Brian J. Rukamp, Ph.D.

Department of Chemistry
UWO-Fox Cities
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Education:

Georgia Institute of Technology
Atlanta, Georgia
Ph.D. in Chemistry, December 2003
Major: Chemistry/Biochemistry; Minor: Bioorganic Chemistry
G.P.A. 3.65/4.00
Thesis: Design, Synthesis, and Evaluation of Novel Inhibitors for Cysteine Proteases, and Subsite Mapping of Granzyme M with Peptidyl Thiobenzyl Ester Substrates
Advisor: James C. Powers, Ph.D.

University of Wisconsin - Madison
Madison, Wisconsin
B. S. Chemistry - Chemistry Course, December 1996

Employment:

Senior Lecturer in Department of Chemistry, University of Wisconsin Colleges
UW-Fox Valley (now UWO-Fox Cities), Menasha, WI; August 2004 - Present
- Instructed students in Applied Chemistry and Society, Foundations of Chemistry, General Chemistry I and II, Organic Chemistry I and II, Chemistry for Engineers, Introductory Chemistry, and Survey of Biochemistry lectures
- Instructed students in Applied Chemistry and Society, General Chemistry I and II, Organic Chemistry I and II, Chemistry for Engineers, Introductory Chemistry, and Biochemistry laboratories

Formerly UW-Fond du Lac, Fond du Lac, WI; August 2005 - May 2006
- Co-instructor of Introductory Chemistry laboratories

Lecturer in Department of Math and Natural Sciences, Marian University of Fond du Lac
Marian University, Fond du Lac, WI; January 2006 - Present
- Instructed students in Introduction to Biochemistry lecture, January 2006 - May 2006
- Instructed students in General, Organic, and Biochemistry lecture and laboratory, January 2007 - Present

Research Assistant and Teaching Assistant
Georgia Institute of Technology, Atlanta, GA; August 1997 - December 2003
- Senior Teaching Assistant for Organic Chemistry I and II laboratories, 2002-2003
- Teaching Assistant for General Chemistry laboratories

- Co-authored multiple publications including journal articles, a patent, and a book chapter
- Designed and synthesized novel inhibitors for enzymes as part of doctoral thesis research
- Mapped an enzyme's active site with synthesized novel substrates as part of doctoral thesis research

Laboratory Assistant
U.S. Dairy Forage Research Center, Madison, WI; August 1994 - December 1996
- Performed sugar and protein assays on plant cell walls

Laboratory Assistant
Lakeland College, Sheboygan, WI; September 1993 - May 1994
- Prepared stock solutions and lab equipment for chemistry and physics laboratories

Skills:

- Spectroscopy: NMR, FTIR, UV/Vis and interpretation of Mass Spectrometry and Combustion Elemental Analysis
- Chromatography: Gas, Thin Layer, Column Chromatography
- Proficient in experimental biochemical and organic syntheses and techniques to run and interpret enzymatic assays
- Computer: proficient with Microsoft Word, Excel, and PowerPoint, ChemDraw, RasMol, and EndNote software; familiar with working in Macintosh and Windows environments

Professional Memberships, Activities, and Philanthropies:

- American Chemical Society
- World Tae Kwon Do Federation
- Faculty Advisor of the Chemistry Club at University of Wisconsin Oshkosh - Fox Cities, September 2008 - Present
- Alpha Chi Sigma (Professional Fraternity in Chemistry) Teacher Workshop, 1999 and 2000
    - Assisted in recruitment, assembly of materials, and setup of the events during National Chemistry Week
- Personal Items Drive, St. James UMC, 2000 and 2001
    - Assisted in collection, packaging, and distribution
- Dress for Success Drive, St. James UMC, 2000
    - Assisted in collection, packaging, and distribution

Honors and Recognitions:

- Nominated for University of Wisconsin - Fox Valley's Instructional Academic Staff Teacher of the Year Award, 2012, 2013, and 2014
- Nominated for University of Wisconsin - Colleges Chancellor's Excellence in Teaching Award, 2015
- Recognized as an American Chemical Society (ACS) Chemistry Ambassador, 2015

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Publications:

Rukamp, B. J. and Powers, J. C. Cathepsins. In *Proteinase and Peptidase Inhibition: Recent Potential Targets For Drug Development*; Smith, H. J. and Simons, C. (Eds.); Taylor & Francis Group: London, (2002); pp. 84-126.

Ekici, Ö. D., Götz, M. G., James, K. E., Li, Z. Z., Rukamp, B. J., Asgian, J. L., Caffrey, C. R., Hansell, E., Dvorák, J., McKerrow, J. H., Potempa, J., Travis, J., Mikolajczyk, J., Salvesen, G. S., Powers, J. C. Aza-peptide Michael Acceptors: A New Class of Inhibitors Specific for Caspases and other Clan CD Cysteine Proteases. *J. Med. Chem.* **47**(8), 1889-1892, 2004.

Rukamp, B. J., Kam, C.-M., Natarajan, S., Bolton, B. W., Smyth, M. J., Kelly, J. M., and Powers, J. C. Subsite Specificities of Granzyme M: A Study of Inhibitors and Newly Synthesized Thiobenzyl Ester Substrates. *Arch. Biochem. Biophys.* **422**(1), 9-22, 2004.

Powers, J. C., Ekici, Ö. D., Götz, M. G., Asgian, J. L., Ellis, K. A., Rukamp, B. J., Li, Z. Z. Propenoyl Hydrazides. U.S. patent filed on February 18, 2005, and assigned Serial Number 11/062,017.

Powers, J. C., Ekici, Ö. D., Götz, M. G., Asgian, J. L., Ellis, K. A., Rukamp, B. J., Li, Z. Z. Propenoyl Hydrazides. European patent filed on February 18, 2005, and assigned Serial Number 05723411.4-2101-US2005005457.

Posters/Presentations:

Rukamp, B. J., Natarajan, S., and Powers, J. C. presented *Identification of the P2 and P3 Amino Acid Binding Specificities of Granzyme M* on March 30, 2001 at the Ninth Annual Suddath Memorial Symposium on Structural Biology in Atlanta, Georgia.