



## 2008 Undergraduate Internship Program

University of California, Berkeley  
**June 23 – August 15**

### Be in the vanguard of cutting-edge nanoscience research

#### As a participant in our program, you will:

- Work directly with **leading scientists** in this exciting field of research
- Focus on the most **important and compelling topics** in nanotechnology
- Gain direct research experience that will **prepare you for a career in science**

#### Program participants receive:

- Summer stipend – \$4,000 for 8 weeks (June 23-August 15)
- Room and board – UC dorm plus full meal plan
- Travel allowance (limited funds available)

#### Examples of Past Summer Internship Research Projects

##### Topic

Fundamentals and Research in Scanning Tunneling Microscopy  
Quantitative Single-Cell Analysis of Receptor Dynamics and Chemotactic Response on a Chip  
Creating Receptor-Imbedded Polymer Coatings for an Electronic Nose  
Controllability of Deposition of Near-Field Electrospinning  
WetFet~A High-k Gate Dielectric Transistor  
Galvanic Displacement of Platinum Clusters onto Silicon Wafers  
Creating a Homogenous Molecular Substrate Tethered by Poly (ethylene glycol) for Gas Receptor Screening  
Ferroelectric Characterization of Inkjet Printed PVDF Thin Films  
Synthesis, Purification and Utilization of Boron Nitride Nanotubes

##### Principal Investigator

Prof. M. Crommie  
  
Prof. L. Lee  
Prof. S.W. Lee  
Prof. L. Lin  
Prof. T.J. King Liu  
Prof. R. Maboudian  
  
Prof. A. Majumdar  
Prof. R. Ramesh  
Prof. A. Zettl

#### To Apply

- Send your resume, transcripts (unofficial okay), 3 references (name and email), and a 350-word essay on why you want to participate in the COINS internship program (include your area of interest in nanoscience) to: [coins\\_urap@calmail.berkeley.edu](mailto:coins_urap@calmail.berkeley.edu)
- Underrepresented students are encouraged to apply
- Must be a US citizen or permanent resident
- **Application deadline: APRIL 4, 2008**
- Notification of acceptance will be sent by April 30

#### About the Center of Integrated Nanomechanical Systems (COINS)

COINS' mission is to inspire and realize revolutionary applications involving molecular transport, replication, and energy conversion using nanomechanical technology. Specifically, the technical focus of COINS is to develop, in parallel, two closely related nanosensor systems: (1) a new Personal And Community-based environmental MONitoring (PACMON), and (2) a chemical/biological sensing with integrated communication and power for tagging, tracking, and locating applications (TTL).

To learn more about COINS, visit [nano.berkeley.edu/coins](http://nano.berkeley.edu/coins).