

UCLA NEUROENGINEERING PROGRAM

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The goal of the UCLA NeuroEngineering Training Program is to prepare graduate students to be leaders in the revolutionary technology developments that will affect neuroscience in the 21st Century. Unfortunately, graduate programs in the life sciences prepare trainees to be academic scientists within traditional disciplines, almost always using the standard tools of that discipline. By expanding the synergies between the UCLA Brain Research Institute (BRI) and the Henry Samueli School of Engineering and Applied Science (HSSEAS), the UCLA NET Program will promote the application of new engineering technologies to neuroscience, including micromachining, microelectromechanical systems (MEMS), nanotechnology, and tissue engineering. The UCLA NET Program has the following objectives: (1) to enable students with a background in biological science to develop and execute projects that make use of state-of-the-art technology; (2) to enable students with a background in engineering to develop and execute projects that address problems that have a neuroscientific base; and (3) to enable all trainees to develop the capacity for the multidisciplinary teamwork that will be necessary for new scientific insights and dramatic technological progress. Many of the details and highlights of the program will be presented and descriptions of several NE projects will be described.