**Medical School Honors/Awards**

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| *2011 Boulware Community Leadership Award Recipient* |

**Membership in Honorary/Professional Societies**

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| |  | | --- | | *2011 Gold Humanism Honor Society* | |

**Education**

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| Education | Institution & Location | Dates Attended | Degree | Degree Date | Field of Study |
| *Undergraduate* | *Iowa State University  Ames, Iowa* | *08/2004 - 05/2008* | *B.S.* | *05/2008* | *Major-Biochemistry; Minors-Russian Studies, German, Mathematics* |

**Current/Prior Training**

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| *None* |

**Experience**

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| Experience | Organization & Location | Position | Dates | Supervisor | Average Hours/Week |
| Volunteer | *University of Iowa Carver College of Medicine, Iowa City, Iowa* | *Student member of curriculum renewal committee* | *04/2010 - 08/2010* | *Dr. Marc Pizzimenti, Ph.D* | *5* |
|  | Description | | | | |
| *Participated in a faculty and student modeling committee for development of my medical school's new curriculum. Read papers on medical student curriculum development, discussed topics with faculty and students, identified potential areas for change and revision in current curriculum, proposed changes to curriculum with special emphasis on anticipated advancements in technology, use of online clinical databases, and techniques for critical appraisal of clinical studies.* | | | | |
| Reason for Leaving: | | | | |
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| Volunteer | *University of Iowa Carver College of Medicine, Iowa City, Iowa* | *Teaching Distinction Track* | *09/2009* | *Dr. Fred Dee, MD* |  |
|  | Description | | | | |
| *Created teaching portfolio with basic science and clinical teaching cases, facilitated small group teaching sessions, developed test questions for preclinical courses, instructed and trained new simulated patients, will grade essay exams for immunology course, and will complete four week teaching elective. Tutored medical students for USMLE Step 1.  Served on second year capstone course liaison committee: met with course director to discuss upcoming exams, distributed exam details to class, reviewed student surveys on course, and compiled report for course review and improvement.* | | | | |
| Reason for Leaving: | | | | |
|  | | | | |
| Work | *Alpha Kappa Kappa Medical Fraternity, Iowa City, Iowa* | *House President* | *05/2009 - 06/2011* | *N/A* | *14* |
|  | Description | | | | |
| *Responsibilities included arranging transportation, housing, and accommodations for visiting--domestic and international--healthcare students. Supervised and participated in upkeep of the fraternity house, house renovations, house hold equipment, and surrounding grounds. Hosted social functions such as game nights, pot lucks, and annual spring party. Facilitated student recruitment and retention resulting in largest house census in over a decade. Assisted and supported residents experiencing interpersonal conflict and academic hardship. Managed house finances in excess of $50,000 per year. Created and maintained house website.* | | | | |
| Reason for Leaving: | | | | |
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| Work | *University of Iowa, Department of Pathology, Iowa City, Iowa* | *Pathology Small Group Case Developer* | *05/2009 - 08/2009* | *Dr. Fred Dee, MD* | *40* |
|  | Description | | | | |
| *Reformatted old pathology cases to be compatible with new course software. Reviewed and updated pathology cases to be used in second year medical student pathology course. Researched and wrote new cases to be used in future pathology small groups; presented and discussed cases with clinician specialists for feedback and further refinement of teaching material.* | | | | |
| Reason for Leaving: | | | | |
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| Volunteer | *Table to Table, Iowa City, Iowa* | *Food Collection Volunteer* | *09/2008* | *Dr. Joel Gordon, MD* | *2* |
|  | Description | | | | |
| *During farmers' market season, April to October, collected donated food from vendors at market for local crisis center and emergency food bank one to four times per month throughout my four years in medical school. Also, trained other medical students to participate in the organization's activities.* | | | | |
| Reason for Leaving: | | | | |
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| Research | *Iowa State University, Ames, Iowa* | *Undergraduate Research Assistant* | *04/2005 - 08/2008* | *Dr. Reuben Peters, Ph.D* | *20* |
|  | Description | | | | |
| *Prepared and ran experiments for two graduate students including time sensitive chemical assays, transforming cell lines, growing cell cultures, preparing and running cell culture fermentors, harvesting cellular products, and purifying chemical products for molecular analysis. Maintained the laboratory’s stock solutions, media, and chemical & gas supplies.* | | | | |
| Reason for Leaving: | | | | |
| *Medical school matriculation.* | | | | |

**Publications**

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| **Peer Reviewed Journal Articles/Abstracts**  Cyr A, Wilderman PR, Determan MK, Peters RJ. A modular approach for facile biosynthesis of labdane-related diterpenes. Journal of the American Chemical Society. 2007 May; 129(21): 6684–6685. Cited in PubMed; PMID: 17480080. |
| Mann FM, Prisic S, Davenport EK, Determan MK, Coates RM, Peters RJ. A single residue switch for Mg(2+)-dependent inhibition characterizes plant class II diterpene cyclases from primary and secondary metabolism. The Journal of Biological Chemistry. 2010 Jul; 285(27): 20558-20563. Cited in PubMed; PMID: 20430888. |
| Morrone D, Lowry L, Determan MK, Hershey DM, Xu M, Peters RJ. Increasing diterpene yield with a modular metabolic engineering system in E. coli: comparison of MEV and MEP isoprenoid precursor pathway engineering. Applied Microbiology and Biotechnology. 2010 Feb; 85(6): 1893-1906. Cited in PubMed; PMID: 19777230. |
| Morrone D, Xu M, Fulton DB, Determan MK, Peters RJ. Increasing complexity of a diterpene synthase reaction with a single residue switch. Journal of the American Chemical Society. 2008 Apr; 130(16): 5400–5401. Cited in PubMed; PMID: 18366162. |

**Language Fluency (Other than English)**

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| *Basic fluency in German and Russian.* |

**Hobbies & Interests**

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| *My personal hobbies and interests include hiking and walking, playing squash, indoor rock climbing, letter writing, reading about the history of science and medicine, solving and creating crossword puzzles, board games, and Russian conversation group.   Professionally, I am interested in medical education and teaching, the visual display of medical information, ramifications of commercially available genetic testing, and community and cultural influences on pediatric obesity.* |

**Other Awards/Accomplishments**

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| *2008 Graduated Summa Cum Laude from Iowa State University  2007 Robert Stupka Memorial Scholarship  2006 Phi Beta Kappa  2006 Award for Excellence in German Writing from the World Languages Department at Iowa State University  2004 National Merit Scholar* |