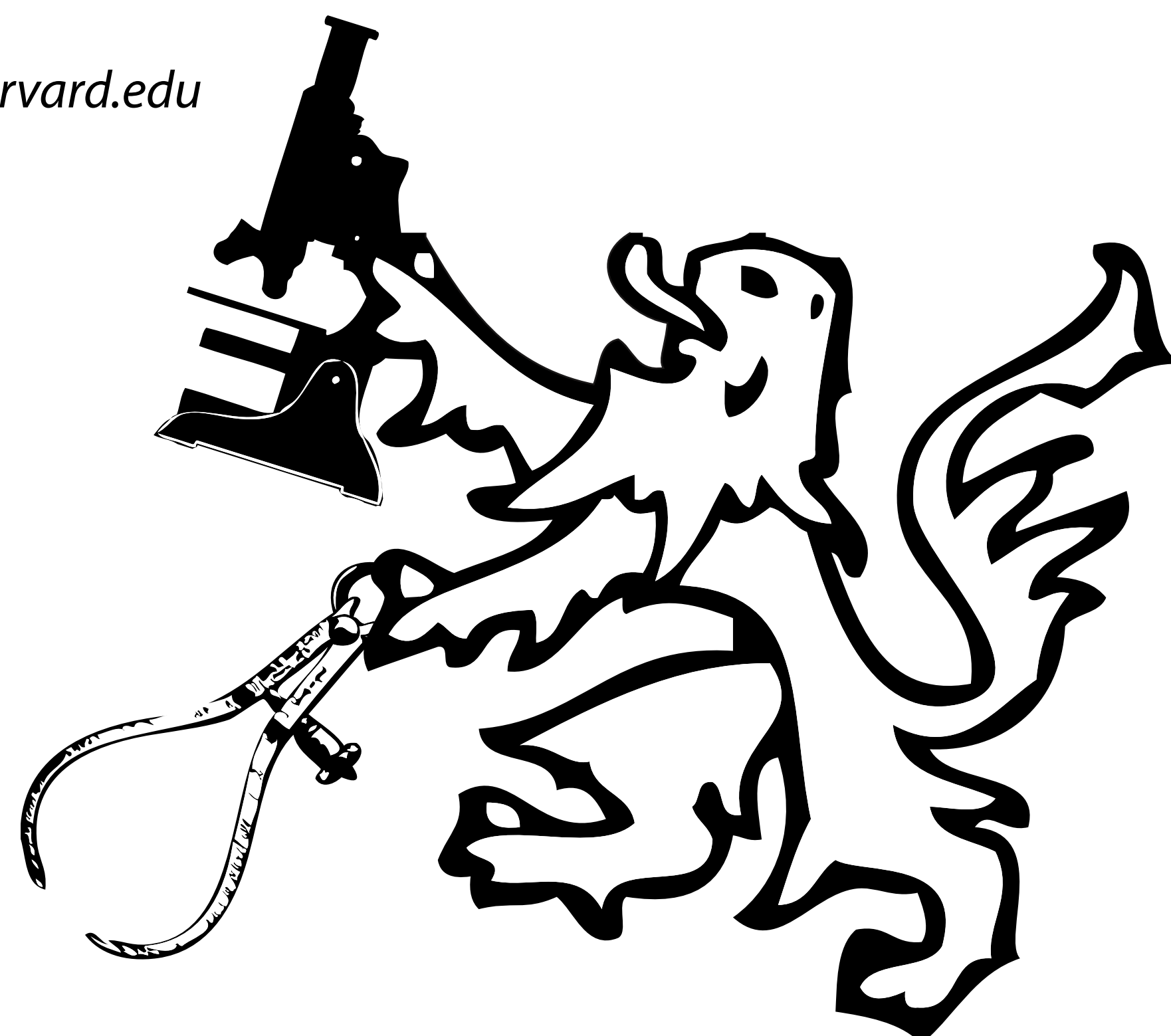
Location & Contact Info

Research Instrumentation Core
Armenise 408
200 Longwood Ave

Email for more information or to discuss a project:

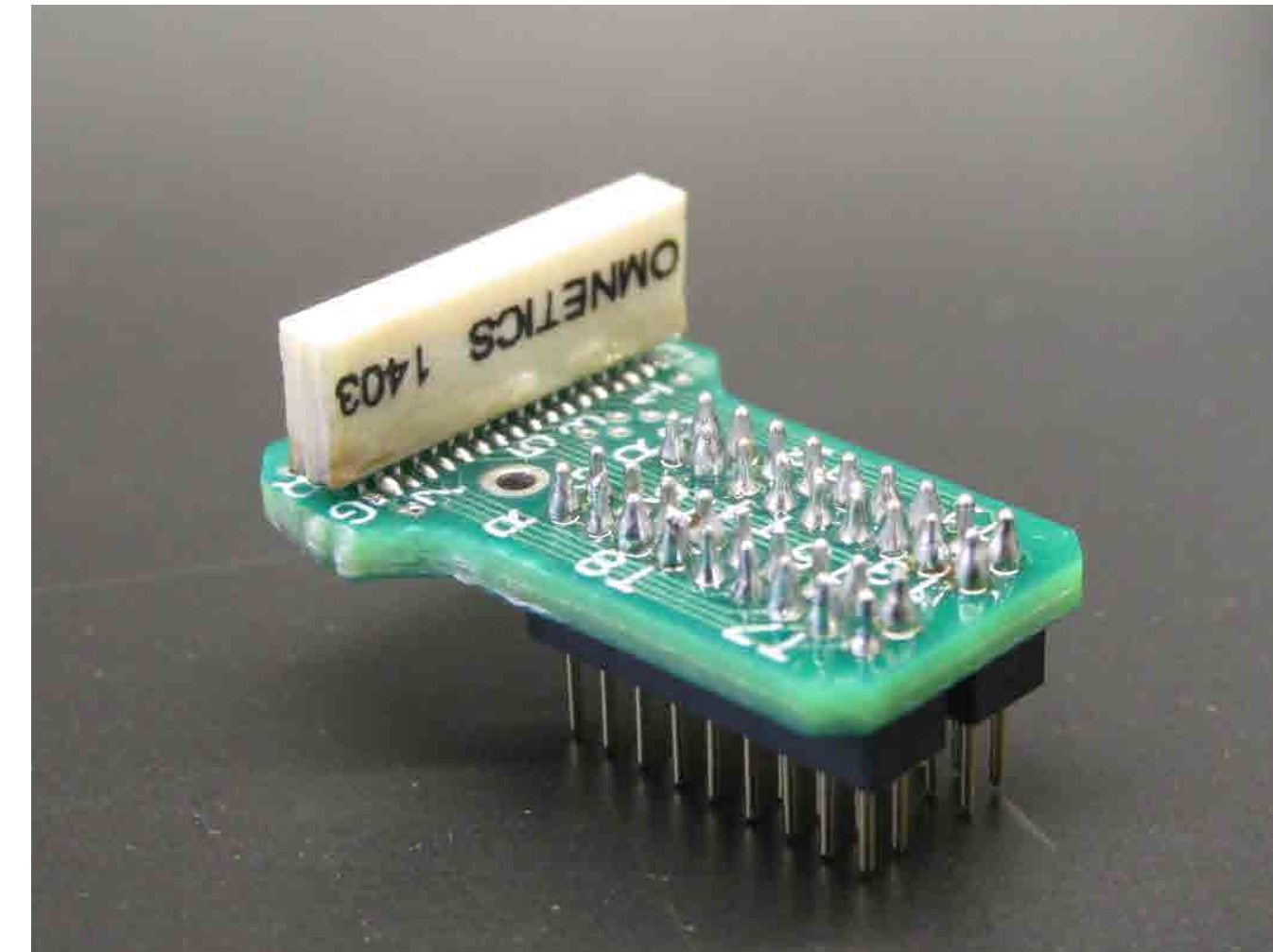
ofer@hms.harvard.edu

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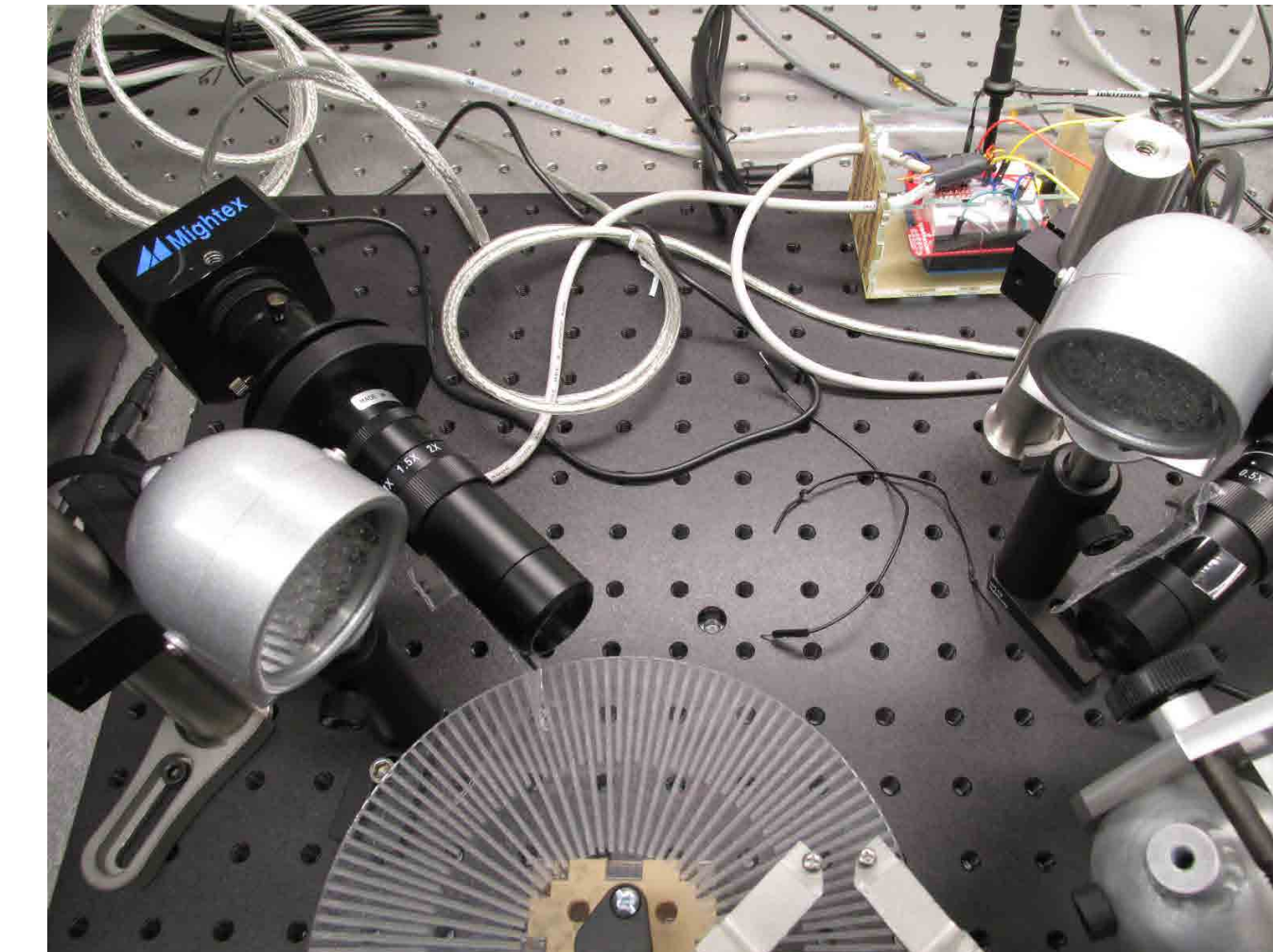


Representative Projects

Electronics

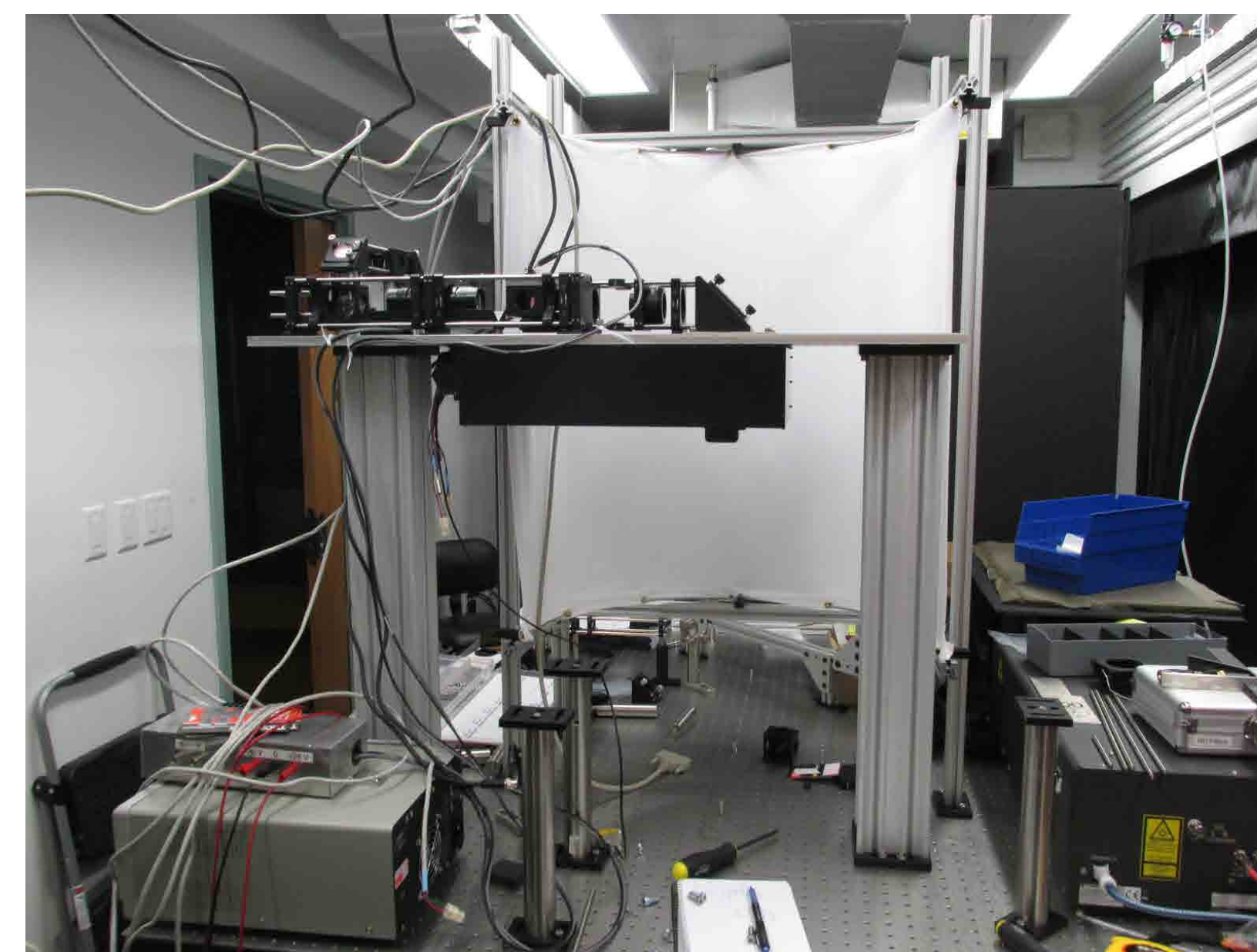


Circuit board for recording neural activity in mice.

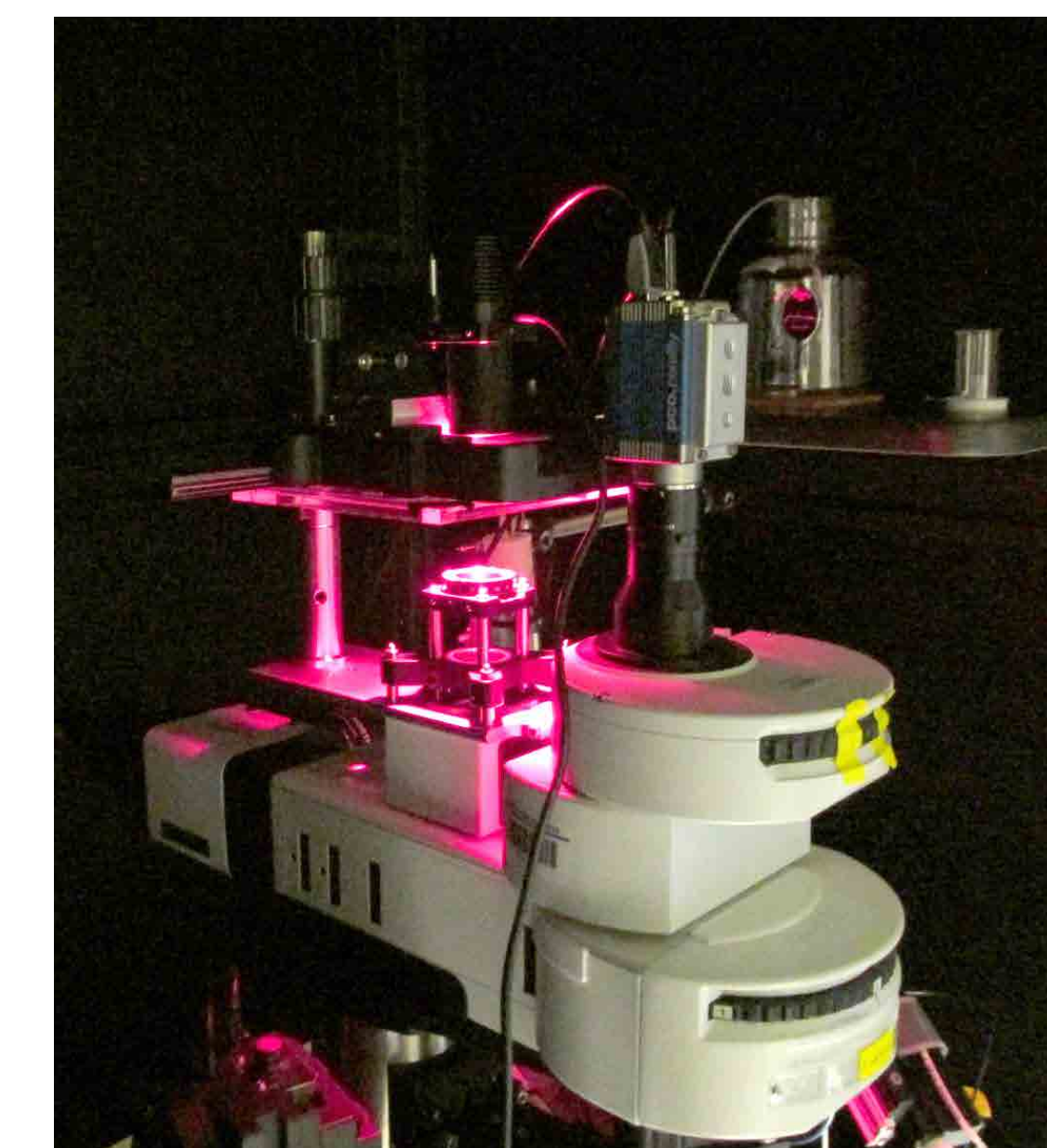


Treadmill and eye movement tracking system for mice.

Optics



Two photon microscope for imaging neural activity in mice.

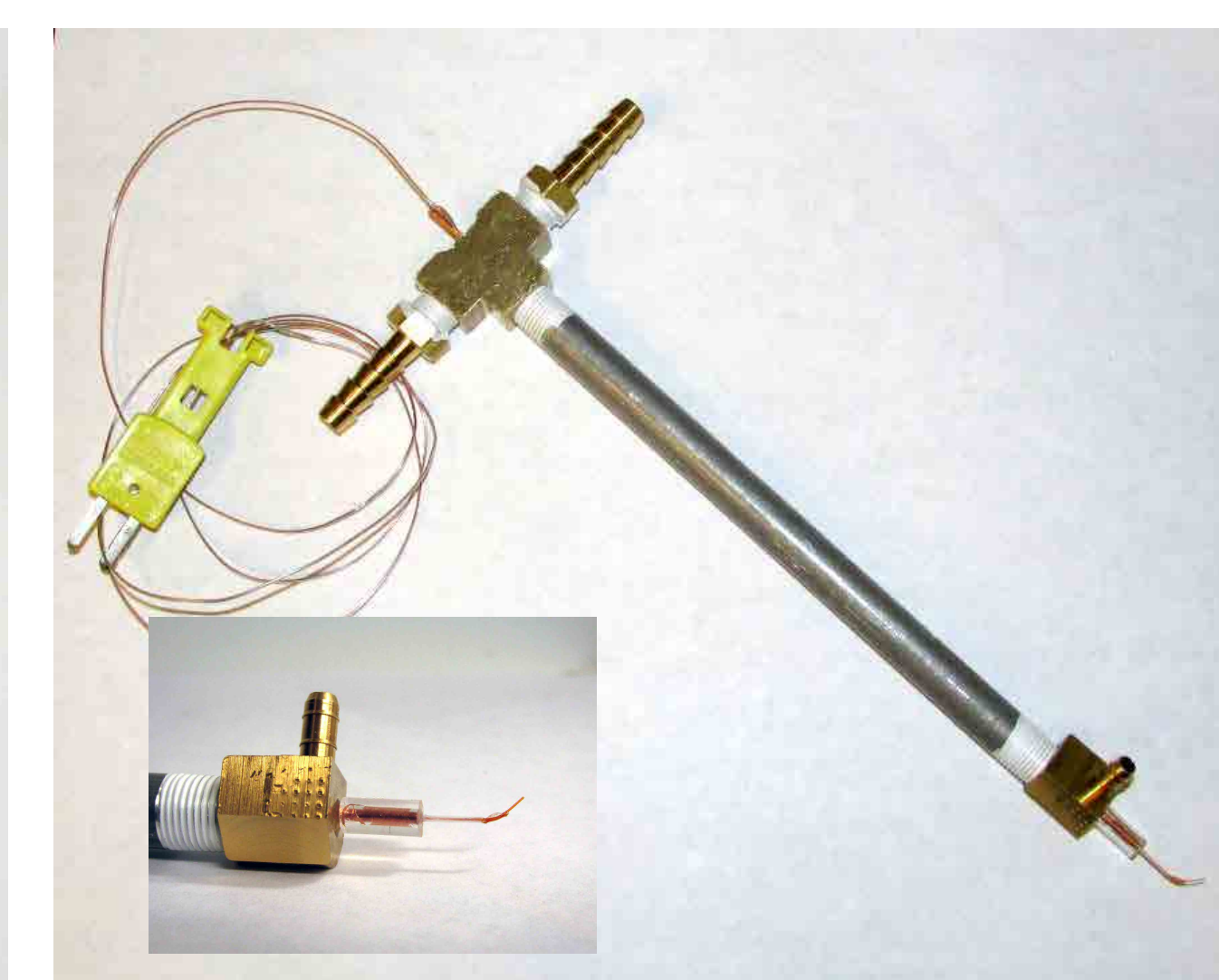


Visual stimulus delivery system for retinal recordings.

Mechanical



32-chamber arena for fruit fly behavior.

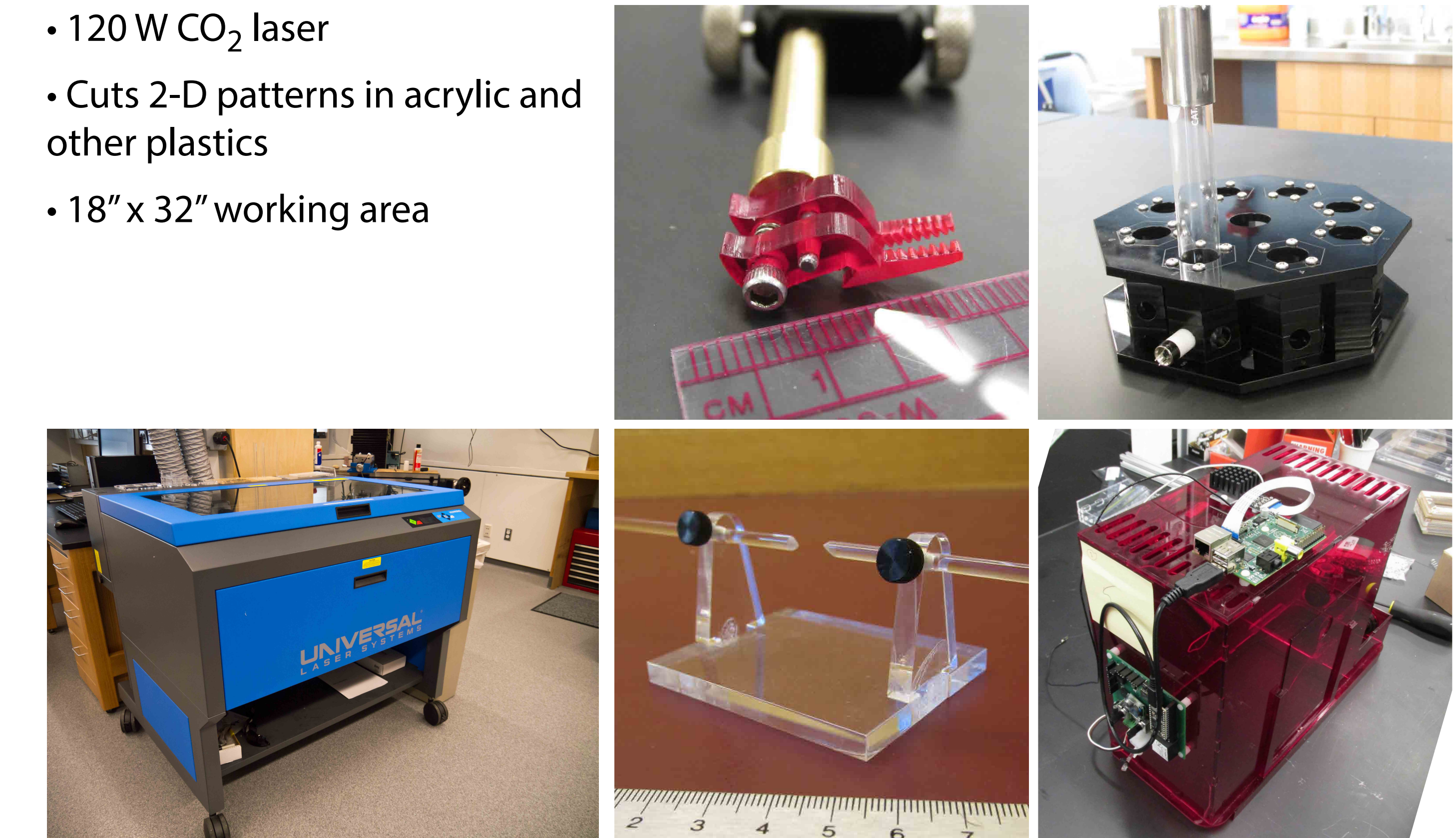


Temperature stimulus delivery system for fruit fly.

Workshop & Tools

Laser Cutter

- 120 W CO₂ laser
- Cuts 2-D patterns in acrylic and other plastics
- 18" x 32" working area



Electronics and Mechanical Workbenches



- Soldering station for through-hole and surface-mount components
- Electronic testing equipment
- Hand tools and prototyping equipment
- Basic power tools

Support



HARVARD
MEDICAL SCHOOL
DEPARTMENT OF
NEUROBIOLOGY

Harvard NeuroDiscovery Center
COLLABORATING TO CURE
NEUROLOGIC AND PSYCHIATRIC DISEASE

HMS Tools & Technology Grant



fondazione
bertarelli