



California Institute of Technology

NEWS RELEASE

For Immediate Release
February 2, 2006

Contact:
Caltech Media Relations
626-395-3227

Karen Denne
The Broad Foundations
310-954-5058

Caltech Launches Brain Study Program with \$8.9 Million Gift from Eli Broad to Fund 24 Researchers and Six New Labs

PASADENA, Calif.— For years, scientists have worked to study each of the 100 billion neurons in the human brain. But while they understand individual neurons, they’ve been stumped by how neurons work together, how they encode information, and how they generate thoughts, emotions, and actions.

That pioneering area of study is behind the Broad Fellows Program in Brain Circuitry at the California Institute of Technology, announced today and made possible through an \$8.9 million grant from the Broad Foundations and philanthropist Eli Broad.

The funding will enable the program to establish six new neuroscience labs at Caltech and hire 24 researchers over the next five years.

“Caltech is one of the country’s greatest research institutions, and this program will encourage some of the brightest young minds in science to devote their research to unlocking the mysteries of the brain,” said Eli Broad, founder of the Broad Foundations.

While scientists have made tremendous progress in recent years in understanding the brain’s overall activity, the interactions between neurons--which hold the clues to mental diseases such as Alzheimer’s, autism, and schizophrenia--are still a mystery.

“We have no idea how these neurons are assembled in groups of 50 to 100,000 to generate conscious thoughts,” said Christof Koch, Troendle Professor of Cognitive and Behavioral Biology and Professor of Computation and Neural Systems at Caltech, who will serve as director of the Broad Fellows Program. “We truly believe that the best way to learn about small neuronal networks is to find a few brilliant young neurobiologists, engineers, or physicists with innovative ideas on how to record and manipulate networks of nerve cells.

California Institute of Technology

Then, if we provide them with the funding for research assistants and equipment to develop the relevant technologies, all we need to do is get out of their way.”

“Neuroscience is becoming an increasingly multidisciplinary exercise,” said Michael Dickinson, Zarem Professor of Bioengineering at Caltech, who will serve on the selection committee for the Broad Fellows Program. “Future progress will depend on a creative mixture of expertise in biology, engineering, and mathematics. An exciting feature of this program is that it will provide talented young researchers with a borderless research environment from which to pursue programs from different perspectives.”

Koch and his colleagues will hire the first two Broad Fellows in Brain Circuitry later this year, and will hire two more in 2007 and an additional two in 2008. Each of the six Broad Fellows will receive funding to hire up to three assistants, for a total of 24 researchers in the program, which will be housed in Caltech’s Division of Biology.

“Each of the fellows will be able to devote up to five years to their projects, without having to worry about finding another postdoctoral appointment in a year or two or limiting themselves only to research that will lead to tenure,” Koch said. “These researchers will be at a level between postdoctoral fellow and assistant professor, which means that they will be very independent and won’t have to worry about the tenure clock.”

“The freedom that comes with these fellowships should foster quite productive interactions among fellows and members of the Caltech community,” added Dickinson. “An important role of the selection committee will be to recruit a diverse array of young researchers with complementary skills.”

The program is designed to give researchers the freedom and flexibility to advance their work in whatever way is most productive, and may include the development of specific technologies or the invention of new instruments. The Broad Fellows will be given individual space to do their work in the Beckman Laboratories of Behavioral Biology on the Caltech campus.

The program will be under the direction of Koch and a committee of other Caltech faculty members, including Dickinson; Gilles Laurent, the Hanson Jr. Professor of Biology and Computation and Neural Systems; David Anderson, the Sperry Professor of Biology; Barbara Wold, director of the Beckman Institute at Caltech and Bren Professor of Molecular Biology; and Mark Konishi, the Bing Professor of Behavioral Biology.

Founded in 1891, Caltech is located on a 124-acre campus in Pasadena. The Institute also manages the nearby Jet Propulsion Laboratory and operates several other off-campus astronomical, seismological, and marine biology facilities. Caltech has an enrollment of some 2,100 students, more than half of whom are in graduate studies, a faculty of about 280 professorial members and 62 research members, and some 570 postdoctoral scholars. Caltech employs a staff of more than 2,500 on campus and 5,000 at JPL.

U.S. News & World Report consistently ranks Caltech's undergraduate and graduate programs as being among the nation's best. The average SAT scores of members of recent incoming

California Institute of Technology

freshman classes have consistently been among the highest in the country. Over the years, 32 Nobel Prizes and five Crafoord Prizes have been awarded to faculty members and alumni.

The Broad Foundations were founded by Eli and Edythe L. Broad as a Los Angeles–based venture philanthropy focused on entrepreneurship for the public good in education, science, and the arts. The Broad Foundations Internet address is www.broadfoundations.org.

###

Visit the Caltech Media Relations website at: <http://pr.caltech.edu/media>