

James J. Chambers

University of Massachusetts, Amherst
Department of Chemistry
710 North Pleasant St.
Amherst, MA 01003 USA

Phone: 413.545.3864
Fax: 413.545.4490
Home Phone:
Email: chambers@chem.umass.edu

ACADEMIC RECORD:

University of Massachusetts, Amherst – Department of Chemistry

- Assistant Professor, Jan. 2008 – present
- Associate Director, Neuroscience and Behavior Graduate Program, Sept. 2011 - present

University of California, Berkeley – Department of Molecular and Cell Biology

- Postdoctoral research: Richard H. Kramer, Sept. 2004 – Dec. 2007

University of California, San Francisco – Department of Pharmaceutical Chemistry

- Postdoctoral research: Pamela M. England, May 2002 – Sept. 2004

Purdue University – Department of Medicinal Chem. and Molecular Pharmacology; Ph.D., 2002

- Graduate research: David E. Nichols, May 1997 – May 2002

State University of New York at Buffalo – Department of Medicinal Chemistry; B.S., 1997

- Undergraduate research: Wayne K. Anderson and Michael R. Detty, May 1995 – May 1997

PUBLICATIONS:

Vytla, D., Combs-Bachmann, R.E., Hussey, A.M., McCarron, S.T., McCarthy, D.S., Chambers, J.J. *Prodrug approaches to reduce hyperexcitation in the CNS*. **2011**, *Advanced Drug Delivery Reviews*, Accepted, Nov. 2011.

Vytla, D., Combs-Bachmann, R.E., Hussey, A., Hafez, I., **Chambers, J.J.** *Silent, fluorescent labeling of native neuronal receptors*. *Org Biomol Chem*. **2011**, *9*, 7151-7161.

Jackman, S., Babai, N., **Chambers, J.J.**, Thoreson, W.B., Kramer, R.H. *A positive feedback synapse from retinal horizontal cells to cone photoreceptors*. *PLoS Biology*. **2011**, [Epub ahead of print]

Chambers, J.J., Kramer, R.H. Editors of Book. *Photosensitive Molecules for Controlling Biological Function*. The Humana Press/Springer. **2011**.

Feliciano, M., Vytla, D., Medeiros, K.A., **Chambers, J.J.** *The GABA-A receptor as a target for photochromic molecules*. *Bioorg. Med. Chem*. **2010**, *18*, 7731-7738.

Chambers, J.J., Kramer, R.H. *Light-activated ion channels for the control of neural activity*. Chapter in *Methods in Nano Cell Biology*. Elsevier. **2008**, *90*, 217-232.

Chambers, J.J., Banghart, M.A., Trauner, D., Kramer, R.H. *Light-induced depolarization of neurons using a modified Shaker K⁺ channel and a molecular photoswitch*. *J. Neurophysiol*. **2006**, *96*, 2792-2796.

McLean, T.H., **Chambers, J.J.**, Parrish, J.C., Braden, M.R., Marona-Lewicka, D., Kurrasch-Orbaugh, D.M., Nichols, D.E. *C-(4,5,6-Trimethoxyindan-1-yl)methanamine: A Mescaline Analogue Designed Using a Homology Model of the 5-HT_{2A} Receptor*. *J. Med. Chem*. **2006**, *49*, 4269-4274.

Kramer, R.H., **Chambers, J.J.**, Trauner, D. *Photochemical tools for remote-control of ion channels in excitable cells*. *Nature Chem. Bio*. **2005**, *1*, 360-365.

Chambers, J.J., Gouda, H., Young, D.M., Kuntz, I.D., England, P.M. *Photochemically Knocking Out Glutamate Receptors in Vivo*. *J. Am. Chem. Soc*. **2004**, *126*(43), 13886-13887.

Press Coverage for Chambers, J.J. et al., *J. Am. Chem. Soc.* **2004**:

- Rusk, N. Memories are made of this. *Nat. Methods* **2004**, *1*(3), 185.
- Faculty of 1000: <http://www.f1000biology.com/article/15506725/evaluation>

Chambers, J.J., Parrish, J.C., Jensen, N.H., Kurrasch-Orbaugh, D.M., Marona-Lewicka, D., Nichols, D.E. *Synthesis and Pharmacological Characterization of a Series of Geometrically Constrained 5-HT_{2A/2C} Receptor Ligands*. *J. Med. Chem*. **2003**, *46* (16), 3526-3535.

Chambers, J.J., Nichols, D.E. *A Homology-Based Model of the Human 5-HT_{2A} Receptor Derived From an In Silico Activated G-Protein Coupled Receptor*. *J. Comput. Aided Mol. Des.* **2002**, 16 (7), 511-520.

Chambers, J.J., Kurrasch-Orbaugh, D.M., Parker, M.A., Nichols, D.E. *Translocation of the 5-Alkoxy Substituent of 2,5-Dialkoxyarylalkylamines to the 6-position: Effects on 5-HT_{2A/2C} Receptor Affinity*. *Bioorg. Med. Chem. Lett.* **2002**, 12, 1997-1999.

Chambers, J.J., Kurrasch-Orbaugh, D.M., Parker, M.A., Nichols, D.E. *Enantiospecific Synthesis and Pharmacological Evaluation of a Series of Super-Potent, Conformationally Restricted 5-HT_{2A/2C} Receptor Agonists*. *J. Med. Chem.* **2001**, 44, 1003-1010.

AD HOC REVIEWING:

Advanced Drug Delivery Reviews
Angewandte Chemie
Journal of Alzheimer's Disease
Journal of Materials Chemistry
Molecular Biosystems
Nature Chemical Biology
PLoS One

AWARDS:

2008-2012 Human Frontier Science Program – Young Investigator Award
2011 Mellon Mutual Mentoring MicroGrant – UMass, Amherst
2008-2009 Mellon Mutual Mentoring Grant – Chemical Biology, UMass, Amherst
2004-2006 National Institutes of Health - NHLBI NRSA, 1 F32 HL72604-01A1
2003-2004 UCSF Cancer Training Fellowship
2002-2003 UCSF Neuroscience Training Fellowship
2002 Excellence in Research, Jenkins/Knevel Award, Purdue University
2001 John N. Davisson Award in Medicinal Chemistry, Purdue University
2001, 2000 Purdue Graduate Student Association Travel Grant Award
2000-2002 Purdue University Research Foundation, Original Research Proposal

SOCIETIES:

1995-present American Chemical Society
2005-present Society for Neuroscience
2002-present Sigma Xi