

About the

## CHEMISTRY NSF-REU PROGRAM

Students in the program come from colleges and universities from around the country, as well as from Germany. They have worked on a wide range of research projects throughout many of the subdisciplines of the broad field of chemistry. They have made great progress on their research projects, and have learned valuable skills that will help them develop as professional scientists.

### Acknowledgments

The Chemistry NSF-REU program gratefully acknowledges many individuals and organizations for their support of this program. First and foremost, the NSF is acknowledged for both the financial support they have provided for the program through Grant CHE07-54114, and for their leadership in providing research experiences for undergraduates. The German Agency DAAD is also acknowledged for its support of the International REU Program. The contributions of all of the presenters at the Professional Development Luncheons are greatly appreciated. The financial contributions and substantial encouragement of the Department of Chemistry, the College of Arts and Sciences and the Office of the Vice President for Research are greatly appreciated. In addition to the faculty advisors and graduate students who have worked with the REU students, the Program gratefully acknowledges the exceptional support and assistance of Ms. Kim Carey, as well as valuable contributions from many others, most notably John Zureick, John Salter, Jeanette Krause, Joel Shulman, Tom Ridgway, Brian Halsall and Estel Sprague.



## National Science Foundation Research Experience for Undergraduates Department of Chemistry

*presents*

### the concluding Poster Session and Celebration Summer, 2009

**August 21, 2009**  
**11:00 AM – 12:30 PM**  
**2<sup>nd</sup> Floor Foyer, Crosley Tower**

brief program and presentation of the  
John J. Alexander prize  
at 12:00 noon

## University of Cincinnati Department of Chemistry NSF-REU Poster Presentations

<u>#</u>	<u>Student</u>	<u>Home Institution</u>	<u>Faculty Advisor</u>	<u>Poster Title</u>
1	Bryan Albani	College of Wooster	Bill Connick	<i>The Synthesis and Characterization of Platinum Four-electron Reagents</i>
2	Thomas Berkemeier	University Bielefeld	James Mack	<i>Understand Stereochemistry in the Solvent-free Synthesis of Stilbene derivatives by the Wittig Reaction</i>
3	Annika Butterer	Johannes Gutenberg University	Pat Limbach	<i>Immobilizing Ribonucleases for Qualitative and Quantitative Analysis of tRNAs</i>
4	Kevin Kerian	Western Kentucky University	Tom Beck	<i>Geometry and Energies of CLC-ec1 Binding Sites through Molecular Dynamics</i>
5	Chris Medley	Wilmington College	Hairong Guan	<i>Synthesis of Nickel Pincer Complexes and Their Use in Catalytic C-S Bond Forming Reaction</i>
6	Nellymar Membrano	Florida International University	Bill Heineman	<i>Optimization and Characterization of Optically Transparent Thin Layer Electrochemical Cells</i>
7	Karen Olsen	Sewanee, University of the South	Eddie Merino	<i>Anti-cancer Therapeutics: Optimizing 8-oxo-guanosine Reactions to Selectively Modify Target Cells</i>
8	Laura Pinelo	Illinois Wesleyan University	Bruce Ault	<i>The Reaction of Ozone with Cycloheptene: The Search for the Criegee Intermediate</i>
9	Nikki Reishus	Taylor University	Pat Limbach	<i>Incorporating Increased Amounts of 4-thiouridine into Bacterial rRNA</i>
10	Jelissa Vinson	Central State University	James Mack	<i>Mimicking Properties of Graphene Sheets through Aromatic Coupling</i>
11	Tekeya Waters	Univ. of Maryland, Eastern Shore	Pearl Tsang	<i>Investigating the tRNA Binding Properties of 2D Protein, a Truncated Version of Human Lysyl Aminoacyl tRNA Synthetase</i>
12	Chester Williamson	Central State University	Anna Gudmundsdottir James Mack	<i>Synthesis of Corannulene-Based Molecules for Applications in Research</i>
13	Kristopher Wright	Central State University	Joe Caruso	<i>Metallic Analysis of Lichen using ICP-MS Instrumentation</i>
14	Samatha Yaakey	Wheeling Jesuit University	Anna Gudmundsdottir	<i>Detection of Conjugated Alkene Biradical Intermediates Using Laser Flash Photolysis</i>

**Visiting Faculty Mentor:** Professor Ghislain Mandouma, University of Maryland Eastern Shore