

## **Microcomponents prototyping for biomedical applications**

Program:

1. Overview of microfabrication techniques.
2. Basic operating principles of some simple micro-scale components/devices.
3. What you need to know about how to make micro-scale elements.
4. Examples of electrical, optical, micromechanical and microfluidic components.
5. How to design your own microdevice for neuroscience and biomedical application in general.
6. What is computer-aided-design CAD and why is it not simply a drawing program.
7. Introduction to 3D modeling and printing techniques.
8. Visiting micro/nanolabs available at CTI, CNPEM & Unicamp.
9. How to make sure you will get what you want – simulating your device.