West Virginia University
EBERLY COLLEGE OF ARTS AND SCIENCES
The C. Eugene Bennett Department of Chemistry

Undergraduate Research Topics

Faculty Member	Research Topics
Gregory Dudley	Enabling Technology for Chemical Synthesis Organic Synthesis for Future Medicines
Fabien Goulay	Laser Applied to Gas-Phase Chemistry Heterogeneous oxidation of nanoparticles
Lisa Holland	Modular Capillary Electrophoresis and Capillary Liquid Chromatography Bioanalytical Separations Biochemical Markers of Cardiovascular Disease Small Molecule Indicative of DNA Damage
Jessica Hoover	Organic and Inorganic Synthesis Organometallic Catalysis Developing New C-C Bond Forming Reactions Using Tranistion Metal Catalysts
Charles Jaffe	Theoretical Studies of Reaction Dynamics Transport in Molecular, Atomic, and Celestrial Systems Development of Computer Algorithms for Pattern Recognition Fractal Analysis of Nucleotides Sequences in DNA

Justin Legleiter	Understanding How Biological Surfaces Modulate Protein Aggregation Associated with Neurodegenerative Diseases – Alzheimer's and Huntington's Disease Application of Atomic Force Microscopy to atomic force microscopy technique development
Blake Mertz	Computational Biophysics of Membrane Proteins Molecular Docking to Facilitate Drug Development
Carsten Milsmann	Inorganic Synthesis and Photocatalysis Development of Photoluminescent Compounds Using Earth-Abundant Elements Photocatalytic Activation of Small Molecules for Solar Fuel Production and Green Chemistry Applications
Brian Popp	Organic and Bioorganic Synthesis Organometallic Catalysis Enantioselective Catalysis and Functional Materials relying on Supramolecular Principles
Michelle Richards-Babb	Novel Experiments for Large Enrollment General Chemistry Classes
Björn Söderberg	Organic Synthesis