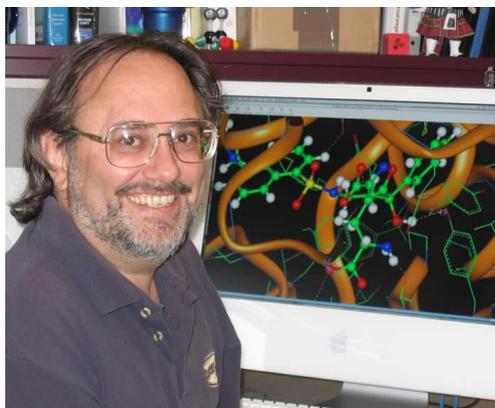


Invited Symposium Speakers

Heterocyclics & Bioorganic Synthesis



Nicholas Natale, Symposium Co-organizer, Professor, University of Montana, Dept. of Biomedical and Pharmaceutical Sciences, Missoula, Montana. He received his Ph.D. in Organic Chemistry and his B.S. in Chemistry from Drexel University. He did postdoctoral work with Albert I. Meyers at Colorado State University in Ft. Collins. He received the Idaho Academy of Science Distinguished Science Communicator Award and the ACS Ann Nalley Northwest Region Award for Volunteer Service. He has over 350 publications and presentations. His research interests include the role of chirality and conformational dynamics in bioactive small molecules and the development of structure activity relationships for a number of isoxazole containing drug candidates. Molecules prepared in his lab have been tested at the National Cancer Institute's Developmental Therapeutic Program and exhibited possible anticancer activity. His talk is entitled "Heteroaryl dihydropyridines bind the multi-drug resistance transporter."



Michael D. Mosher, Symposium Co-organizer, Chair and Professor, University of Northern Colorado, Dept. of Chemistry & Biochemistry, Greeley, Colorado. He received his Ph. D. from Texas Tech University. His research focus is on

synthetic organic chemistry, heterocyclic chemistry of N and O containing molecules, novel synthesis of 2-isozazolines and anti-cancer drug design.

Eric Ferrier, Assistant Professor, Colorado State University, Chemistry Dept., Ft. Collins, Colorado. He did his undergraduate work at MIT, his Ph.D. research at California Institute of Technology, and his postdoctoral work as an American Cancer Society associate at Stanford with Professor Barry Trost. His research interests include natural products possessing interesting biological activity and structural properties, analysis of their core molecular architectures and design of synthetically important methodologies. He explores the fundamental principles of catalysis and reactivity primarily centered around transition metal catalysis.

Larry Westrum, Senior Chemist, Director of Product Safety, Boulder Scientific Company, Mead, Colorado. He received his Ph.D. from Colorado State University under A. I. Meyers and his B.A. from University of Northern Colorado. He did postdoctoral research at Trinity University. He was an Assistant Professor of Chemistry at Knox College before joining Boulder Scientific Company. His research interests include heterocyclics, organic synthesis, and organometallics. Boulder Scientific has developed chemicals for breakthroughs in human drug therapy. Westrum's talk will focus on scaling up reactions for industrial applications.

Philip Reigan, Assistant Professor, University of Colorado Denver, School of Pharmacy, Dept of Pharmaceutical Sciences, Aurora, Colorado. He received his Ph.D., M.S. and B.S. from the University of Manchester, UK. He was a Postdoctoral Fellow at the University of Colorado. His laboratory studies the design, synthesis and biological evaluation of small-molecule antitumor agents that act on molecular targets associated with the pathology of cancer. Currently he is working on developing agents for treatment of brain tumors and the challenges they present. He is also developing neuroprotective agents to protect normal brain tissue from exposure to radiotherapy and chemotherapy. He is a member of the University of Colorado Cancer Center and the Colorado Clinical and Translational Sciences Institute.

Don Warner, Associate Professor, Boise State University, Dept. of Chemistry & Biochemistry, Boise, Idaho. He received his Ph.D. from the University of Michigan at Ann Arbor, his M.S. from the University of Wisconsin at Madison, and his B.S. from the University of Utah, Salt Lake City. He studies aziridinomitosenes, compounds related to the clinically used anticancer agent mitomycin C. This has led to the study of the mechanism of DNA cross-linking by the synthetic aziridinomitosenes and the electrophilic sites involved. He works on the synthetic and computational investigations of electrocyclization and cycloaddition reactions of azomethine ylides and azaallyl anions that offer potential for region- and stereocontrolled formation of azacycles.

Charles M. Thompson, Professor, Director of Mass Spectrometry and Proteomics Facility, University of Montana, Missoula, Montana. He did his undergraduate work in chemistry at Rutgers University. He earned his Ph.D. and M.S. at the University of California, Riverside. He

did post-doc work with E. J. Corey at Harvard and Henry Rapoport at the University of California, Berkeley. He is a medicinal and bioorganic chemist with interests in biologically active compounds. His research lab designs and synthesizes glutamate analogs to study and differentiate the pharmacology of the glutamate neurotransmitter system proteins such as the excitatory amino acid transporters. Other research interests include synthesis of phosphorus-containing analogs of alpha amino acids and their utility as inhibitors.

Hang (Hubert) Yin, Assistant Professor, University of Colorado Boulder, Dept. of Chemistry & Biochemistry, Boulder, Colorado. He works on drug discovery, particularly potential therapeutics that inhibit toll-like receptors. He also does protein engineering such as peptide targeting, and transmembrane domains of proteins that regulate pivotal biological processes. He also works on biotechnology development for non-invasive cancer biomarkers.

Patrick J. Hrdlicka, Associate Professor, University of Idaho, Dept. of Chemistry, Moscow, Idaho. He obtained his Ph.D., M.S. and B.S. from the University of Southern Denmark. His work has been published in over 30 publications. He received both the Early Career and Mid-Career Faculty Awards. His research focus is on DNA biotechnology, biological applications of nanomaterials, nucleic acid-based therapeutics/diagnostics, and synthetic bioorganic chemistry. His research includes the applications of chemically modified oligonucleotides and nanomaterials within therapeutics, diagnostics, and material science. He also does synthetic bioorganic chemistry with carbohydrates, nucleosides and oligonucleotides.

Cliff Berkman, Professor, Washington State University, Dept. of Chemistry, Pullman, Washington. He received his Ph.D. in chemistry from Loyola University of Chicago and his B.A. from Lake Forest College. The emphasis of his research is designing, synthesizing, and evaluating inhibitors of proteases and peptidases related to cancer. He is interested in the design of novel enzyme inhibitors for use in targeting tumor cells with diagnostic and therapeutic agents including prostate cancer. Some of the technology is used towards the development of diagnostic and therapeutic drugs with a start-up company CTT, Cancer Targeted Technology. This company develops innovative agents for early detection of cancer, monitoring treatment efficacy, and improving patient survival and quality of life.