

ANDREW R. LYNCH

Graduate Research Assistant | University of Wisconsin – Madison

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EDUCATION

Cellular and Molecular Pathology (Ph.D.) **In Progress**
University of Wisconsin – Madison

Biochemistry and Molecular Biology (B.S.) **2012 – 2016**
University of Wisconsin – Eau Claire
Cum Laude

RELATED EXPERIENCE

University of Wisconsin – Madison School of Medicine and Public Health **2018 – present**
Graduate Research Assistant – Burkard Research Group
Using genomics and cell biology to study chromosomal instability in human cancer.

Reality Unlimited, L.L.C. **2013 – 2017**
Caregiver
Specializing in traumatic brain injury (TBI), I provided care and companionship to individuals who have survived various TBIs in an adult family home setting.

University of Wisconsin – Eau Claire: Department of Chemistry **2013 – 2016**
Student Researcher
Synthesis of linear and cyclic antigenic MUC1 mimotopes via solid-phase peptide synthesis (SPPS) and copper catalyzed azide-alkyne cycloaddition (CuAAC).

NSF REU Program at University of Wisconsin – Eau Claire Chemistry Department **June – August 2016**
NSF REU Peer Mentor & Student Researcher
Facilitated positive laboratory experiences for a selection of under-represented STEM students from local technical and two-year colleges. Instructed and mentored on introductory chemistry, organic chemistry, and biochemistry as well as appropriate laboratory methods and techniques.

Tropical Disease Institute of Ohio University and Pontificia Universidad Católica del Ecuador **June – July 2014**
Research Intern
Participated in the in-field collection and subsequent study of triatomine vectors of *T. cruzi*, the causative parasite in the pathogenesis of Chagas disease, as well as a comparative drug study of *Malaria falciparum* infected cells, both in a level 3 biohazard setting. Also assisted in rural humanitarian efforts including infrastructure repair and basic clinical care in an underserved region of Ecuador.

PUBLICATIONS

Yang, T., Her, C., **Lynch, A.R.**, White, R.J., Wang, M., and Westler, W.M. Short proline-substituted MUC1 Mucin peptides can bind to mouse MUC1 monoclonal antibody as revealed by STD NMR. *Journal of Undergraduate Chemistry Research*, 14(1): 5-11, 2015.

POSTERS AND PRESENTATIONS

Andrew R. Lynch, Amber S. Zhou, Beth A. Weaver, Mark E. Burkard. Assessing CIN caused by treatment with paclitaxel via single cell sequencing and agent-based stochastic modeling. Department of Medicine, Carbone Cancer Center, University of Wisconsin School of Medicine and Public Health, ASCB|EMBO Annual Meeting, San

Diego, CA. December 8-12, 2018. Poster.

Ryan A. Denu, Justin C. Jagodinsky, **Andrew R. Lynch**, Mark E. Burkard. Analysis of the “centrosome-ome” reveals potential causes of centrosome amplification in human cancer. Department of Medicine, Carbone Cancer Center, University of Wisconsin School of Medicine and Public Health, Genomic Sciences Training Program Annual Retreat, Madison, WI. June 9, 2018. Poster.

Synthesis of Cyclic Antigenic MUC1 Mimotopes; 1st NSF REU Symposium: Eau Claire, WI, August 2016. Talk.
Creation of MUC1 Peptide Mimotopes for Specific Carcinoma Immunotherapy; 1st NSF REU Symposium: Eau Claire, WI, July 2016. Talk.

Andrew R. Lynch and Thao Yang. Synthesis and Analysis of MUC1 Mimotopes. Celebration of Excellence in Research and Creativity (CERCA), Department of Chemistry, University Wisconsin-Eau Claire, Eau Claire, WI, April 25-29, 2016. Poster.

Andrew R. Lynch and Thao Yang. Analysis of the Antibody Binding of Derivative MUC1 Peptides via STD NMR, Department of Chemistry, University of Wisconsin-Eau Claire, 249th ACS National Meeting & Exposition, in Denver, CO, March 22nd – 26th, 2015. Poster.

Andrew R. Lynch and Thao Yang. Analysis of the Antibody Binding of Derivative MUC1 Peptides via STD NMR. Celebration of Excellence in Research and Creative Activity (CERCA), 23rd Annual Student Research Day, UWEC, Eau Claire, WI, April 29-30, 2015. Poster.