

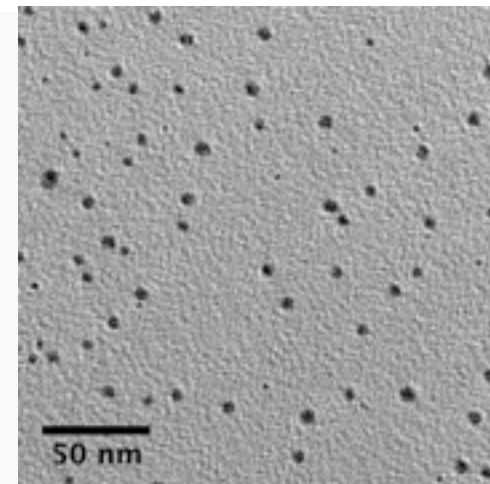
LEWIS & CLARK CHEMISTRY

2011

SABBATICAL NEWS

■ Recent Returns from Sabbatical

- Anne Bentley (U. Illinois-Urbana, Fall 2010)
 - Learned new ways to control nanoparticle surface chemistry
- Nikolaus Loening (Leibniz Institute – FMP, Berlin, Fall 2010 – Spring 2011)
 - Determined the structures of three spider venom peptides
 - Optimal control designed pulses for NMR spectroscopy



■ Upcoming Sabbaticals

- Janis Lochner (Fall 2012 – Spring 2013)
- Louis Kuo (Fall 2012 – Spring 2013)



NEWS FROM RECENT GRADUATES

- Hillary Struthers ('11) – Working in China
- Curtis Smith ('10) and Peter Ray ('10) – Working at Genentech
- Alli Akagi ('09) – starting PhD program at Caltech after Teach for America
- Angela Blum ('05) – Finishing PhD at Caltech, off to a post-doctoral position at Scripps

NEW NANOSCIENCE CLASSES

- Chem 198: Technologies of the Future
 - Spring 2012
 - Taught by Anne Bentley (Chemistry) and Autumn Keller (Biology)

- Chem 415: Nanomaterials
 - Spring 2011
 - Taught by Anne Bentley
 - Collaboration with art class



SPECIAL TOPICS CLASSES

- Chem 305: Aquatic Chemistry (Barb Balko)
- Chem 415: Nanochemistry (Anne Bentley)
- Chem 421: Neurochemistry (Janis Lochner)
- Chem 443: Medicinal Organic Chemistry (Louis Kuo)
- Chem 460: Topics in Modern Physical Organic Chemistry
(Jim Duncan)
- Chem 464: Biomolecular NMR Spectroscopy (Niko Loening)

RENOVATED LABORATORIES

- Organic Chemistry Lab moved into a remodeled space
- New Instrumentation Room
- Lab for Perspectives classes will be renovated Summer 2012



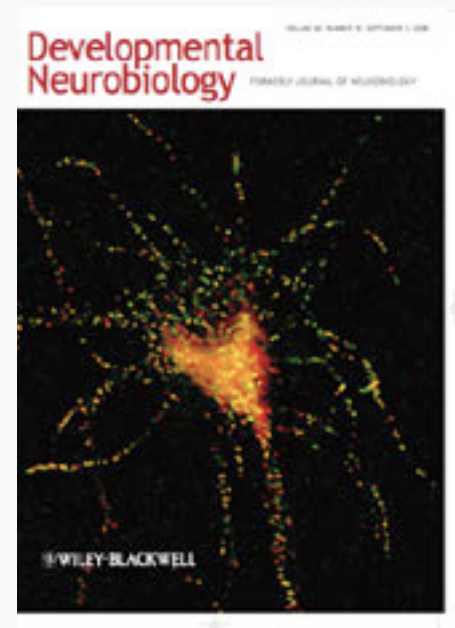
NEW EQUIPMENT

- Benchtop SEM Microscope



RECENT PUBLICATIONS

- Louis Kuo and Sara Glazier ('12), "Stereochemical Inversion of Phosphonothioate Methanolysis by La(III) and Zn(II): Mechanistic Implications for the Degradation of Organophosphate Neurotoxins", *Inorganic Chemistry*
- Lila Forte ('09), Marie C. Lafortune ('10), Irena R. Bierzynski ('11) and James A. Duncan, "CASSCF Molecular Orbital Calculations Reveal a Purely Pseudopericyclic Mechanism for a [3,3] Sigmatropic Rearrangement", *Journal of the American Chemical Society*
- Janis Lochner, Erika Spangler ('09), Maria Chavarha ('09), Conor Jacobs ('09), Kevin McAllister ('08), Linnea Schuttner ('06), Bethe Scalettar, "Efficient copackaging and cotransport yields postsynaptic colocalization of neuromodulators associated with synaptic plasticity", *Dev Neurobiol.*



RECENT GRANTS

- Nanoscience grant from the W. M. Keck Foundation
 - Anne Bentley a part of this grant
 - \$250,000 for 3 years
 - Supports curriculum development and research
 - new benchtop SEM (FEI, Hillsboro)
- Janis Lochner awarded a NIH-AREA grant
 - \$250,000 for 3 years
 - Supports her neurochemistry research