# Curriculum Vitae - Biochemistry Amy L. Stockert, Ph.D.

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# Education

Ph.D., The Ohio State University (August 2004)
M.S., The Ohio State University (March 2002)
Major in Biochemistry with focus in enzymology of metalloenzymes

B.S., Indiana-Purdue University Fort Wayne (May 1999)

Major in chemistry

# Research Experience

<u>Associate Professor of Biochemistry, Ohio Northern University (2012 – Present).</u> <u>Assistant Professor of Biochemistry, Ohio Northern University (2006 - 2012).</u>

- "Mechanistic studies of xanthine oxidase and its involvement in ischemia reperfusion"
- "Design and testing of new antibiotic targets for gram positive bacteria"
- o Received both internal and external grant funding for student research support.
- Participated in Campus Campaign for student recruitment by featuring current research student and project in the Chronicle for Higher Education.
- Mentored AFPE funded student research project.
- Mentored 40+ independent study students and research students working on multiple projects with results published in research articles, and presentations.
- o Developed individual research project to maintain an ongoing active lab.
- o Participated in numerous collaborative projects within the department.
- o Designed multiple research projects for undergraduate lab students.
- o Developed numerous proposals for new and established investigator awards from both National and Local agencies.
- Managed research projects for over 40 research students.
- Developed research project for local high school student who presented at the International level.
- Guide research students in preparation of poster presentations for Regional Research Colloquium
- o Sponsored student involvement in research conferences in Chicago, IL, Washington, D.C., and Orlando, FL

#### Research in Progress

- "Educational Implementation of Case Studies early in health professional curriculum" (On-Going)
- "Effects of Se on chemo-agents" (On-Going)
- "Inhibitor Design, Antimicrobial Design" (On-Going)
- Summary of Student Based Projects

Microbiology based antibiotic testing

Spectroscopic antibiotic inhibition screening

Spectroscopic glucose uptake assays

Spectroscopic reactive oxygen species evaluation for selenium and cis-platinum treated colon cancer cells

Molecular biology based glutamate racemase cloning

Molecular biology based xanthine oxidase/dehydrogenase cloning and mutagenesis

Spectroscopic inhibitor testing for xanthine oxidase/dehydrogenase wild type and mutant enzymes

Clinical studies examining the effects of cinnamon on blood sugar levels

Protein expression trials

Effectiveness of a wellness motivation program on employee wellness improvement

Nutrition education initiatives for public education systems

### Post-Doctoral Researcher, The Ohio State University (2004 - 2005).

"Mechanism and regulation of RNA chain elongation"

- Quickly became familiar with extensive past and present research. Re-oriented several techniques utilized in a new field.
- Developed previously non-existing spectroscopic methods for study of NTP addition in complicated multi-subunit enzyme system, reducing the necessity of radioactivity.
- Rapidly learned new techniques with multiple applications.
- o Managed and designed multiple research projects simultaneously.

### Graduate Research Assistant, The Ohio State University (2003 - 2004).

"Spectroscopic and kinetic studies of bovine xanthine oxidase and Rhodobactor capsulatus xanthine dehydrogenase"

- o Quickly mastered new instruments and software. Organized personal data.
- o Managed multiple research projects, coursework, and lab duties. Developed lab protocols manual.
- o Instructed and trained rotation and visiting students.
- o Acted as the graduate program student president.
- o Utilized persuasive writing and presentation skills in seminars, meetings and international conferences.

### Training Fellow, Chemistry-Biology Interface Training Program, The Ohio State University (2001 - 2002; 2003 - 2004).

<u>Undergraduate Research Assistant, Indiana University School of Medicine (1997 - 1999).</u>

"Growth capabilities of CLP-8 yeast mutants" and "S31 Ribosomal Subunit Studies"

- Learned techniques of physical mapping to chromosome, cloning, and other basic molecular biology techniques.
- o Cloned and tagged the UB1 3 gene. Started expression trials

### Teaching Experience

<u>Associate Professor of Biochemistry, Ohio Northern University (2012 – Present).</u> <u>Assistant Professor of Biochemistry, Ohio Northern University (2006 - 2012).</u>

- Completed numerous teaching workshops and seminars.
- o Designed and delivered new elective for nutrition with emphasis on patient care.
- o Developed unique exam assessment method and measurements of application ability in students.
- o Designed, developed and implemented the biosafety training program for the college and university. Included Web Ct course for all safety training materials and storage.
- o Re-developed biochemistry curriculum for an online version allowing increased enrollment during summer sessions.
- Mentored over 40 research students with results that were included in grant proposals, publications, presentations at the local, state, national level and international level.
- o Re-designed new upper level course in the area of biochemistry for medical fields.
- o Received funding for longitudinal case development for integration into biochemistry course.
- o Developed intensive course packets with conceptual challenges imbedded for multiple topics.
- o Coordinated team taught biochemistry course.
- Developed conceptual exams both of multiple choice and essay format to test the students' ability to apply the instructed material to a situation developing in the medical or pharmaceutical field.
- o Developed and directed multiple review sessions including review packets, group tasks for review, and review presentations.
- Attended Cultural Competency training workshop and began design of curriculum integration for biochemical course.
- Directed several research students in achieving their own research goals. Monitored their development of poster presentations for Undergraduate Research Colloquium.
- Designed and utilized class demonstrations for various biochemical processes. Organized and maintained course page with supplemental links, review questions, homework questions, and animations.
- o Mediated a discussion of "Fostering Professionalism in Students" at the American Association of the Colleges of Pharmacy
- o Mentored students for research presentation at the National Level.

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o Developed and delivered multiple guest lectures on topics of nutrition and protein structure.

### **Teaching Assignments**

Courses developed

Biochemistry I and II
Online Biochemistry I and II
Independent Study – Biochemistry

Research - Biochemistry

**Basic Nutrition** 

Lectures delivered outside of major courses

Nutrition during pregnancy – Developmental Anatomy Guest Lecture Protein Structure and Drug Design – Drug Design Guest Lecture

Methods in gene cloning – Pharmaceutical Techniques Lab

Physics of Motion – Applied Physics of Pharmacy Lecture

Physics of Magnetism – Applied Physics of Pharmacy Lecture

Physics of Fluids and Gases – Applied Physics of Pharmacy Lecture

### Visiting Assistant Professor, Ohio Northern University (2005 - 2006).

- Instructed students from diverse background and majors in introductory biology
- o Instructed advanced pharmacy students in bioscience lab including enzymology, microbiology, and molecular biology.
- Acted as course coordinator overseeing course content, writing exams, organizing review sessions, and developing homework assignments and handouts for team taught course
- o Met with students individually to direct group scientific presentations
- Managed materials and organization for special needs students
- Tutored students
- o Directed classroom discussion of current scientific topics
- o Organized effective course web site providing additional materials, references, and web links
- o Advised biology majors on course selection and career development
- Acted as a Judge for District Science Day
- o Served as a interviewer for Distinguished Achievement Scholarship Day

#### Private Tutor (1996 - 1999).

- o Provided students with additional instruction on material covered in the classroom
- o Advised students on alternate study methods
- Aided students in preparation for exams
- o Researched additional materials for learning

#### Teacher, St. Peter's Church (2003).

- Organized lesson plans
- Designed creative art projects
- Developed projects to encourage family involvement

#### Senior Student, The Ohio State University (2002 - 2004).

- o Instructed and guided rotation on the techniques of the lab
- Worked exclusively with visiting students on international research projects
- Aided in experiment production for new students
- Designed research projects for visiting and rotation students

### Grader, The Ohio State University College of Medicine (2002 - 2004).

- Worked as a grader for Problem-based learning Medical school program
- Assisted in grading exams for graduate level enzymology classes
- o Graded exams for general biochemistry course

# Specific Skills

#### Computer

PC, Macintosh, Sigma Plot, Excel, ChemDraw, Word, Hewlett Packard diode array software, OLIS stopped-flow software, Applied Photo Physics Pro-K, Bio-Rad Spectrophotometer software, Luminis Platform, Akta purification software, Chemstation, Graph Pad Prism

### Laboratory

Protein purification, chromatography, absorbance spectroscopy, steady state and pre-steady state kinetics, anaerobic technique, SDS-PAGE, sterile technique, plate reproduction, culture maintenance, media preparation, bacterial and yeast transformation, RNA isolation, cDNA cloning, restriction enzyme digestion, expression, plate assays, redox assays, Kirby-Bauer, minimum inhibitory concentration determination, cell culture

#### Communications

Lecture and Lab presentations, Poster and oral presentations, experience guiding and instructing rotation and visiting students, experience managing lab and lab student projects.

### Instrumentation Experience

Stopped-flow, UV/Vis Spectroscopy, Gel Electrophoresis, Anaerobic technique, EPR, PCR, R. Raman, IR, HPLC, GC, FPLC, NMR, thermo cycler, ultra centrifugation

# Published Intellectual Contributions

Stockert A., Kinder D., Christ M., Amend K., Aulthouse A. (2014) Improving the Efficacy of Cisplatin in Colon Cancer HT– 29 Cells via Combination Therapy with Selenium. Austin J Pharmacol Ther. 2 (2).1-6

Mahfouz, T. M., Patel, R., Petersen, B., Fakunmoju, O., Stockert, A. L. (2013). Correlation of docking energies with spectroscopic kinetic assays of potential xanthine oxidase substrates. Journal of Biophysical Chemistry. 4(1): 22-27.

Hoehn, A. and Stockert, A. L. (2012). The effects of *Cinnamomum cassia* on blood glucose values are greater than those of dietary changes alone. Nutrition and Metabolic Insights 5:77-83. doi: 10.4137/NMI.S10498.

Bright, D.R.; Terrell, S.L.; Rush, M.J.; Kroustos, K.R.; Stockert, A.L.; Swanson, S.C.; DiPietro, N.A. (2012). Employee Attitudes Toward Participation in a Worksite-Based Health and Wellness Program. Journal of Pharmacy Practice 25(5):530-6. Epub 2012 May 9.

Stockert, A.; Mahfouz, T. (2012). Superbugs: Current Trends and Emerging Therapies: In Bobarala, V., (Ed.), *Antibacterial* Agents (1st, pp. 273-298). Rijeka, Croatia: In Tech.

John Wiley & Sons Biochemistry Text Test Bank Supplement. (2011).

Sobotka, JL.; Bright, D.R.; Rush, M.J.; Kroustos, K.R.; Stockert, A.L.; Kier, K.L.; Murphy, B.L.; DiPietro, N.A. "Design and Implementation of a Multidisciplinary, University-Based Disease State Management and Wellness Program." FIP, India, September 2011.

Stockert, A.L.; Stechschulte, M.; Amend, K.L.; Aulthouse, A.L.; Kinder, D.H. "Response of colon cancer cells to selenium and cisplatinum exposure." FASEB, Washington DC, May 2011.

Bright, D.R.; Rush, M.J.; Kroustos, K.R.; Terrell, S.L; Swanson, C.C.; Stockert, A.L.; Kier, K.L.; Thompson, R.E.; Milks, M.M.; Murphy, B.L.; DiPietro, N.A. "Design and Implementation of a Multidisciplinary, University-Based Disease State Management and Wellness Program." Ohio Pharmacists Association, Columbus, OH, April 2011.

Hoehn A.N.; Stockert, A.L. "The effects of cinnamomum cassia on glucose uptake." Ohio Academy of Science, Westerville, OH, April 2011.

Bright, D.R.; Rush, M.J.; Kroustos, K.R.; Terrell, S.L.; Swanson, C.C.; Stockert, A.L.; Kier, K.L.; Thompson, R.E.; Milks, M.M.; Murphy, B.L.; DiPietro, N.A. "Preliminary Results from a University-Based Disease State Management Program Focused on Hypertension, Hyperlipidemia, and Diabetes." APhA Annual Meeting Seattle, WA, March 2011. - Award winning

Contract for co-authorship for the Fundamentals of Biochemistry 4e Text Supplement. Supplement completion date: 2011. (Sample Section Included)

Schoenberger, E.; Hazelet, E.; Sanders, K.; Hallman, L.; Bright, D.; Stockert, A.L. (2011). "Role of Non-nutritive Sweeteners in Obesity and Diabetes." The Pharmacy and Wellness Review 2(1):18-20.

Skidmore, K.W.; Scherer, C.; Stockert, A.L.; Mahfouz, T.M. (2011). A ligand-based approach for enhancing the pharmacokinetic profile of highly charged antibacterial agents. Medicinal Chemistry Research, Online First DOI 10.1007/s00044-010-9538-4

Stockert, A.L.; Fakunmoju, O.; Mahfouz, T.M. "An effective docking model for rapid screening of potential xanthine oxidase inhibitors." FASEB, Anaheim, CA, May 2010.

Amend, K.L.; Aulthouse, A.L.; Kinder, D.H.; Stockert, A.L. "Response of colon cancer cells to selenium and cis-platinum exposure." Ohio Academy of Science Annual Meeting, Ada, OH, April 2010.

Roecker, A.M.; Stockert, A.L.; Kisor, D.F. (2010). Nelarabine in the treatment of refractory T-cell malignancies. Clinical Medicine Insights: Oncology 4: 133-141.

Stockert, A.L.; Stechschulte, M. (2010). Allopurinol to Febuxostat: How far have we come? Clinical Medicine Insights: Therapeutics 2: 927-945.

Stockert, A.L.; Aulthouse, A.L.; Kinder, D.H. "Effect of selenium on the efficacy of cis-platinum on the HT-29 colon tumor cell line." American Institute for Cancer Research, Washington DC, November 2009.

Stockert, A.L.; Petersen, B.; Mahfouz, T.M.; Fakunmoju, L.; Patel, R.; Hoffman, A.; Leimkuehler, S. "Orientation studies of novel xanthine oxidase inhibitors using." Experimental Biology, FASEB, New Orleans, LA, 2009.

Stockert, A.L.; Mahfouz, T.M.; Patel, R.; Petersen, B. "Correlation of Glide Docking Energies with Spectroscopic Kinetic Assays of xanthine Oxidase and Potential Inhibitors." American Chemical Society Annual Meeting, Columbus, OH, June 2008. - Oral Presentation, peer-reviewed

Stockert, A.L.; Patel, R.; Petersen, B.; Koch, D.; Mahfouz, T.M. "Spectroscopic Analysis of the reaction of xanthine oxidase with Benzotriazole-1-methanol and benzotriazole-1-acetonitrile." American Chemical Society Annual Meeting, Columbus, OH, June 2008.

Stockert, A.L.; Mahfouz, T.M.; Krall, D. "Computer Modeling of Glutamate Racemase." American Chemical Society Annual Meeting, Columbus, OH, June 2008.

Mahfouz, T.M.; Skidmore, K.W.; Stockert, A.L.; Scherer, C. (2008) United States Patent: 61/105,662: "A model for glutamate racemase inhibitors and new antibacterial agents."

Hemann, C.; Ilich, P.; Stockert, A.L.; Hille, R. (2005). Resonance Raman studies of xanthine oxidase: the reduced enzyme-product complex with violapterin. Journal of Physical Chemistry B, 109(7), 3023-3031.

Doonan, C.; Stockert, A.L.; Hille, R.; George, G. (2005). The nature of the catalytically labile oxygen at the active site of xanthine oxidase. Journal of the American Chemical Society, 127, 4518-4522.

Choi, E.; Stockert, A.L.; Leuimkuehler, S.; Hille, R. (2004). Studies of the mechanism of action of xanthine oxidase. Journal of Inorganic Biochemistry, 98, 841-848.

Leimkuehler, S.; Stockert, A.L.; Igarashi, K.; Nishino, T.; Hille, R. (2004). The role or active site residues in catalysis of Rhodobacter capsulatus xanthine dehydrogenase. Journal of Biological Chemistry, 279(39), 40437-40444.

Stockert, A.L.; Shinde, S.; Anderson, R.; Hille, R. (2002). The reaction mechanism of xanthine oxidase: evidence for two-electron chemistry rather than sequential one-electron steps. Journal of the American Chemical Society, 124(49), 14554-14555.

# Conference Proceedings

Stockert, A.L.; Mahfouz, T.M.; Leimkuehler, S.; Boss, J.; Gallaspie, J.; Hoffman, A.; Fakunmoju, L.; Popovich, D. "Effects of xanthine dehydrogenase argenic mutants on potential xanthine oxidase inhibitors." Sigma Xi Student Research Conference, Washington, DC, 2008.

Mahfouz, T.M.; Scherer, C.; Stockert, A.L.; Krall, D. "Computational Drug Design Targeting the Enzyme Glutamate Racemase." Midwest Enzymes Conference, Chicago, IL, 2008.

Stockert, A.L.; Mahfouz, T.M.; Fakunmojo, L.; Petersen, B. "Orientation studies of novel xanthine oxidase inihibitors using Glide docking and spectroscopic kinetic assays." Midwest Enzymes Conference, Chicago, IL, 2008.

Mahfouz, T.M.; Hoq, R.; Stockert, A.L.; Krall, D. "Role of the water molecules in inhibitor binding to S. pneumoniae glutamate racemase." Sigma Xi Student Research Conference, Washington, DC, November 2008.

Scherer, C.; Skidmore, K.; Stockert, A.L.; Mahfouz, T.M. "Ligand based drug design targeting the enzyme glutamate racemase." Sigma

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Xi Student Research Conference, Washington, DC, November 2008.

Stockert, A.L.; Mahfouz, T.M.; Fakunmoju, L.; Hoffman, A.; Koch, D.; Patel, R. "Use of Glide Docking Energies to select xanthine oxidase and xanthine dehydrogenase inhibitors with favorable binding orientations." Sigma Xi Student Research Conference, Washington, DC, November 2008.

Stockert, A.L.; Mahfouz, T.M.; Petersen, B.; Hoffman, A.; Patel, R.; Fakunmoju, L. "Kinetic Analysis of Inhibitory compounds of xanthine oxidase selected Based on computer docking results." Sigma Xi Student Research Conference, Washington, DC, November 2008.

Stockert, A.L.; Mahfouz, T.M.; Petersen, B.; Patel, R.; Koch, D. "Spectroscopic analysis of the reaction of xanthine oxidase with Benzotriazole-1-methanol and Benzotriazole-1-acetonitrile." Sigma Xi Student Research Conference, Washington, DC, November 2008.

Krall, D.; Stockert, A.L.; Mahfouz, T.M. "Computer modeling of glutamate racemase." Sigma Xi National Meeting and Student Research Conference, Orlando, FL, November 2007.

Mahfouz, T.M.; Patel, R.; Petersen, B.; Krall, D.; Stockert, A.L. "Correlation of Docking Energies With Kinetic Assays of Xanthine Oxidase and potential inhibitors." Sigma Xi National Meeting and Student Research Conference, Orlando, FL, November 2007.

Older abstracts (copies not included in portfolio):

Stockert, A.L.; Leimkuehler, S.; Hemann, C.; Anderson, R.; Ilich, P. "Spectroscopic and Kinetic Studies of bovine xanthine oxidase and Rhodobacter capsulatus xanthine dehydrogenase." Midwest Metals Meeting, Ann Arbor, MI, June 2004.

Stockert, A.L.; Leimkuehler, S.; Hemann, C.; Anderson, R.; Ilich, P. "Spectroscopic and Kinetic studies of bovine xanthine oxidase and Rhodobacter capsulatus xanthine dehydrogenase." Gorden Research Conference for Molybdenum and Tungsten Enzymes, Meriden, NH, June 2003.

Hemann, C.; Stockert, A.L.; Ilich, P.; Hille, R. "Resonance Raman and Kinetic Studies of xanthine oxidase." OSU Medical Center Research Day, Columbus, OH, April 2003.

# **Presentations**

Bouhall, S. and Stockert, A. "Streptococcus pneumoniae Crude Protein Assays of Glutamate Racemase Enzyme Inhibitors for Antimicrobial Therapeutics." Department of Chemistry, Ohio Northern University, September 2012.

Sobotka, JL.; Bright, D.R.; Rush, M.J.; Kroustos, K.R.; Stockert, A.L.; Kier, K.L.; Murphy, B.L.; DiPietro, N.A. "Design and Implementation of a Multidisciplinary, University-Based Disease State Management and Wellness Program." FIP, India, September 2011.

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Stockert, A.L.; Fakunmoju, O.; Mahfouz, T.M. "An effective docking model for rapid screening of potential xanthine oxidase inhibitors." ASBMB Anaheim, Anaheim, CA, May 2010.

Amend, K.L.; Aulthouse, A.L.; Kinder, D.H.; Stockert, A.L. "Response of colon cancer cells to selenium and cis-platinum exposure." Ohio Academy of Science Annual Meeting, Ada, OH, April 2010.

Stockert, A.L.; Aulthouse, A.L.; Kinder, D.H. "Effect of selenium on the efficacy of cis-platinum on the HT-29 colon tumor cell line." American Institute for Cancer Research, Washington DC, November 2009.

Stockert, A.L.; Petersen, B.; Mahfouz, T. M.; Fakunmoju, L.; Patel, R.; Hoffman, A.; Leimkuehler, S. "Orientation studies of novel xanthine oxidase inhibitors using." Experimental Biology, ASBMB, New Orleans, LA, 2009.

Mahfouz, T.M.; Scherer, C.; Stockert, A.L; Krall, D. "Computational Drug Design Targeting the Enzyme Glutamate Racemase." Midwest

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Enzymes Conference, Chicago, IL, 2008.

Stockert, A.L.; Mahfouz, T.M.; Fakunmojo, L.; Petersen, B. "Correlation of Glide docking to kinetic assays of xanthine oxidase." Midwest Enzymes Conference, Chicago, IL, 2008.

Stockert, A.L.; Mahfouz, T.M.; Leimkuehler, S.; Boss, J.; Gallaspie, J.; Hoffman, A.; Fakunmoju, L.; Popovich, D., "Effects of xanthine dehydrogenase argenic mutants on potential xanthine oxidase inhibitors." Sigma Xi Student Research Conference, Washington, DC, 2008.

Stockert, A.L.; Mahfouz, T.M.; Petersen, B.; Hoffman, A.; Patel, R.; Fakunmoju, L. "Kinetic Analysis of Inhibitory compounds of xanthine oxidase selected based on computer docking results." Sigma Xi Student Research Conference, Washington, DC, November 2008.

Stockert, A.L.; Mahfouz, T.M.; Petersen, B.; Patel, R.; Koch, D. "Spectroscopic analysis of the reaction of xanthine oxidase with Benzotriazole-1-methanol and Benzotriazole-1-acetonitrile." Sigma Xi Student Research Conference, Washington, DC, November 2008.

Stockert, A.L.; Mahfouz, T.M.; Fakunmoju, L.; Hoffman, A.; Koch, D.; Patel, R. "Use of Glide Docking Energies to select xanthine oxidase and xanthine dehydrogenase inhibitors with favorable binding orientations." Sigma Xi Student Research Conference, Washington, DC, November 2008.

Mahfouz, T.M.; Hoq, R.; Stockert, A.L.; Krall, D. "Role of the active site water molecules in inhibitor binding to S. pneumoniae glutamate racemase." Sigma Xi Student Research Conference, Washington, DC, November 2008.

Mahfouz, T.M.; Krall, D.; Stockert, A.L. "A structural model for glutamate racemase from S. pneumonia." AACP annual meeting poster session, Chicago, IL, July 2008.

Stockert, A.L.; Mahfouz, T.M.; Krall, D. "Computer Modeling of Glutamate Racemase." American Chemical Society Annual Meeting, Columbus, OH, June 2008.

Stockert, A.L.; Patel, R.; Petersen, B.; Koch, D.; Mahfouz, T.M. "Spectroscopic Analysis of the reaction of xanthine oxidase with Benzotriazole-1-methanol and benzotriazole-1-acetonitrile." American Chemical Society Annual Meeting, Columbus, OH, June, 2008.

Stockert, A.L.; Mahfouz, T.M.; Patel, R.; Petersen, B. "Correlation of Glide Docking Energies with Spectroscopic Kinetic Assays of xanthine Oxidase and Potential Inhibitors." American Chemical Society Annual Meeting, Columbus, OH, June 2008. - Oral Presentation, peer-reviewed

Mahfouz, T.M.; Patel, R.; Petersen, B.; Krall, D.; Stockert, A.L. "Correlation of Docking Energies With Kinetic Assays of Xanthine Oxidase and potential inhibitors." Sigma Xi National Meeting and Student Research Conference, Orlando, FL, November 2007.

Krall, D.; Stockert, A.L.; Mahfouz, T.M. "Computer modeling of glutamate racemase." Sigma Xi National Meeting and Student Research Conference, Orlando, FL, November 2007.

Stockert, A.L. "Pausing Enzyme Action to Prevent Oxidative Damage." Sigma Xi Scientific Research Society, Ada, OH, December 2006.
- Oral Presentation, invited

Amend, K.L.; Aulthouse, A.L.; Kinder, D.H.; Stockert, A.L. "Response of colon cancer cells to selenium and cis-platinum exposure." Student Research Colloquium, Ada, OH, 2010.

Stockert, A.L.; Mahfouz, T.M.; Patel, R.; Petersen, B.; Boss, J.; Gallaspie, J. "Spectroscopic analysis of the reaction of Benzotriazole-5-carboxylic acid with two forms of Rhodobacter capsulatus xanthine dehydrogenase; wild type and mutant form (R310M)." Summer Research Presentations, Ada, OH, June 2008.

Stockert, A.L.; Antloga, S.; Mahfouz, T.M. "Streptoccus pneumonia whole cell assays of glutamate racemase." ONU Undergraduate Research Colloquium, Ada, OH, April 2008.

Krall, D.; Stockert, A.L. "Kinetic Behavior of xanthine oxidase and Potential Active Site Inhibitors." ONU Undergraduate Research Colloquium, Ada, OH, April 2007.

Lusardi, K.; Mahfouz, T.M; Stockert, A.L. "Cloning and expression of E. coli glutamate racemase for design of antimicrobial therapeutics." ONU - Undergraduate Research Colloquium, Ada, OH, April 2007.

Clough, A.; Hood, B.; Hille, R.; Stockert, A.L. "Cloning and expression of bovine xanthine oxidase and human xanthine dehydrogenase." ONU Undergraduate Research Colloquium, Ada, OH, April 2007.

Stockert, A.L.; Leimkuehler, S.; Hemann, C.; Anderson, R.; Ilich, P. "Spectroscopic and Kinetic Studies of bovine xanthine oxidase and Rhodobacter capsulatus xanthine dehydrogenase." Midwest Metals Meeting, Ann Arbor, MI., June 2004.

Stockert, A.L.; Leimkuehler, S.; Hemann, C.; Anderson, R.; Ilich, P. "Spectroscopic and Kinetic Studies of bovine xanthine oxidase and Rhodobacter capsulatus xanthine dehydrogenase." Ohio State Biochemistry Program Student Seminar, Columbus, OH, May 2004. - Oral presentation

Stockert, A.L.; Leimkuehler, S.; Hemann, C.; Anderson, R.; Ilich, P. "Spectroscopic and Kinetic Studies of bovine xanthine oxidase and Rhodobacter capsulatus xanthine dehydrogenase." CBI Training Symposium, Columbus, OH, May 2004.

Stockert, A.L.; Leimkuehler, S.; Hemann, C.; Anderson, R.; Ilich, P. "Spectroscopic and Kinetic Studies of bovine xanthine oxidase and Rhodobacter capsulatus xanthine dehydrogenase." Ohio State Biochemistry Program Poster Session, Columbus, OH, May 2004.

Stockert, A.L.; Leimkuehler, S.; Hemann, C.; Anderson, R.; Ilich, P. "Spectroscopic and Kinetic Studies of bovine xanthine oxidase and Rhodobacter capsulatus xanthine dehydrogenase." Ohio State Biochemistry Program Fall Symposium, Columbus, OH, October 2003. - Oral presentation - Award winning

Stockert, A.L.; Keimkuehler, S.; Hemann, C.; Anderson, R.; Ilich, P. "Spectroscopic and Kinetic Studies of bovine xanthine oxidase and Rhodobacter capsulatus xanthine dehydrogenase." Department of Molecular and Cellular Biochemistry Retreat, Loudonville, OH, September 2003. - Award winning

Stockert, A.L.; Leimkuehler, S.; Hemann, C.; Anderson, R.; Ilich, P. "Spectroscopic and Kinetic Studies of bovine xanthine oxidase and Rhodobacter capsulatus xanthine dehydrogenase," CBI Luncheon Seminar, Columbus, OH, August 2003. - Oral presentation

Stockert, A.L.; Leimkuehler, S.; Hemann, C.; Anderson, R.; Ilich, P. "Spectroscopic and Kinetic studies of bovine xanthine oxidase and Rhodobacter capsulatus xanthine dehydrogenase." Gorden Research Conference for Molybdenum and Tungsten Enzymes, Meriden, NH, June 2003.

Stockert, A.L.; Leimkuehler, S.; Hemann, C.; Anderson, R.; Nishino, T. "Spectroscopic and Kinetic Studies of bovine xanthine oxidase and Rhodobacter capsulatus xanthine dehydrogenase." Ohio State Biochemistry Program Poster Session, Columbus, OH, May 2003.

Hemann, C.; Stockert, A.L.; Ilich, P.; Hille, R. "Resonance Raman and Kinetic Studies of xanthine oxidase." OSU Medical Center Research Day, Columbus, OH, April 2003.

Hemann, C.; Stockert, A.L.; Ilich, P.; Hille, R. "Resonance Raman and Kinetic Studies of xanthine oxidase." Department of Molecular and Cellular Biochemistry Retreat, Columbus, OH, September 2002.

Hemann, C.; Stockert, A.L.; Ilich, P.; Hille, R. "Resonance Raman and Kinetic Studies of xanthine oxidase." Ohio State University Protein Research Group Retreat, Loudonville, OH, May 2002. - Oral presentation

Hemann, C.; Stockert, A.L.; Ilich, P.; Hille, R. "Resonance Raman and Kinetic Studies of xanthine oxidase." Ohio State Biochemistry Program Student Seminar, Columbus, OH, May 2002. - Oral presentation

Hemann, C.; Stockert, A.L.; Ilich, P.; Hille, R. "Resonance Raman and Kinetic Studies of xanthine oxidase." Ohio State Biochemistry Program Poster Session, Columbus, OH, May 2002.

Hemann, C.; Ilich, P.; Stockert, A.L.; Hille, R. "Resonance Rama Studies of the Charge Transfer Complex formed between xanthine oxidase and violapterin." Department of Molecular and Cellular Biochemistry Retreat, Mt. Sterling, OH, September 2001.

Hemann, C.; Ilich, P.; Stockert, A.L.; Hille, R. "Resonance Raman Studies of Xanthine Oxidase." NIH-Chemistry Biology Interface Seminar, Columbus, OH, September 2001.

Hemann, C.; Ilich, P.; Stockert, A.L; Hille, R. "Resonance Raman studies of the charge transfer complex formed between xanthine oxidase and violapterin." Chemistry-Biology Interface Symposium, Columbus, OH, September 2001.

Stockert, A.L.; Ilich, P.; Hille, R. "The Reaction of Xanthine Oxidase with Formamide." Ohio State Biochemistry Program Poster Session, Columbus, OH, May 2001.

Stockert, A.L.; Ilich, P.; Hille, R. "The Reaction of Xanthine Oxidase with Formamide." NIH-CBI Poster Session, Columbus, OH, September 2000.

Stockert, A.L.; Ilich, P.; Hille, R. "The Reaction of Xanthine Oxidase with Formamide." Inorganic Biochemistry Summer Workshop, Athens, GA, August 2000.

# Grants and Sponsored Research

#### **Funded**

Stockert, A.L.; Mahfouz, T.M.; Fakunmoju, L. "Undergraduate Summer Research." Sponsored by Other, Ohio Northern University, (2009). - Funded, Summer Stipend

Faculty Development Grant, "Design of electronic cases tailored to fit current coursework." (2008). - Funded, \$1500.00

Stockert, A.L.; Schmees, P. "AFPE - The reaction of Benzotriazole-1-acetonitrile with xanthine oxidase." Sponsored by Other, Private, \$5,000.00. (June 2008 - May 2009). – Funded, \$5000.00

Mahfouz, T.M.; Stockert, A.L. "Structure-based design of broad-spectrum glutamate racemase inhibitors." Sponsored by NIP, \$10,000.00. (December 2008 - December 2009). – Funded, \$10000.00

Stockert, A.L.; Koch, D. "Undergraduate Summer Research." (2008). - Funded, Summer Stipend

Stockert, A.L.; Fakunmojo, L. "Undergraduate Summer Research." (2008). - Funded, Summer Stipend

Mahfouz, T.M.; Stockert, A.L.; Kinder, D.H. "Structure-based design of broad-spectrum glutamate racemase inhibitors." Sponsored by Bower, Bennet and Bennet, \$12,500.00. (June 2008 - September 2008). – Funded, \$12500.00

Stockert, A.M.; Patel, R. "Undergraduate Student Summer Research." (2007). - Funded, Summer Stipend

Stockert, A.M.; Peterson, B. "Undergraduate Student Summer Research." (2007). - Funded, Summer Stipend

#### Submitted

Stockert, A.L.; Hoehn, A. Sigma Xi Grants in Aid of Research. "The effects of *Cinnamomum cassia* supplementation in blood glucose levels of diabetics." (2012). – in review

Stockert, A. L. National Institutes of Health R03 – "Ask Yourself-what have you done for your health today?" (2012) – in review

Stockert, A.L., Wellpoint Foundation Signature Grant Application - "Ask Yourself what have you done for your health today?" (2011). - \$32900.00

Mahfouz, T.M.; Stockert, A.L. American Heart Assoc. – "Antibacterial Compounds" (2011).

Stockert, A.L.; Kier, K.; Shields, K. Wolterskuwer ACE curriculum Facts & Comparisons® Academic Partnership Program Advancement of Clinical Education (ACE) Curriculum Grant 2010 "Teaching and Assessing Longitudinally Integrated Nutritional and Dietary Supplement Concepts throughout the PharmD curriculum." (2010). - \$10000.00

Stockert, A.L.; Hoehn, A. Sigma Xi Grants in Aid of Research. "The effects of *Cinnamomum cassia* supplementation in blood glucose levels of diabetics." (2010). - \$1000.00

Stockert, A.L. Gustavus and Louise Pfeiffer Research Foundation "Nutrition Education Initiative." (2010).- \$8200.00

Stockert, A.L.; Aulthouse, A.L.; Kinder, D.H. Bower, Bennet and Bennet Endowed Chair Research Proposal 2010 "Improving the efficacy of cis-platinum in HT-29 colon cancer cell line." (2010). - \$12500.00

Stockert, A.L. California Table Grape Commission, "Potential benefits of grape consumption on heart health by examining the effects of grape powder on generation of tissue damaging reactive oxygen species." (2009). - \$30000.00

Online Instruction Grant Proposal, "Two alternate versions of biochemistry online." (2009).

Stockert, A. L.; Aulthouse, A.L.; Kinder, D.H. "NIH R21: Supplement effects of cisplatin." Sponsored by NIH - National Institutes of Health, (2009). - \$284000.00

Stockert, A.L.; Mahfouz, T.M.; Antologa, S. "AFPE: The Antimicrobial potential of S. pneumoniae glutamate racemase inhibitors." (2009). - \$5000.00

Stockert, A. L.; Mahfouz, T.M.; Hoffman, A. "AFPE: The effects of arginine mutants on inhibitory potential of benzotriazole-5-carboxyllic acid." (2009). - \$5000.00

Stockert, A.L.; Antloga, S. AFPE 2008- The antimicrobial potential of S. pneumonia glutamate racemase inhibitors." (2008). -\$5000.00

Stockert, A.L.; Mahfouz, T.M. "BBB 2008 - Correlation of Docking Energies to potential xanthine oxidase inhibitors for ischemia-reperfusion treatment." (2008). - \$12000.00

Stockert, A.L.; Crossgrove-Hart, J.S. "Letter of Intent 2008- The effects of grape powder extracts on Xanthine Oxidase for reduction of oxidative damage associated with heart attack." (2008). - \$30000.00

Stockert, A.L.; Mahfouz, T.M. "NIHR21 2008- Xanthine Oxidase Inhibitors for Ischemia-Reperfusion." Sponsored by NIH - National Institutes of Health, (2008). - \$150000.00

Stockert, A.L.; Mahfouz, T.M. "NIHR03 2008- Xanthine Oxidase Inhibitors for Ischemia-Reperfusion." Sponsored by NIH - National Institutes of Health, (2008). - \$150000.00

Stockert, A.L.; Mahfouz, T.M. "NIP 2008 - Correlation of Docking Energies to potential xanthine oxidase inhibitors for ischemia-reperfusion treatment." (2008). - \$100000.00

ASBMB Small Meeting Proposal, "New Methods in Protein Research." (2007).

Stockert, A.L.; Krall, D. "AFPE: Xanthine oxidase inhibitors for ischemia-reperfusion." (2007). - \$5000.00

Stockert, A.L. "Bower, Bennet and Bennet Endowed Chair Research Award - ," (2007). - \$12500.00

Stockert, A.L.; Crossgrove-Hart, J.S. "Letter of Intent 2007- Effects of Grape Powder Extracts on Xanthine Oxidase levels in healthy and hypertensive rat's hearts." (2007). - \$25000.00

Stockert, A.L.; Crossgrove-Hart, J.S.; Rorabaugh, B.R. "Letter of Intent 2007- The Effects of Grape Powder Extracts on Xanthine Oxidase for reduction of oxidative damage associated with heart attack." (2007). - \$75000.00

Mahfouz, T.M.; Stockert, A.L.; Kinder, D.H. "NIH R15 - Design of Glutamate Racemase Inhibitors." (2007).

Stockert, A.L.; Mahfouz, T.M. "NIP AACP - Xanthine Oxidase Inhibitors for Ischemia-Reperfusion." (2007).

Stockert, A.L.; Krall, D. "Sigma Xi Xanthine Oxidase Inhibitors for Ischemia-Reperfusion." (2007).

Crossgrove, J.; Stockert, A.L. "Letter of Intent: Grape Commission." (2006).

Stockert, A.L. "NHF - Xanthine Oxidase Inhibitors for Ischemia-Reperfusion." (2006).

# Professional Activity

#### **Elected Offices**

Director Baccalaureate Colleges, Sigma Xi, 2014-Present

Associate Director Baccalaureate Colleges, Sigma Xi, 2012-2014.

Chair, American Chemical Society (ACS), Northwest Central Ohio Section, 2010 – 2011

Vice Chair, ACS Northwest Central Ohio Section, 2008, 2009.

Vice President, American Chemical Society Student Affiliates, 1998.

President, Sigma Xi Scientific Research Society Ohio Northern Chapter, 2008, 2009, 2011, 2012, 2013, 2014

Vice-President, Sigma Xi Scientific Research Society Ohio Northern Chapter, 2010.

### Committees for a state, national or international professional organizations

Committee Member of the 2009 - 2010 Paul Dawson Biotechnology Award Selection Committee. American Association of Colleges of Pharmacy (2009).

Judge, Ohio Academy of Science. State Science Fair (2006 - Present).

Member of the ACS Legislative Action Network

Invitation to apply: National Association or Boards of Pharmacy exam writing workshop (2009).

#### Reviewer for national journals, books, and/or manuscripts

Editor, Austin Journal of Pharmacology and Therapeutics 2012-Present.

The Ohio Journal of Science, manuscript review, September 2009.

Voet, Voet, and Pratt. Fundamentals of Biochemistry 3e. Textbook review, October 2009.

Tansey. Introductory Biochemistry Text. Text proposal review, October 2010.

Voet, Voet, and Pratt. Fundamentals of Biochemistry 3e. Virtual focus group review of course materials and text supplements, February 2011.

Reviewer, Biochemistry: A Conceptual Approach. Oxford. (2011).

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Registered as a reviewer for the following:

Reviewer, Journal Article, Computational Biology and Chemistry. (2009 - Present).

Reviewer, The Ohio Journal of Science. (2009 - Present).

Reviewer, Biochemistry 3rd edition Voet, Voet, and Pratt, Wiley. (2009 - Present).

# <u>Program coordinator or moderator for meetings/symposia, or patient education programs.</u>

Nutrition educator, ONU Healthwise. (2010 - 2012) Selected forms and handouts included.

Roundtable mediator, American Association of Colleges of Pharmacy Annual Meeting and Seminars, "Fostering Professionalism in Students." (2007).

Research colloquium coordinator, Sigma Xi Research Society Ohio Northern Chapter (2007, 2008).

# Lead Instructor for CE BLS course and publication of CE

Continuing Ed. Publication, "A review of enzymology for pharmacists". (2007).

Continuing Ed. Course Delivery (Class size required 3 simultaneous courses), Lead Instructor, Basic Life Support for Healthcare Providers. (2010).

### Awards, Honors, and Achievements

Professional Woman of the Year", National Association of Professional Women (2011 - 2012).

APhA-APPM Innovative Practice Report Merit Award, American Pharmacists Association (2011).

National Association of Professional Woman (2011).

Who's Who in America (2008, 2009, 2010, 2011).

Who's Who Among American Women. (2007, 2008, 2009, 2010, 2011).

Who's Who of World Class Professionals. (2010).

Mortar Board Favorite Professor Award. (2009).

Bonus Recognition of meritorious efforts in Pharmaceutical and Biomedical Sciences. (2008).

Mortar Board Favorite Professor Award. (2008).

Mortar Board Favorite Professor Award. (2007).

Honorary Brother, Phi Delta Chi Pharmacy Fraternity (2007).

Mentor for national student award - Rajvi Patel, Sigma Xi. (2007).

Mentor for national student award - Daniel Krall, Sigma Xi. (2007).

Sigma Xi Scientific Research Society Induction (2006).

Who's Who Among America's Teachers. (2006).

First degree black belt Tae Kwon Do, United Martial Arts Black Belt Association. (2005 - Present).

Student President, The Ohio State Biochemistry Program. (2003 - 2004).

Graduate Studies Committee, The Ohio State Biochemistry Program. (2003 - 2004).

NIH Chemistry-Biology Interface Training Program Fellow. (2003).

Department of Molecular and Cellular Biochemistry Annual Retreat 2nd Place Poster Winner. (2003).

The Ohio State Biochemistry Program Fall Symposium Grand Prize Seminar Presenter. (2003).

NIH Chemistry-Biology Interface Training Program Fellow. (2001).

National Honors Society. (1994 - Present).

### Licensures and Certifications

ACLS Instructor, American Heart Association. (2009 - Present).

BLS Instructor. (2009 - Present).

ACLS Provider, American Heart Association. (2009 - Present).

BLS Provider. (2009 - Present).

AHA Course Instructor. (2009 - Present).

Biosafety Officer's Training. (2008, 2013).

American Red Cross CPR/AED Provider (2007 - 2009).

### Membership

National Honors Society (1994 - Present)

American Association of College of Pharmacy, (2006 - Present).

American Chemical Society, (2006 - Present).

Sigma Xi Scientific Research Society, (2006 - Present).

American Society for Biochemistry and Molecular Biology (2006 - Present).

The Ohio Academy of Science, (2006 - Present).

Sigma Xi Scientific Research Society (2006 - Present).

Kiwanis International (2006 - 2008).

Circle K International (2006 - Present).

Phi Delta Chi Pharmacy Fraternity (2007 - Present).

American Chemical Society Student Affiliates (1997 - 1999).

### Workshops, Seminars, Continuing Education

"Biosafety and Biosecurity Training," Fort Collins, CO (2013).

"Faculty Development and Teaching Scholars Program," West Virginina University. (2012).

"ACS and You," American Chemical Society. (2009).

"Basic Life Support," American Heart Association (2009).

"Basic Life Support Instructor," American Heart Association (2009).

"Budgeting 101," Council on Undergraduate Research. (2009).

"Coaching and Feedback," American Chemical Society. (2009).

"Describing the Role of Undergraduates in your Research," Council on Undergraduate Research. (2009).

"Fostering Innovation," American Chemical Society. (2009).

"Foundations and their special requirements," Council on Undergraduate Research. (2009).

"Grant Writing," Council on Undergraduate Research. (2009).

"How to Critique a Proposal," Council on Undergraduate Research. (2009).

"Leading Without Authority," American Chemical Society. (2009).

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"The Rhetoric of the Grant Proposal," Council on Undergraduate Research. (2009).

"Things you Need to Know to Submit," Council on Undergraduate Research. (2009).

"What Reviewers Look For and the Review Process," Council on Undergraduate Research. (2009).

"Team Learning: Cooperative Learning in the Science Classroom -," National Center for Case Study Teaching in Science. (2008).

"The Use of Case Studies and group discussions in Science Education," National Center for Case Study Teaching in Science. (2008).

"Food, Nutrition, Physical Activity and Cancer." American Institute for Cancer Research (2009). -17.5 CPEUs

"Advanced Cardiac Life Support Instructor Renewal Course," AHA. (2008). - 2.5 Edu Cr

"Introduction to Wiley Plus," Wiley faculty Network (2008).

"WebCt 6 Communications," Heather Caprette, Ohio Northern University (2008).

"Matching Online Assessments to Online Pedagogies," Wiley faculty Network (2008).

"Meaningful Pre-Lab Preparation Through Virtual Labs," Wiley faculty Network (2008).

"Outcomes Assessment," Wiley faculty Network (2008).

"Respondus Training," Respondus (2008).

"The Top Six Reasons Faculty Choose to Teach Online," Rich Media Training (2008).

"Using Personal Response Systems to Increase Classroom Participation and Retention," American Association of Colleges of Pharmacy (2008).

"Biosafety and Biosecurity Training," Fort Collins, CO (2008).

"Exam Writing Strategies with Nicholas Popovich, Ph.D." Ohio Northern University (2008).

"Assessment 101, Katherine Kelley, Ph.D" Ohio Northern University (2008).

"Writing Ability-Based Outcomes, Katherine Kelley, PhD" Ohio Northern University (2008).

"Curricular Mapping: Process AND Product, Katherine Kelley, PhD", Ohio Northern University (2008).

"Biosafety in Microbiological and Biomedical Laboratories." Ohio Northern University (2008).

"Masters Teachers Program," Ohio Northern University. (2008).

"Cardiac Structure and Function", Healthworks (2007). - 2 CEUs

"Basic Hemodynamics," Healthworks (2007). - 1 CEUs

"Advanced Cardiac Life Support Training," American Heart Association (2007).

"AHA Core Instructor Training". American Heart Association (2007). - 4 contact hours

"Assurance of Learning", Professional Development (2007).

"Basic Life Support," CPR Today Inc. (2007).

"CPR / AED training," American Red Cross (2007).

"Engaging Students in a Large Classroom," American Association of the Colleges of Pharmacy (2007).

"Fostering Professionalism in Students," Discussion Mediator – American Association of the Colleges of Pharmacy (2007).

"Cultural Competency Curriculum Integration and Training," Cultural Competence in Health Professions Education Institute (2007).

"Sedona Training," Sedona (2006).

"Responsible Conduct of Research," The Ohio State University (2005).

"Making the Most of your Talk," The Ohio State University (2003).

"Preparing for Positions Outside Academia," The Ohio State University (2003).

"Responsible Research Conduct Workshop," The Ohio State University (2001).

"Inorganic Biochemistry Summer Workshop," University of Georgia (2000).

#### Amy L. Stockert Page 14

#### Conference and Meetings

- "Food, Nutrition, Physical Activity and Cancer." American Institute for Cancer Research, Washington, DC (2013).
- "American Association of the Colleges of Pharmacy Annual Meeting," AACP, Orlando, FL (2012). Faculty Delegate
- "ACS Central Ohio Region Annual Meeting," ACS, Indianapolis, IN (2011).
- "ASBMB Annual Meeting," Experimental biology, Washington, DC (2011).
- "ASBMB Annual Meeting," Experimental biology, Anaheim, CA (2010).
- "Food, Nutrition, Physical Activity and Cancer." American Institute for Cancer Research, Washington, DC (2009).
- "Grant Writing," Council on Undergraduate Research. Salem, OR (2009).
- "Leadership Institute," American Chemical Society. Fort Worth, TX (2009).
- "American Chemical Society Central Ohio Region," ACS. Columbus, OH (2008).
- "Experimental Biology," ASBMB. New Orleans, LA (2008).
- " Sigma Xi National Meeting and Student Research Conference," ONU delegate, Washington, DC (2008).
- "Biosafety Training." Fort Collins, CO (2008).
- "Masters Teachers Program," ONU. Ada, OH (2008).
- "American Associan of Colleges of Pharmacy Annual Meeting," Orlando, FL (2007).
- "Cultural Competence in Health Professions Education Institute" Washington, DC (2007).
- "Midwest Enzyme Conference" Chicago, IL (2007).
- "Sigma Xi Research Conference," Chapter Delegate. Orlando, FL (2007).
- "XXVI Midwest Enzyme Chemistry Conference" Chicago, IL (2006).
- "Midwest Metals Meeting" (2004).
- "VCU Transcription Termination Meeting" (2004).
- "OSU Medical Center Research Day" (2003).
- "Gordon Research Conference for Molybdenum and Tungsten Enzymes" (2003).
- "Department of Molecular and Cellular Biochemistry Retreat" (2003).
- "The Ohio State University Protein Research Group Retreat" (2002).
- "Department of Molecular and Cellular Biochemistry Retreat" (2002).
- "Department of Molecular and Cellular Biochemistry Retreat" (2001).
- "Inorganic Biochemistry Summer Workshop" (2000).

### Coursework

Biochemistry
General Biochemistry
Protein Spectroscopy
Protein Biochemistry
Enzymology
Advanced Enzymology
Genetics of DNA replication and repair
Regulation of gene expression
Intermediary Metabolism
Lipids and membranes
Cell Biology
Transitional organometallo chemistry
Bioinorganic chemistry
Animal Models of Human Disease

Chemistry
General Chemistry
Inorganic chemistry
Organic Chemistry
Analytical Chemistry
Physical Chemistry

Related Sciences
Mechanical Physics
Electrical/Optical Physics
Calculus I, II, III
Computer Science
Geology

General
Philosophy
Art Appreciation
Forestry
Archeology

<u>Psychology</u> General Psychology Developmental Psychology I, II Statistics for Psychology Communications
A/P English
English Writing I, II
Creative Writing
German
Communications

# Service

### **University Service**

Committee Chair, University Biosafety. (2009 - Present).

Committee Member, University Biosafety. (2009 - 2010).

Council Member, University Council. (2007 - 2011).

Committee Member, University Council Subcommittee. (2008 - 2009).

Committee Member, Safety. (2008 - Present).

Committee Member, Presidential Speaker Series Planning. (2008 - 2011).

Committee Member, Student Research Colloquium Planning. (2009 - Present).

Committee Member, Facilities and Planning Committee. (2007 - 2008).

Committee Chair, University Disciplinary Board Hearing Committee. (2007 - 2008). - Chaired two hearings

University Service, Faculty Interviewer. (2006 - Present).

University Board of Appeals and Disciplinary Board. (2006 - 2008).

Attendee, President's Leadership Dessert. (2007 - 2009).

Support Donor, The Northern Fund, Student Skills Center, Alumni and Friend Entry Pavillion. (2005 - Present).

Bear Supporter, ONU Student Athlete Advisory Committee Adopt-a-Bear – Woman's Soccer. (2007 - 2008).

Design and Implementation of University wide Biosafety Program and Training. – 1 university wide program implemented

Member, Faculty Ambassador. (2009 - 2010).

Committee Member, Faculty Search Committee. (2007 - 2008).

Faculty Interview Team for University President. (2010 - 2011).

Interview, College of Pharmacy (2007 - Present).

Advised an average of 30 students per year. (2005 - Present).

Advisor, Honors Program Contract Course and Projects.

Faculty Advisor, Phi Delta Chi. (2007 - 2014).

Faculty Advisor, Circle K Faculty Advisor. (2006 - Present).

### College and Departmental Service

Committee Chair, Pharmacy Safety Committee. (2009 - Present).

Committee Member, Student Affairs. (2009 - Present).

Biosafety Officer for College, Safety. (2008 - Present).

Committee Member, Honors and Awards. (2007 - Present).

Committee Chair, ASBMB Meeting Proposal Committee. (2007 - 2009).

Committee Member, Faculty Affairs. (2006 - 2008).

Committee Member, Assessment Committee. (2011 - 2012).

Development of Honors Day Projection Program. (2008 - 2011)

Faculty Mentor, Letters of recommendation.

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Development of College Biosafety Training Program and Course.

Incorporation of Research Ethics Training for College of Pharmacy.

RESPy Award Nomination for Susan Warrington. (2007).

Participate, AACP Focus Group. (2007).

Syllabi Review (sample included) for course equivalents. (2006.-. Present).

### **Professional Service**

Reviewer, Ohio Academy of Science. (2009 - Present).

Reviewer, Biochemistry 3rd edition Voet, Voet, and Pratt, Wiley. (2009.-. Present).

Reviewer, Journal Article, Computational Biology and Chemistry. (2009 - Present).

Committee Member, 2009-2010 Paul Dawson Biotechnology Award Selection Committee. (2009).

Officer, Chair, American Chemical Society NW Central Section. (2010 - Present).

Officer, Vice Chair, American Chemical Society NW Central Section. (2010 - Present).

Officer, President, Sigma Xi Research Society, Ada, OH. (2008 – 2010, Present).

Officer, Past President, Sigma Xi Research Society, Ada, OH. (2010 - 2011).

Research colloquium organizer, Sigma Xi Research Society. (2007 - 2009).

Judge, Sigma Xi Research Society. (2007-2009).

Special Awards Design, Ohio Academy of Science. (2006-2008).

Judge, Ohio Academy of Science. Science Fair. (2005 - 2007).

Judge, Sigma Xi Research Society National Undergraduate Research Conference. (2007 - 2008).

Discussion Mediator, AACP. (2007).

Graduate Studies Committee, The Ohio State University. (2003).

American Chemical Society Student Affiliates, Vice President. (1998).

### Public and Community Service

Member, Our Lady of Lourdes, Ada, OH. (2009 - Present).

Ada Food Pantry. (2009).

Advisor, Circle K, Ada, OH. (2007 - Present).

Kiwanis Advisor. (2007 – 2009).

Guest Speaker, Kiwanis International, Ada, OH. (2007, 2009).

Kiwanis International. (2006 - 2009).

Kiwanis Fundraisers (2006 - 2009).

Circle K Fundraiser Weekend, Sandusky, OH. (2007).

Circle K Christmas for Kids Project. (2007).

Girl Scouts Ecology Day (2007).