# Gabriel Fenteany, Ph.D. – Curriculum vitae

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### **EDUCATION**

1997	Ph.D., Biochemistry, Harvard University, Cambridge, Massachusetts (with Profs.
	Stuart L. Schreiber and Elias J. Corey)
1992	M.A., Biochemistry and Molecular Biology, University of California, Santa
	Barbara (with Prof. Daniel E. Morse)
1990	B.A., Biochemistry, Aquatic Biology, University of California, Santa Barbara
1989	Licence (B.S. equivalent), Biology, Université de Franche-Comté, France (as
	foreign exchange student from Reed College, 1987 – 1989)
1985 - 1989	Reed College, Portland, Oregon

### **PROFESSIONAL EXPERIENCE**

2017 – present	Senior Research Scientist (institutional equivalent of professor), Institute of
	Genetics, Biological Research Centre, Szeged, Hungary
2015 - 2017	Senior Research Scientist, Division of Endocrinology, Data Sciences Research
	Center, and Research Administration, New York City Health and Hospitals and
	New York University Medical Center
2006 - 2015	Associate Professor of Chemistry, University of Connecticut, Storrs
	Concurrent appointments: Faculty of the Cell Biology Graduate Program (2008 –
	2015); Co-Director of the High-Throughput Screening Facility (2008 – 2015);
	Faculty of the Structural Biology Partnership (2007 – 2015)
2000 - 2006	Assistant Professor of Chemistry, University of Illinois, Chicago
1997 - 2000	Life Sciences Research Foundation Postdoctoral Fellow, Harvard Medical School,
	Boston, Massachusetts (with Profs. Thomas P. Stossel and Paul A. Janmey)

#### **DIGITAL CONTENT CREATION**

1999 – present	Creator and Maintainer, The Virtual Library of Biochemistry, Molecular Biology
	and Cell Biology, http://biochemweb.net
1998 – 2000	Creator and Maintainer, Websites for the Divisions of Experimental Medicine and
	Hematology, Brigham and Women's Hospital, Harvard Medical School

#### AWARDS AND HONORS

2007	University of Connecticut Undergraduate Student Government
	Educator of the Year
2002 - 2006	American Cancer Society Research Scholar
1999 – 2000	Life Sciences Research Foundation Postdoctoral Fellowship
1999	National Institutes of Health Postdoctoral Fellowship (Declined)
1999	American Lung Association Postdoctoral Fellowship (Declined)
1991 – 1994	National Defense Science and Engineering Graduate Fellowship

1990	Election to Phi Beta Kappa National Honor Society
1990	Election to Golden Key National Honor Society
1985	Alice Tweed Tuohy Foundation Honors Scholarship

# **RESEARCH GRANTS**

### **Main Competitive Grants**

R01GM077622 S2, National Institutes of Health (NIGMS) Fenteany, G. (PI), 11/09/2009 – 31/05/2014	(dates in DD/MM/YYYY format)
Mechanism of Action of New Inhibitors of Cell Migratic	n
Role: PI	Amount: \$200,451
R01GM077622, National Institutes of Health (NIGMS)	
Fenteany, G. (PI), 01/06/2006 – 31/05/2014	
Mechanism of Action of New Inhibitors of Cell Migratic	n
Role: PI	Amount: \$1,295,000
R01GM077622 S1, National Institutes of Health (NIGMS)	
Fenteany, G. (PI), 01/06/2006 – 31/05/2011	
Mechanism of Action of New Inhibitors of Cell Migratic	n
Role: PI	Amount: \$174,903
RSG-02-250-01-DDC, American Cancer Society	
Fenteany, G. (PI), 01/07/2002 – 30/06/2006	
Probes to Study and Control Cell Motility and Morphoge	enesis
Role: PI	Amount: \$650,000
R21CA95177, National Institutes of Health (NCI)	
Fenteany, G. (PI), 01/04/2002 – 31/03/2003	
Discovery of Drug Targets Controlling Cell Motility	
Role: PI	Amount: \$148,573

# **Miscellaneous Competitive Grants**

University of Connecticut Summer Undergraduate Research	h Fellowship
Fenteany, G. (PI), Lincoln, S.T (Student), 06/2011 - 08/2	011
Role: PI	Amount: \$3,990
University of Connecticut Summer Undergraduate Research	h Fellowship
Fenteany, G. and Knecht, D. (Co-PIs), Minutolo, N. (Stud	dent), $06/2011 - 08/2011$
Role: Co-PI	Amount: \$4,000
University of Connecticut Major Research Equipment Awa	rd
Hadden, K. (PI), 22/10/2010	
Initial Establishment of UConn High-Throughput Screen	ing Center
Role: Key Personnel	Amount: \$221,530
University of Connecticut Summer Undergraduate Research	1
Fenteany, G. (PI), Heyse, S.A. (Student), 06/2010 - 08/20	010
Role: PI	Amount: \$2,500
University of Connecticut Intermediate Research Equipment	nt Award
Yao, X. (PI), 11/12/2009	
Nano Liquid Chromatography System	
Role: Key Personnel	Amount: \$99,000
UCHC/Storrs and Regional Campus Incentive Grant	
Fenteany, G. and Wright, D. (Co-PIs), 01/09/2008 – 31/0	
A High Throughput Screen to Identify Novel Anti-Cance	0
Role: Co-PI	Amount: \$50,000
University of Connecticut Summer Undergraduate Research	1
Fenteany, G. (PI), Morse, P.D. (Student), 06/2009 - 08/20	
Role: PI	Amount: \$3,000

University of Connecticut Partnership for Excellence in Structural Biology Research Fellowship Fenteany, G. and Alexandrescu, A.T. (Co-PIs), Beshir, A.B. (Student), 01/01/2008 - 31/05/2008 Role: Co-PI Amount: \$12,735 University of Connecticut Partnership for Excellence in Structural Biology Research Fellowship Fenteany, G. and Gascón, J.A. (Co-PIs), Menikarachchi, L.C. (Student), 01/08/2008 -31/12/2007 Role: Co-PI Amount: \$12,735 University of Connecticut Summer Undergraduate Research Fellowship Fenteany, G. (PI), Drozdowicz, L.B. (Student), 06/2007 - 08/2007 Amount: \$3,000 Role: PI Award #0722948, National Science Foundation Knecht, D.A. (PI), 01/09/2007 Acquisition of a Confocal Live Cell Imaging System Role: Senior Personnel Amount: \$367,305 University of Illinois Campus Research Board Grant Fenteany, G. (PI), 01/07/2001 – 30/06/2002 Small Organic Molecules to Study and Control Cell Motility Amount: \$15,000 Role: PI Award #0091994, National Science Foundation Keiderling, T.A. (PI), Fenteany, G. (Co-Investigator), 15/02/2001 Purchase of a Departmental Stopped-Flow Equipped Circular Dichroism Spectrometer Role: Co-Investigator Amount: \$112,572

### **Startup Funding**

University of Connecticut (2006)	Role: PI	Amount: \$625,000
University of Illinois (2000)	Role: PI	Amount: \$400,000

### **PEER-REVIEWED PUBLICATIONS**

- 1. Fenteany, G., Sharma, G., Gaur, P., Kiss, E. & Haracska, L. Inhibitors of the Rad6–Rad18 interaction in the ubiquitination of proliferating cell nuclear antigen and consequent DNA damage tolerance. *In prep.* (2020).
- 2. Gaur, P., Haracska, L. & Fenteany, G. Ubiquitination of proliferating cell nuclear antigen as a cascade of cancer chemotherapeutic targets. *Submitted* (2020).
- 3. Argueta, C.E. & Fenteany, G. Raf kinase inhibitor protein localizes to the nucleus through a bipartite nuclear localization signal and the nuclear transport factor importin α. *Submitted* (2020).
- 4. Gaur, P., Fenteany, G. & Tyagi, C. Mode of inhibitory binding of epigallocatechin gallate to the ubiquitin-activating enzyme Uba1. *Submitted* (2020).
- 5. Fenteany, G., Gaur, P., Sharma, G., Pintér, L., Kiss, E. & Haracska, L. Robust high-throughput assays to assess discrete steps in ubiquitination and related cascades. *BMC Mol. Cell Biol.* **21**, 21 (2020).
- 6. Fenteany, G., Gaur, P., Hegedűs, L., Dudás, K., Kiss, E., Wéber, E., Hackler, L., Martinek, T., Puskás, L.G. & Haracska, L. Multilevel structure–activity profiling reveals multiple green tea compound families that each modulate ubiquitin-activating enzyme and ubiquitination by a distinct mechanism. *Sci. Rep.* **9**, 12801 (2019).
- 7. Fenteany, G., Inoue, T., Bahtiyar, G. & Sacerdote, A.S. Association of vitamin D repletion with normalization of elevated serum 17-OH-progesterone. *Med. Case Rep.* **3**, 22 (2017).
- 8. Powell, D., Inoue, T., Bahtiyar, G., Fenteany, G. & Sacerdote, A. Treatment of nonclassic 11hydroxylase deficiency with Ashwagandha root. *Case Rep. Endocrinol.* **2017**, 1869560 (2017).
- 9. Eddy, N.A. & Fenteany, G. Model studies directed to the synthesis of cucurbitacin I C/D rings. *Tetrahedron Lett.* **56**, 5079–5081 (2015).
- 10. Magpusao, A.N., Omolloh, G., Johnson, J., Gascón, J., Peczuh, M.W. & Fenteany, G. Cardiac

glycoside activities link Na<sup>+</sup>/K<sup>+</sup> ATPase ion-transport to breast cancer cell migration via correlative SAR. *ACS Chem. Biol.* **10**, 561–569 (2015).

- 11. Eddy, N.A., Richardson, J.J. & Fenteany, G. The effect of Lewis acids on the cycloaddition of 3,3,6-trimethylcyclohex-5-ene-1,2,4-trione: Hydrogen transfer versus cycloaddition with cyclopentadiene. *Eur. J. Org. Chem.* **2013**, 5041–5044 (2013).
- 12. Clark, A.G., Sider, J.R., Verbrugghe, K., Fenteany, G., von Dassow, G. & Bement, W.M. Identification of small molecule inhibitors of cytokinesis and single cell wound repair. *Cytoskeleton* **69**, 1010–1020 (2012).
- 13. Eddy, N.A., Kelly, C.B., Mercadante, M.A., Leadbeater, N.E. & Fenteany, G. Access to dienophilic ene-triketone synthons by oxidation of diketones with an oxoammonium salt. *Org. Lett.* **14**, 498–501 (2012).
- Ren, G., Baritaki, S., Marathe, H., Feng, J., Park, S., Beach, S., Bazeley, P.S., Beshir, A.B., Fenteany, G., Mehra, R., Daignault, S., Al-Mulla, F., Keller, E., Bonavida, B., De La Serna, I. & Yeung, K.C. Polycomb protein EZH2 regulates tumor invasion via the transcriptional repression of the metastasis suppressor RKIP in breast and prostate cancer. *Cancer Res.* 72, 3091–3104 (2012).
- 15. Rudnitskaya, A.N., Eddy, N.A., Fenteany, G. & Gascón, J.A. Recognition and reactivity in the binding between Raf kinase inhibitor protein and its small-molecule inhibitor locostatin. *J. Phys. Chem. B* **116**, 10176–10181 (2012).
- Beshir, A.B., Argueta, C.E., Menikarachchi, L.C., Gascón, J.A. & Fenteany, G. Locostatin disrupts association of Raf kinase inhibitor protein with binding proteins by modifying a conserved histidine residue in the ligand-binding pocket. *For. Immunopathol. Dis. Ther.* 2, 47– 58 (2011).
- 17. Eddy, N.A., Morse, P.D., Morton, M.D. & Fenteany, G. Synthesis of oxazolidinone and tosyl enamines by tertiary amine catalysis. *Synlett* **5**, 699–701 (2011).
- Wang, Z., Castellano, S., Kinderman, S.S., Argueta, C.E., Beshir, A.B., Fenteany, G. & Kwon, O. Diversity through a branched reaction pathway: Generation of a library of sixteen multicyclic scaffolds and identification of antimigratory agents. *Chem. Eur. J.* 17, 649–654 (2011).
- 19. Beshir, A.B., Ren, G., Magpusao, A.N., Barone, L.M., Yeung, K.C. & Fenteany, G. Raf kinase inhibitor protein suppresses nuclear factor-κB-dependent cancer cell invasion through negative regulation of matrix metalloproteinase expression. *Cancer Lett.* **299**, 137–149 (2010).
- 20. Kahsai, A.W., Zhu, S. & Fenteany, G. G protein-coupled receptor kinase 2 activates radixin, regulating membrane protrusion and motility in epithelial cells. *Biochim. Biophys. Acta Mol. Cell Res.* **1803**, 300–310 (2010).
- 21. Knecht, D.A., LaFleur, R.A., Kahsai, A.W., Argueta, C.E., Beshir, A.B. & Fenteany, G. Cucurbitacin I inhibits cell motility by indirectly interfering with actin dynamics. *PLoS One* **5**, e14039 (2010).
- 22. Magpusao, A.N., Desmond, R.T., Billings, K.J., Fenteany, G. & Peczuh, M.W. Synthesis and evaluation of antimigratory and antiproliferative activities of lipid-linked [13]-macrodilactones. *Bioorg. Med. Chem. Lett.* **20**, 5472–5476 (2010).
- Ménoret, A., McAleer, J.P., Ngoi, S.-M., Ray, S., Eddy, N.A., Fenteany, G., Lee, S.-J., Rossi, R.J., Mukherji, B., Allen, D.L., Chakraborty, N.G. & Vella, A.T. The oxazolidinone derivative locostatin induces cytokine appeasement. *J. Immunol.* 183, 7489–7496 (2009).
- 24. Beshir, A.B., Guchhait, S.K., Gascón, J.A. & Fenteany, G. Synthesis and structure–activity relationships of metal–ligand complexes that potently inhibit cell migration. *Bioorg. Med. Chem. Lett.* **18**, 498–504 (2008).
- 25. Kahsai, A.W., Cui, J., Kaniskan, H.Ü., Garner, P.P. & Fenteany, G. Analogs of tetrahydroisoquinoline natural products that inhibit cell migration and target galectin-3 outside of its carbohydrate-binding site. *J. Biol. Chem.* **283**, 24534–24545 (2008).
- 26. Mc Henry, K.T., Montesano, R., Zhu, S., Beshir, A.B., Tang, H.H., Yeung, K.C. & Fenteany, G. Raf kinase inhibitor protein positively regulates cell–substratum adhesion while negatively regulating cell–cell adhesion. *J. Cell. Biochem.* **103**, 972–985 (2008).

- 27. Farooqui, R., Zhu, S. & Fenteany, G. Glycogen synthase kinase-3 acts upstream of ADPribosylation factor 6 and Rac1 to regulate epithelial cell migration. *Exp. Cell Res.* **312**, 1514– 1525 (2006).
- 28. Kahsai, A.W., Zhu, S., Wardrop, D.J., Lane, W.S. & Fenteany, G. Quinocarmycin analog DX-52-1 inhibits cell migration and targets radixin, disrupting interactions of radixin with actin and CD44. *Chem. Biol.* (now *Cell Chem. Biol.*) **13**, 973–983 (2006).
- 29. Stossel, T.P., Fenteany, G. & Hartwig, J.H. Cell surface actin remodeling. *J. Cell Sci.* **119**, 3261–3264 (2006).
- 30. Farooqui, R. & Fenteany, G. Multiple rows of cells behind an epithelial wound edge extend cryptic lamellipodia to collectively drive cell-sheet movement. *J. Cell Sci.* **118**, 51–63 (2005).
- Zhu, S., McHenry, K.T., Lane, W.S., Fenteany, G., Mc Henry, K.T., Lane, W.S. & Fenteany, G. A chemical inhibitor reveals the role of Raf kinase inhibitor protein in cell migration. *Chem. Biol.* (now *Cell Chem. Biol.*) 12, 981–991 (2005).
- 32. Altan, Z.M. & Fenteany, G. c-Jun N-terminal kinase regulates lamellipodial protrusion and cell sheet migration during epithelial wound closure by a gene expression-independent mechanism. *Biochem. Biophys. Res. Commun.* **322**, 56–67 (2004).
- 33. Fenteany, G. & Glogauer, M. Cytoskeletal remodeling in leukocyte function. *Curr. Opin. Hematol.* **11**, 15–24 (2004).
- 34. Ankala, S. V. & Fenteany, G. Aryl, alkyl bis-silyl ethers: Rapid access to monoprotected aryl alkyl and biaryl ethers. *Synlett* **6**, 825–828 (2003).
- 35. Fenteany, G. & Zhu, S. Small-molecule inhibitors of actin dynamics and cell motility. *Curr. Top. Med. Chem.* **3**, 593–616 (2003).
- 36. Ankala, S. V. & Fenteany, G. Selective deprotection of either alkyl or aryl silyl ethers from aryl, alkyl bis-silyl ethers. *Tetrahedron Lett.* **43**, 4729–4732 (2002).
- 37. Mc Henry, K.T., Ankala, S. V., Ghosh, A.K. & Fenteany, G. A non-antibacterial oxazolidinone derivative that inhibits epithelial cell sheet migration. *ChemBioChem* **3**, 1105–1111 (2002).
- 38. Fenteany, G., Janmey, P.A. & Stossel, T.P. Signaling pathways and cell mechanics involved in wound closure by epithelial cell sheets. *Curr. Biol.* **10**, 831–838 (2000).
- Corey, E.J., Li, W.D.Z., Nagamitsu, T. & Fenteany, G. The structural requirements for inhibition of proteasome function by the lactacystin-derived β-lactone and synthetic analogs. *Tetrahedron* 55, 3305–3316 (1999).
- 40. Fenteany, G. & Schreiber, S.L. Lactacystin, proteasome function, and cell fate. *J. Biol. Chem.* **273**, 8545–8548 (1998).
- 41. Degnan, B.M., Degnan, S.M., Fenteany, G. & Morse, D.E. A Mox homeobox gene in the gastropod mollusc Haliotis rufescens is differentially expressed during larval morphogenesis and metamorphosis. *FEBS Lett.* **411**, 119–122 (1997).
- Craiu, A., Gaczynska, M., Akopian, T., Gramm, C.F., Fenteany, G., Goldberg, A.L. & Rock, K.L. Lactacystin and clasto-lactacystin β-lactone modify multiple proteasome β-subunits and inhibit intracellular protein degradation and major histocompatibility complex class I antigen presentation. *J. Biol. Chem.* 272, 13437–13445 (1997).
- 43. Fenteany, G. & Schreiber, S.L. Specific inhibition of the chymotrypsin-like activity of the proteasome induces a bipolar morphology in neuroblastoma cells. *Chem. Biol.* (now *Cell Chem. Biol.*) **3**, 905–912 (1996).
- 44. Fenteany, G., Standaert, R.F., Lane, W.S., Choi, S., Corey, E.J. & Schreiber, S.L. Inhibition of proteasome activities and subunit-specific amino-terminal threonine modification by lactacystin. *Science* **268**, 726–731 (1995).
- 45. Fenteany, G., Standaert, R.F., Reichard, G.A., Corey, E.J. & Schreiber, S.L. A β-lactone related to lactacystin induces neurite outgrowth in a neuroblastoma cell line and inhibits cell cycle progression in an osteosarcoma cell line. *Proc. Natl. Acad. Sci. USA* **91**, 3358–3362 (1994).
- Fenteany, G. & Morse, D.E. Specific inhibitors of protein synthesis do not block RNA synthesis or settlement in larvae of a marine gastropod mollusk (*Haliotis rufescens*). *Biol. Bull.* 184, 6–14 (1993).

### AWARDED PATENTS

Compound libraries made through phosphine-catalyzed annulation/Tebbe/Diels-Alder reactions (US8624032) Patent date: 07/01/2014; Filing date: 09/11/2012; Priority date: 09/11/2011 Also published as: US20130143916 Inventors: Ohyun Kwon, Gabriel Fenteany

Inhibitors of animal cell motility and growth (US7390826) Patent date: 24/06/2008; Filing date: 26/10/2005; Priority date: 12/06/2002 Also published as: US20030236290, US20060063935, WO2003106437A1 Inventors: Gabriel Fenteany, Arun K. Ghosh, Kevin McHenry, Sudha Ankala, Sarosh Anjum, Shoutian Zhu

Lactacystin analogs (US6645999)

Patent date: 11/11/2003; Filing date: 12/04/1996; Priority date: 12/04/1995 PCT number: PCT/US1996/005072. Also published as: CA2217817A1, CN1151787C, CN1187769A, DE69636902D1, DE69636902T2, EP0820283A1, EP0820283A4, EP0820283B1, US5756764, US6147223, US6214862, US6335358, US6458825, WO1996032105A1 Inventors: Gabriel Fenteany, Robert F. Standaert, Timothy F. Jamison, Stuart L. Schreiber

### PUBLISHED MEETING ABSTRACTS

- Inoue, T., Soni, L., Bahlol, M., Fenteany, G., Bahtiyar, G., Sacerdote, A. 2018. Worsening and prolonged hypovitaminosis D is associated with biochemical exacerbation of non-classic 11-hydroxylase deficiency. *Endocrine Rev.* 39:Suppl. 2.
- Simon, K., Inoue, T., Fenteany, G., Bahtiyar, G., Sacerdote, A. 2018. Ashwagandha root in the treatment of prediabetes. *Endocrine Rev.* 39:Suppl. 2.
- Sultana, T., Inoue, T., Gattorno, F., Soni, L., Fenteany, G., Bahtiyar, G., Sacerdote, A. 2018. Empagliflozin use in type 2 diabetes is associated with remission of adrenal hyperandrogenism. *Endocrine Rev.* 39:Suppl. 2.
- Fenteany, G., Inoue, T., Bahtiyar, G., Fishman, S., Sacerdote, A.S. 2017. Pulmonary arterial hypertension in patients with hyperthyroid Graves' disease and toxic multinodular goiter. *Endocrine Rev.* 38:Suppl. 3.
- Inoue, T. Sacerdote, A.S., Neog, M., Patel, R., Fenteany, G., Patibandla, K., Bahtiyar, G. 2017. Nonclassic 11-hydroxylase deficiency presenting as an adrenal incidentaloma with biochemical amelioration associated with weight loss and vitamin D repletion. *Endocrine Rev.* 38:Suppl. 3.
- Magpusao, A.N., Peczuh, M.W., Fenteany, G. 2013. Exploring the relationship between inhibition of Na<sup>+</sup>/K<sup>+</sup> ATPase and inhibition of breast cancer cell migration by correlative SAR. *Mol. Biol. Cell* 24:575.
- Rudnitskaya, A.N., Menikarachchi, L.C., Fenteany, G., Gascón, J.A. 2013. Mechanistic study of the reaction between locostatin and Raf kinase inhibitor protein (RKIP). *Abstr. Pap. Am. Chem. Soc.* 242:199-COMP.
- Abraham, S.T., Moody C.I., Fenteany, G. 2007. Raf-1 kinase inhibitor protein regulates migration of vascular smooth muscle cells independent of ERK-MAP kinase. *FASEB J.* 21:A1441.
- Fenteany, G. What the web can do for the bioscientist: a lesson by example(s). 1999. *Proceedings of the First Joint BMES/EMBS Conference*. 1999:1203.
- Corey, E.J., Reichard, G.A., Li, W.Z., Choi, S., Nagamitsu, T., Fenteany, G., Schreiber, S.L. 1998. Synthetic and biological studies with lactacystin and analogs. *Abstr. Pap. Am. Chem. Soc.* 216:500-ORGN, Part 2.
- Nagamitsu, T., Ōmura, S., Li, W., Fenteany, G., Corey, E.J. Total synthesis and structure–activity relationships of lactacystin, a specific inhibitor of proteasome. *Symposium on the Chemistry of Natural Products.* 40:721–726.
- Criau, A., Gaczynska, M., Akopian, T., Gramm, C.F., Fenteany, G., Goldberg, A.L., Rock, K.L. 1997. Lactacystin modifies multiple proteasome β subunits and blocks intracellular protein

degradation and major histocompatibility class I antigen presentation, facilitating analysis of processing pathways. *J. Allergy Clin. Immun.* 99:1030.

Rock, K.L., Criau, A., Gaczynska, M., Akopian, T., Fenteany, G., Goldberg, A.L. 1997. How peptides are generated for MHC class I antigen presentation. *FASEB J.* 11:A860.

#### **INVITED TALKS**

07/11/2019	Chemical Approaches to Cell Biology, Post-Translational Modifications, and Protein Complex Assembly, Institute of Picersonic Chemistry of the Polich
	Protein Complex Assembly, Institute of Bioorganic Chemistry of the Polish
14/00/2019	Academy of Sciences, Poznan, Poland
14/09/2018	Novel Modulators of DNA Damage Tolerance as Tools and Therapeutics, 9th
10/04/0011	Central European Genome Stability and Dynamics Meeting, Warsaw, Poland
10/04/2011	Chemical Biology of Cell Motility, Department of Chemistry, Connecticut College,
	New London, Connecticut
03/04/2011	Chemical Biology of Cell Motility, Department of Medicinal Chemistry, College of
	Pharmacy, University of Minnesota, Minneapolis
09/04/2010	Chemical Approaches to Understanding and Controlling Cell Migration,
	Department of Chemistry, Brown University, Providence, Rhode Island
18/03/2010	– 20/03/2010 Interactions of Raf Kinase Inhibitor Protein with Natural and Unnatural
	Binding Partners, First International Workshop on Prognostic and Therapeutic
	Applications of RKIP in Cancer, University of California, Los Angeles
23/04/2009	Chemical Approaches to Understanding and Controlling Cell Migration, Center for
	Cell Analysis and Modeling, University of Connecticut Health Center, Hartford
01/03/2009	– 04/03/2009 Indo-American Frontiers of Science Symposium (Indo-U.S. Science and
	Technology Forum and U.S. National Academy of Sciences), Agra, India
06/04/2008	Chemical Approaches to Understanding and Controlling Cell Migration,
	Department of Chemistry, Washington State University, Pullman
05/12/2007	Chemical Biology of Cell Motility, Department of Pharmaceutical Sciences, School
	of Pharmacy, University of Connecticut, Storrs
04/12/2007	Identification of Small-Molecule Modulators of Cell Migration, American Society
	for Cell Biology 47th Annual Meeting, Washington, D.C.
04/10/2007	Chemical Biology of Cell Motility, Department of Molecular and Cellular Biology,
01,10,200,	University of Connecticut, Storrs
27/09/2007	Chemical Biology of Cell Motility, Department of Biochemistry and Cancer
2110912001	Biology, College of Medicine, University of Toledo, Ohio
12/09/2007	Chemical Approaches to Understanding and Controlling Cell Migration,
12/07/2007	Department of Physiology and Neurobiology, University of Connecticut, Storrs
14/04/2006	Chemical Approaches to Understanding and Controlling Wound Healing,
14/04/2000	University of Wisconsin–Madison
09/02/2006	Chemical Approaches to Studying Cell Migration. Department of Chemistry, Case
07/02/2000	Western Reserve University, Cleveland, Ohio
08/02/2006	Chemical Approaches to Studying Cell Migration. Department of Chemistry, John
08/02/2000	Carroll University, University Heights, Ohio
05/10/2005	
05/10/2005	Chemical Approaches to Understanding Cell Migration. Frontiers of GI Research
10/00/2005	Seminar, College of Medicine, University of Illinois, Chicago
10/08/2005	Chemical Proteomics: Deciphering Protein Function, Technical Scientific
01/05/0005	Workshop Series, Boston, Massachusetts
21/05/2005	Discovery of Compounds Affecting Cell Movement Using High Throughput
	Screening, 2005 Annual Meeting of the Wound Healing Society, Chicago, Illinois
13/05/2005	Chemical Approaches to Understanding Cell Migration, Department of Chemistry,
	University of California, Irvine
31/03/2005	Chemical Approaches to Understanding Cell Migration, Department of Chemistry,
	University of Illinois, Urbana-Champaign

06/03/2005	Chemical Approaches to Understanding and Controlling Cell Migration,
	Department of Chemistry, University of Connecticut, Storrs
01/02/2005	Chemical Approaches to Understanding Cell Migration, Department of Molecular
	Physiology and Biophysics, Baylor College of Medicine, Houston, Texas
10/11/2004	Chemical Approaches to Understanding Cell Migration, Department of Biological,
	Chemical and Physical Sciences, Illinois Institute of Technology, Chicago
29/09/2004	Chemical Approaches to Understanding Cell Motility and Morphogenesis,
	Department of Pharmaceutical Sciences, University of Michigan, Ann Arbor
23/07/2004	Molecular Control of Actin Polymerization, Department of Physics, Brown
	University, Providence, Rhode Island
17/09/2003	Chemical Approaches to Understanding Cell Motility, Department of
	Pharmacology, University of Illinois, Chicago
18/02/2003	Chemical Approaches to Understanding Cell Motility, Department of Chemistry,
	University of Illinois, Chicago
07/02/2003	Chemical Approaches to Understanding Cell Motility, Department of Medicinal
	Chemistry and Pharmacognosy, University of Illinois, Chicago
29/10/1999	- 31/10/1999 Mechanism and Mechanics of Wound Closure by Epithelial Cell Sheets,
	Life Sciences Research Foundation Annual Meeting, Dallas, Texas
15/10/1999	What the Web Can Do for the Bioscientist: A Lesson by Example(s), First Joint
	Biomedical Engineering Society/Engineering in Medicine and Biology Society
	(BMES/EMBS) Conference, Atlanta, Georgia
21/07/1998	Mechanism and Mechanics of Wound Closure by Epithelial Cell Sheets,
	Department of Biology, University of Virginia, Charlottesville

## SELECTED UNPUBLISHED POSTER PRESENTATIONS AT MEETINGS

14/06/2018 -	15/06/2018 Gaur, P., Fenteany, G., Haracska, L. Fighting Fatal Errors:
	Targeting Translesion DNA Synthesis to Kill Cancer, Economic Development
	and Innovation Operational Programme Symposium, Debrecen, Hungary
02/03/2009	Fenteany, G. Chemical Approaches to Understanding and Controlling Cell
	Migration, Indo-American Frontiers of Science Symposium (Indo-U.S. Science
	and Technology Forum and U.S. National Academy of Sciences), Agra, India
04/12/2007	Kahsai, A.W., Zhu, S., Wardrop, D.J., Lane, W.S., Fenteany, G. Quinocarmycin
	Analog DX-52-1 Inhibits Cell Migration and Targets Radixin, Disrupting
	Interactions of Radixin with Actin and CD44, American Society for Cell Biology
	47th Annual Meeting, Washington, D.C.
20/08/2007	Kahsai, A.W., Zhu, S., Wardrop, D.J., Lane, W.S., Fenteany, G. Quinocarmycin
	Analog DX-52-1 Inhibits Cell Migration and Targets Radixin, Disrupting
	Interactions of Radixin with Actin and CD44, American Chemical Society 234th
	National Meeting, Boston, Massachusetts
27/05/2007 -	01/06/2007 Mc Henry, K.T., Montesano, R., Zhu, S., Beshir, A.B., Tang, HH.,
	Yeung, K., Fenteany, G. Raf Kinase Inhibitor Protein Positively Regulates Cell-
	Substratum Adhesion while Negatively Regulating Cell-Cell Adhesion, Gordon
	Research Conference, Cell Contact and Adhesion, Lucca (Barga), Italy
14/12/2005	Zhu, S., Mc Henry, K.T., Fenteany, G. A New Positive Role for Raf Kinase
	Inhibitor Protein in Epithelial Cell Migration, American Society for Cell Biology
	45th Annual Meeting, San Francisco, California
12/12/2005	Farooqui, R., Fenteany, G. Collective Migration of Epithelial Cells, American
	Society for Cell Biology 45th Annual Meeting, San Francisco, California
15/10/2004	Farooqui, R., Fenteany, G. Multiple Rows of Cells behind an Epithelial Wound
	Edge Extend Cryptic Lamellipodia to Collectively Drive Cell Sheet Movement
	While Maintaining Cell-Cell Contacts, Cytoskeleton in Health and Disease
	Symposium, Northwestern University, Chicago, Illinois.

- 17/10/2003 Fenteany, G. Chemical Approaches to Understanding Cell Motility and Morphogenesis, Cytoskeleton in Health and Disease Symposium, Northwestern University, Chicago, Illinois.
- 29/06/2003 04/07/2003 Fenteany, G. Chemical Approaches to Understanding Cell Motility, Gordon Research Conference, Motile and Contractile Systems, Colby-Sawyer College, New London, New Hampshire.
- 17/06/2001 22/06/2001 Fenteany, G. Pharmacological Dissection of the Mechanisms of Cell Sheet Migration and Embryonic Tissue Morphogenesis, Gordon Research Conference, Tissue Repair and Regeneration, Colby-Sawyer College, New London, New Hampshire.

#### **THESES**

Fenteany, G. Lactacystin, Proteasome Function and Cell Morphology. Unpublished Doctoral Dissertation, Harvard University, 1997.

Fenteany, G. Antibiotic Inhibitors of Protein Synthesis: Relative Efficacy in Larvae of *Haliotis rufescens* (Gastropod Mollusc) and Effects on Larval Settling Behavior. Unpublished Master's Thesis, University of California, Santa Barbara, 1992.

#### MENTORSHIP (with present or last-known position)

- **Postdoctoral Fellows:** Sudha V. Ankala (Principal Scientist, CoMentis), Anwar B. Beshir (Lecturer, University of Connecticut), Bharat R. Bhattarai (Faculty, American International College), Hari Gobburu (Associate Director of Global Sourcing, Eli Lilly), Nicholas A. Eddy (Faculty, University of Connecticut), Sankar K. Guchhait (Assistant Professor, National Institute of Pharmaceutical Education and Research, India), Satyendra Mishra (Assistant Professor, Indian Institute of Advanced Research), Babajide Okandeji (Product Manager, SCIEX)
- Ph.D. Students: Z. Melis Altan (Scientific Sales Consultant, Beckman Coulter), Christian E. Argueta (Senior Scientist, Karyopharm Therapeutics), Anwar B. Beshir (Lecturer, University of Connecticut), Nicholas A. Eddy (Faculty, University of Connecticut), Rizwan Farooqui (Senior Product Marketing Manager, Infection Prevention, Becton Dickinson), Paras Gaur (Biological Research Centre, Szeged), Péter Germán (Biological Research Centre, Szeged), Bayan Kharrat (Biological Research Centre, Szeged), Alem W. Kahsai (Assistant Professor, Duke University), Anniefer N. Magpusao (Postdoctoral Fellow, Case Western Reserve University), Kevin T. Mc Henry (Medical Science Liaison, Genentech), Matthew L. Rotondi (Postdoctoral Fellow, University of Texas Health Sciences Center), Gaurav Sharma (Biological Research Centre, Szeged), Shoutian Zhu (Director of Research, Regulus Therapeutics)
- **M.S. Students:** Sarosh Anjum (Senior Systems Manager, Astellas Pharmaceutical), Junru Cui (Postdoctoral Fellow, University of Connecticut), Mihae Hong, Michael T. Otley (Scientist, BASF), Donghui Song (Graduate Research Assistant, University of Connecticut), Priscillia K. Uba-Oyibo
- Undergraduates: Christian E. Argueta (Senior Scientist, Karyopharm Therapeutics; Ph.D. from University of Connecticut), Linda B. Drozdowicz (Resident at Icahn School of Medicine at Mount Sinai; M.D. from Mayo Clinic College of Medicine), Angel Fung, Daniel J. Hagen, Jenaya L. Goldwag, Shannon A. Heyse (Ph.D. from Boston College), Mateusz Hoppe, Kristi Kearney, Stephen T. Lincoln, Joseph Lucas, Denise D. Maniakouras (D.D.S. from University of Illinois), Nick Minutolo, Peter D. Morse (Postdoctoral Fellow, Massachusetts Institute of Technology, Ph.D. from UNC, Chapel Hill), Mark A. O'Brien, Jay Richardson (Senior Engineer, Environmental Energy Services), Amanda L. Soohoo (Ph.D. from Carnegie Mellon University), Anna A. Weiss (Ph.D. from Loyola University, M.S. from Northwestern University), Yekaterina Zavgorodniy
- **Technicians:** Katalin Illésné Kovács (Biological Research Centre, Szeged), Anna A. Weiss (Ph.D. from Loyola University, M.S. from Northwestern University)

**High School Students (Sponsored by the American Cancer Society):** Mingzhu He (Design Strategist, Wells Fargo; Ed.M. from Harvard Graduate School of Education, M.S. from DePaul University, B.A. from University of Chicago), Alan Vuong (B.S. from University of Chicago)

#### **Theses of Mentored Ph.D. Students**

Altan, Z.M. The Role of the c-Jun N-Terminal Kinase Pathway in Epithelial Cell Sheet Migration. Unpublished Doctoral Dissertation, University of Illinois, Chicago, 2006

- Argueta, C.E. Small Molecule Inhibitors of Cell Migration and the Subcellular Localization of Raf Kinase Inhibitor Protein. Unpublished Doctoral Dissertation, University of Connecticut, 2012
- Beshir, A.B. Small-Molecule Inhibitors and Their Molecular Targets. Unpublished Doctoral Dissertation, University of Connecticut, 2009
- Eddy, N.A. Studies Directed Towards the Total Synthesis of Cucurbitacin I. Unpublished Doctoral Dissertation, University of Connecticut, 2012
- Farooqui, R. Mechanics and Mechanism of Epithelial Cell Sheet Migration. Doctoral Dissertation, University of Illinois, Chicago, 2006
- Gaur, P. Discovery of Small-Molecule Inhibitors of Uba1 and Development of Step-Specific Assays for PCNA Ubiquitination. Doctoral Dissertation, University of Szeged, 2020
- Kahsai, A.W. Mechanism of Action of the Cell Migration Inhibitor Quinocarmycin Analog DX-52-1. Unpublished Doctoral Dissertation, University of Connecticut, 2008
- Mc Henry, K.T. Discovery of Locostatin: A Small-Molecule Inhibitor of Cell Migration and Adhesion. Unpublished Doctoral Dissertation, University of Illinois, Chicago, 2006
- Rotondi, M.L. The Influence of DX-52-1 and Phosphorylation on the Interactions of Galectin-3 with Its Binding Partners. Unpublished Doctoral Dissertation, University of Connecticut, 2014

Zhu, S. Chemical Genetics Approach Reveals the Role of Raf Kinase Inhibitor Protein in Cell Migration. Unpublished Doctoral Dissertation, University of Illinois, Chicago, 2006

#### **PROFESSIONAL SERVICE**

#### **Scientific Committee Service**

2010	Evaluation of External Faculty Tenure Case
2003 - 2006	American Cancer Society Illinois Division Research Advisory Committee
2005	Multiple Myeloma Research Foundation/Multiple Myeloma Research
	Consortium Scientific Advisors Summit Participant

#### **Reviewer of Scientific Research Proposals**

2011	National Science Foundation – Division of Chemistry
2009	National Institutes of Health – Synthetic and Biological Chemistry B Study Section,
2000	Ad Hoc Member
2009	National Science Foundation – Integrative Organismal Systems – Animal
	Developmental Mechanisms
2009	National Institutes of Health, Stage 1 Reviewer for RC1 Challenge Grants
2008	American Heart Association Bioengineering 2 Peer Review Study Group
2007 - 2008	National Science Foundation – Molecular and Cellular Biosciences
2006	National Institutes of Health – Synthetic and Biological Chemistry B Study Section,
	Ad Hoc Member
2003 - 2006	American Cancer Society
2003	Vahlteich Endowment Research Fund

#### **Editor for Scientific Journal**

2011 – 2015 Academic Editor, *PLoS One/PLOS ONE* 

Reviewer for Scientific Journals (with number of reviews for each)

ACS Chemical Biology (3) African Journal of Microbiology Research (1) *Biophysical Journal* (5) Bioorganic and Medicinal Chemistry (4) Bioorganic and Medicinal Chemistry Letters (13) *BioTechniques* (1) Blood(1)Briefings in Bioinformatics (1) ChemBioChem (7) *Chemical Research in Toxicology* (1) Chemistry & Biology/Cell Chemical Biology (11) *Chemistry – A European Journal* (2) *Current Medicinal Chemistry* (1) *Current Topics in Medicinal Chemistry* (1) European Journal of Medicinal Chemistry (3) Experimental Cell Research (8) Expert Opinion on Investigational Drugs (1) FEBS Letters (1) *IBM Journal of Research and Development* (1) Indian Journal of Pharmaceutical Sciences (1) Inorganic Chemical Communications (1) International Journal of Molecular Sciences (2) Journal of Enzyme Inhibition and Medicinal Chemistry (1) Journal of the American Chemical Society (7) Journal of Cellular Biochemistry (1) Journal of Cell Science (9) *Journal of Clinical Investigation* (1) *Journal of Clinical Pathology* (1) Journal of Neuroscience (1) Journal of Neuroscience Methods (1) Journal of Pathology (1) *Journal of Pharmacological and Toxicological Methods* (1) Laboratory Investigation (1) *Neoplasia* (1) Oncogene (1) Organic Letters (2) PLoS One/PLOS ONE (4) *Polyhedron* (6) *Protein Science* (1) Medicinal Chemistry Reviews – Online (1) *Molecular BioSystems* (1) *Molecular and Cellular Biochemistry* (1) Nucleosides, Nucleotides and Nucleic Acids (1) Phosphorus, Sulfur, and Silicon (1) Proceedings of the National Academy of Sciences USA (1) Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy (2) Synlett (1) *Tumor Biology* (1)

#### Miscellaneous

2005 - 2015	Faculty of 1000 Member, "Chemical Biology of the Cell" Section of the Chemical
	Biology Faculty, Section Heads: Kevan Shokat and Roger Tsien
2006 - 2007	Scientific Advisor and Product Evaluator for Platypus Technologies, LLC,

#### **PROFESSIONAL MEMBERSHIPS**

American Chemical Society American Society for Biochemistry and Molecular Biology American Society for Cell Biology

#### **UNIVERSITY SERVICE**

#### **Faculty Search Committees**

- 2011 Molecular and Cell Biology Faculty Search Committee, University of Connecticut
- 2010 Chemistry Grants and Contracts Manager Search Committee, University of Connecticut
- 2010 Mass Spectrometry Scientist Search Committee, University of Connecticut
- 2008 Chemistry/Institute of Materials Science Faculty Search Committee, University of Connecticut
- 2002 Biochemistry Faculty Search Committee, University of Illinois, Chicago
- 2001 Analytical Chemistry Faculty Search Committee, University of Illinois, Chicago
- 2001 Organic Chemistry Faculty Search Committee, University of Illinois, Chicago

#### Ph.D. Thesis Advisory Committees

- 2014 Matthew L. Rotondi (Biological Chemistry)
- 2012 Christian E. Argueta (Biological Chemistry)
- 2012 Nicholas A. Eddy (Organic Chemistry)
- 2010 Megan Nollenberger (Biological Chemistry)
- 2009 Anwar Beshir (Biological Chemistry), Jaideep Shah (Organic Chemistry)
- 2009 Wesley Fyvie (Organic Chemistry)
- 2008 Steve Castro (Organic Chemistry), Alem Kahsai (Biological Chemistry)
- 2007 Amber Onorato (Organic Chemistry), Alexis Ramos (Analytical Chemistry)
- 2006 Z. Melis Altan (Biochemistry), Rizwan Farooqui (Biochemistry), Kevin T. Mc Henry (Biochemistry), Shoutian Zhu (Biochemistry)
- 2005 Jennifer Barber-Singh (Analytical Chemistry), Sumith Kottegoda (Analytical Chemistry), John Rafter (Biochemistry)
- 2004 Pierre Daublain (Organic Chemistry), Leyi Gao (Analytical Chemistry), Youngjun Kim (Biochemistry), Xiayan Zhao (Analytical Chemistry)
- 2003 Bharath Ananthanarayanan (Biochemistry), Sudipto Das (Biochemistry), Michele Digman (Biochemistry), Robert Stahelin (Biochemistry), Wenming Zhang (Organic Chemistry)
- 2002 Martina Bertsch (Biochemistry), Geoff Bilcer (Organic Chemistry), Kathleen Mandell (Biochemistry), Dongwoo Shin (Organic Chemistry)
- 2001 Layne Morsch (Organic Chemistry), Daniel Stanford (Organic Chemistry), Michael Whiteside (Biochemistry)

#### M.S. Thesis Advisory Committees

- 2012 Junru Cui (Biological Chemistry)
- 2011 Michael T. Otley (Organic Chemistry)
- 2010 Donghui Song (Biological Chemistry)
- 2010 Ronald Ramsubhag (Organic Chemistry)
- 2009 Priscillia K. Uba-Oyibo (Cell Biology)
- 2008 Pedro Daddario (Organic Chemistry)
- 2007 Hua Yang (Analytical Chemistry)

2006	Sarosh Anjum	(Biochemistry)

2004 Mignon Hernreiter (Biochemistry)

2002 Mihae Hong (Biochemistry)

### **General Undergraduate Advisory Committees**

2007 - 2015	Advisory Board Member, Office of Undergraduate Research, University of
	Connecticut
2004 - 2006	Phi Beta Kappa Election Committee, University of Illinois, Chicago

2002 – 2006 Faculty Advisor, Honors College, University of Illinois, Chicago

### **Other Departmental Committees**

2010 - 2015	Head, Organic Chemistry Division, Department of Chemistry, University of
	Connecticut
2010 - 2015	Departmental Advisory Committee, Department of Chemistry, University of
	Connecticut
2007 - 2015	Teaching Assistant Affairs Committee, Department of Chemistry, University of
	Connecticut
2006 - 2105	Graduate Affairs Committee, Department of Chemistry, University of
	Connecticut
2007 - 2009	Advisory Committee, Department of Chemistry, University of Connecticut

### **TEACHING EXPERIENCE**

2013, Fall	Instructor, Biological Chemistry I, University of Connecticut
2012, Spring	Instructor, Organic Chemistry II, University of Connecticut
2011, Fall	Instructor, Biological Chemistry I, University of Connecticut
2011, Spring	Co-Instructor, Introduction to Undergraduate Research (Molecular and Cell
	Biology), University of Connecticut
2010, Fall	Instructor, Introduction to Undergraduate Research, University of Connecticut
2010, Fall	Instructor, Biological Chemistry I, University of Connecticut
2010, Spring	Instructor, Organic Chemistry II, University of Connecticut
2009, Fall	Instructor, Biological Chemistry I, University of Connecticut
2009, Spring	Instructor, Organic Chemistry II, University of Connecticut
2008, Fall	Instructor, Biological Chemistry I, University of Connecticut
2008, Spring	Instructor, Graduate Student Seminar Series, University of Connecticut
2008, Spring	Instructor, Organic Chemistry II, University of Connecticut
2007, Fall	Instructor, Organic Chemistry I, University of Connecticut
2007, Fall	Co-Instructor, Biological Chemistry II, University of Connecticut
2007, Spring	Instructor, Organic Chemistry II, University of Connecticut
2006, Fall	Instructor, Organic Chemistry I, University of Connecticut
2005, Spring	Instructor, Biochemistry I, University of Illinois, Chicago
2004, Fall	Instructor, Chemical Biology and Bioorganic Chemistry, University of Illinois,
	Chicago
2004, Spring	Instructor, Chemical Biology and Bioorganic Chemistry, University of Illinois,
	Chicago
2003, Fall	Instructor, Literature Seminar in Biochemistry, University of Illinois, Chicago
2003, Spring	Instructor, Biochemistry I, University of Illinois, Chicago
2002, Fall	Instructor, Chemical Biology and Bioorganic Chemistry, University of Illinois, Chicago
2002, Fall	Instructor, Literature Seminar in Biochemistry, University of Illinois, Chicago
2002, Spring	Instructor, Biochemistry I, University of Illinois, Chicago
2001, Fall	Instructor, Chemical Biology and Bioorganic Chemistry, University of Illinois, Chicago

2001, Fall	Instructor, Literature Seminar in Biochemistry, University of Illinois, Chicago
2001, Spring	Instructor, Biochemistry I, University of Illinois, Chicago
2000, Fall	Instructor, Chemical Biology and Bioorganic Chemistry, University of Illinois, Chicago
1996, Fall	Discussion Section Teaching Fellow, Introductory Molecular Biology, Harvard University
1996, Spring	Laboratory Teaching Fellow, Introduction to Genetics, Molecular, Cellular and Developmental Biology, Harvard University
1995, Spring	Head Teaching Fellow, Principles of Biochemistry and Cell Biology, Harvard University
1994, Fall	Discussion Section Teaching Fellow, Introductory Molecular Biology, Harvard University
1994, Spring	Discussion Section Teaching Fellow, Principles of Biochemistry and Cell Biology, Harvard University
1991, Spring	Laboratory Teaching Assistant, Introductory Biology, University of California, Santa Barbara