

## Richard T. Taylor

### *Professional Preparation*

University of Delaware Chemistry B. S., 1972 (James A. Moore), with Highest Honors and Distinction in Major

The Ohio State University Chemistry Ph. D., 1977, University Fellow, 1973 and 1977 (Leo A. Paquette)

Cornell University NIH Postdoctoral 1977-78 (Martin F. Semmelhack)

### *Appointments*

1983-present Associate Professor, Chemistry, Miami University

1978-83 Assistant Professor, Chemistry, Miami University

### *Assignments*

Current Assistant Chair, Chemistry, Miami University

1996-2003 Chief Departmental Advisor, Chemistry, Miami University

1993-94 Acting Director, University Honors Program, Miami University

1991-94 Associate Director, University Honors Program, Miami University

1986-87 Faculty Improvement Leave, The Ohio State University

### *Publications*

J. Widera, A. M. Kijak, D. V. Ca, G. E. Pacey, R. T. Taylor, H. Perfect, and J. A. Cox, "The Influence of the Matrix Structure on the Oxidation on Aniline in a Silica Sol-Gel Matrix," *Electrochim. Acta*, **2005**, *50*, 1703-1709.

B. W. Gung and R. T. Taylor, "Parallel Combinatorial Synthesis of Azo Dyes," *J. Chem. Ed.*, **2004**, *81*, 1630-1632.

K. W. Kittredge, S. S. Marine, and R. T. Taylor, "Reaction Product Analysis for the Hydrogenation of 4-Nitroacetophenone. Development of a Parallel Synthesis Experiment in a Second Year Undergraduate Organic Chemistry Course", *J. Chem. Ed.*, **2004**, *81*, 1494-1496.

Y. Lu and R. T. Taylor, "Syntheses Of Oxazolidinone, Imidazolidinone And Thiazolidinone Derivatives Using a Polymer-Supported Diphenylphosphoryl Azide," *Heterocycles*, **2004**, *62*, 869-876.

Y. Lu and R. T. Taylor, "Preparation and Applications of a Polymer-Bound Phosphoryl Azide," *Tetrahedron. Lett.*, **2003**, *44*, 9267-9269.

M. Chai, P. L. Rinaldi, U. Puapaiboon, R. T. Taylor, "Multidimensional NMR Studies on Polyurethane-Based Dendritic Wedges," Chapter 10 in ACS symposium Series Number 834, NMR Spectroscopy of Polymers in Solution and in the Solid State, **2003**, 147.

Chai, Minghui; Puapaiboon, Uraiwan; Taylor, Richard T.; Rinaldi, Peter L. "Multidimensional NMR studies on polyurethane dendritic wedges." *Polymer Preprints*

**2001**, 42(1), 33-34.

U. Puapaboon, R. T. Taylor, and J. Jai-nhukhnan, "Structural Confirmation of Polyurethane Dendritic Wedges and Dendrimers Using Post Source Decay Matrix-Assisted Laser Desorption/Ionization Time-of-flight Mass Spectrometry," *Rapid Commun. Mass Spectrom.*, **1999**, 13, 516.

U. Puapaboon and R. T. Taylor, "Characterization and Monitoring Reaction of Polyurethane Dendritic Wedges and Dendrimers Using Matrix-Assisted Laser Desorption/Ionization Time-of-flight Mass Spectrometry," *Rapid Commun. Mass Spectrom.*, **1999**, 13, 508.

R. T. Taylor and U. Puapaboon, "Polyurethane Dendrimers via Curtius Reaction," *Tetrahedron Lett.*, **1998**, 39, 8005.

R. T. Taylor, A. J. Sommer, J. W. Green, K. Ripparger, B. M. Nejad, and J. A. Shah, "Substitution of Poly(chlorotrifluoroethylene) with Sulfur Dioxide under Reductive Conditions," *Heteroatom Chemistry*, **1998**, 9, 265.

R. T. Taylor, J. A. Shah, J. W. Green and T. Kamolratanayothin, "Poly-(chlorotrifluoroethylene) substitution Reactions," in *Polymer Modification*, by Graham Swift, Charles E. Carraher, Jr. and Christopher N. Bowman, Plenum Press, **1997**; pp. 133-151.

Taylor, R. T.; Kamolratanayothin, T.; Shah, J.; Green, J. W. "Substitution reaction on poly(chlorotrifluoroethylene)." *Polymeric Materials Science and Engineering*, **1996**, 75, 138-139.

Mugnano, John A.; Lee, Richard E. Jr.; Taylor, Richard T. "Fat body cells and calcium phosphate spherules induce ice nucleation in the freeze-tolerant larvae of the gall fly *Eurosta solidaginis* (Diptera, Tephritidae)." *Journal of Experimental Biology*, 1996, 199(2), 465-71.

Taylor, Richard T.; Allison, Steven; Kamolratanayothin, Thanaporn. "Reductive allylation of poly(chlorotrifluoroethylene)." *Heteroatom Chemistry*, **1995**, 6(6), 585-7.

Taylor, R. T.; Durrell, D. M.; Schory, D. H. "Approaches to dendrimers with high charge density." *Polymer Preprints*, **1995**, 36(2), 261-2.

Taylor, R. T.; Stevenson, T. A.; Ewing, G. J.; Lucke, M. A.; Rocco, E. G. "Oxidations using catalytic Se (IV) systems. Immobilized selenium catalyst versus immobilized oxidant." *Polymer Preprints*, **1994**, 35(2), 990-1.

Sherman, Jeffrey H.; Danielson, Neil D.; Taylor, Richard T.; Marsh, James R.; Esterline, Daniel T. "Removal of transition metals from motor oil using ion exchange resins. *Environmental Technology*," **1993**, 14(11), 1097-100.

Allison, Steven; Burks, Steven J.; Taylor, Richard T. "Total syntheses of microminutin and other coumarins through the key intermediate isomurralonginol." *Tetrahedron*, 1991, 47(47), 9737-42.

Pasto, Daniel J.; Taylor, Richard T., "Reduction with diimide.: *Organic Reactions* (New York), 1991, 40, 91-155.

Taylor, Richard T.; Pelter, Michael W.; Paquette, Leo A. "Domino Diels-Alder reaction: 3,3a,3b,4,6a,7a-hexahydro-3,4,7-metheno-7H-cyclopenta[a]pentalene-7,8-dicarboxylic acid." *Organic Syntheses*, 1990, 68, 198-205.

Taylor, Richard T.; Allison, Steven; Green, John W. "Chemical modification of poly(chlorotrifluoroethylene) by one-electron mechanisms." *Polymer Preprints*, 1990, 31(1), 336-7.

Paquette, Leo A.; Teleha, Christopher A.; Taylor, Richard T.; Maynard, George D.; Rogers, Robin D.; Gallucci, Judith C.; Springer, James P., "Boat/chair topographic stereoselection during anionic oxy-Cope rearrangement of 1-alkenyl-2-cyclopentenyl-endo-norbornan-2-ols." *Journal of the American Chemical Society*, 1990, 112(1), 265-77.

Paquette, Leo A.; DeRussy, Donald T.; Pegg, Neil A.; Taylor, Richard T.; Zydowsky, Thomas M., "Direct oxygenation of enolates generated by anionic oxy-Cope rearrangement. Expedient preparation of polycyclic  $\alpha$ -hydroxy ketones." *Journal of Organic Chemistry*, 1989, 54(19), 4576-81.

Gallucci, Judith C.; Taylor, Richard T.; Kobayashi, Tomoshige; Weber, Jeffrey C.; Krause, Jeanette; Paquette, Leo A., "X-ray crystallographic analysis of the structural distortions induced by substitution and annulation of the dodecahedrane nucleus." *Acta Crystallographica, Section C: Crystal Structure Communications*, 1989, C45(6), 893-8.

Taylor, Richard T.; Pelter, Michael W., "Chemical modification of 3-mercaptopropionic acid-substituted poly(chlorotrifluoroethylene)." *Reactive Polymers, Ion Exchangers, Sorbents*, 1988, 9(3), 229-35.

Taylor, Richard T.; Stevenson, Thomas A., "Mercury mediated synthesis of bis(carboxy)iodobenzenes." *Tetrahedron Letters*, 1988, 29(17), 2033-6.

Pelter, Michael W.; Taylor, Richard T., "The substitution of poly(chlorotrifluoroethylene) with sulfur, selenium, and phosphorus nucleophiles." *Journal of Polymer Science, Part A: Polymer Chemistry*, 1988, 26(10), 2651-67.

Stevenson, Thomas A.; Taylor, Richard T., "Preparation and application of the polymer-bound iodoxy functional group." *Reactive Polymers, Ion Exchangers, Sorbents*, 1988, 8(1), 7-15.

Taylor, Richard T.; Pelter, Michael W., "The reaction of chlorofluoropolymers with

sulfur nucleophiles.: *Journal of Polymer Science, Part C: Polymer Letters*, **1987**, 25(5), 215-17.

Taylor, Richard T., "Polymer-bound oxidizing agents." *ACS Symposium Series*, **1986**, 308(*Polym. Reagents Catal.*), 132-54.

Taylor, Richard T.; Flood, Lawrence A., "Polystyrene-bound phenylseleninic acid: catalytic oxidations of olefins, ketones, and aromatic systems." *Journal of Organic Chemistry*, **1983**, 48(26), 5160-4.

Taylor, R. T.; Paquette, L. A., "1,6-Dimethyltricyclo[4.1.0.0<sup>2,7</sup>]hept-3-ene." *Organic Syntheses*, **1983**, 61, 39-42.

Danielson, Neil D.; Taylor, Richard T.; Huth, Jeffrey A.; Siergiej, Richard W.; Galloway, James G.; Paperman, Joseph B., "Reactivity of Kel-F polymers with organolithium and organomagnesium compounds." *Industrial & Engineering Chemistry Product Research and Development*, **1983**, 22(2), 303-7.

Goldstein, M. J.; Johnson, M. W.; Taylor, R. T., "The serendipitous synthesis of an oxabicyclo[3.2.0]heptadiene," *Tetrahedron Letters*, **1982**, 23(33), 3331-4.

Taylor, Richard T.; Cassell, Roger A., "Trimethylsilylketene: synthesis of coumarins via cyclization-elimination." *Synthesis*, **1982**, (8), 672-3.

Taylor, Richard T.; Galloway, James G., "Addition of trimethylsilyllithium and trimethylstannylithium to a hindered cyclopropyl enone." *Tetrahedron Letters*, **1982**, 23(31), 3147-50.

Taylor, Richard T.; Cassell, Roger A.; Flood, Lawrence A., "Electrophilic additions to mercurated polystyrene," *Industrial & Engineering Chemistry Product Research and Development*, **1982**, 21(3), 462-4.

Taylor, Richard T.; Galloway, James G., "Addition of trimethylsilylmethylmagnesium chloride to  $\alpha,\beta$ -unsaturated carbonyls." *Journal of Organometallic Chemistry*, **1981**, 220(3), 295-300.

Taylor, Richard T.; Crawshaw, Dennis B.; Paperman, Joseph B.; Flood, Lawrence A.; Cassell, Roger A., "Preparation and halogenation of silylated polystyrene." *Macromolecules*, **1981**, 14(4), 1134-5.

Taylor, Richard T.; Pytroczo, Donn F., "Cyclopropylidene formation in 7,7-dibromonorcar-3-ene oxides. Synthesis of derivatives of homobenzvalene oxide." *Tetrahedron Letters*, **1980**, 21(26), 2471-4.

Bischof, Peter; Gleiter, Rolf; Taylor, Richard T.; Browne, Alan R.; Paquette, Leo A., "Electronic structure of tricyclo[4.1.0.0<sup>2,7</sup>]hept-3-enes. Correlation with the regioselectivity of electrophilic attack." *Journal of Organic Chemistry*, **1978**, 43(12), 2391-6.

Taylor, Richard T.; Paquette, Leo A., "Silver (I) ion catalyzed rearrangements of strained  $\sigma$  bonds. 34. A study of the capacity of Group 4 substituents for directing the course of silver(I)-catalyzed tricyclo[4.1.0.0<sup>2,7</sup>]heptane rearrangement into the elusive type  $\delta$  manifold." *Journal of Organic Chemistry*, **1978**, 43(2), 242-50.

Taylor, Richard T.; Paquette, Leo A., "Thermal rearrangement of dibromotetracyclo[5.1.0.0<sup>2,4</sup>.0<sup>3,5</sup>]octanes. Assessment of the competitive opening of dibromocyclopropane and bicyclo[1.1.0]butane rings and a general synthesis of trans-bishomobenzenes." *Journal of the American Chemical Society*, **1977**, 99(17), 5824-6.

Paquette, Leo A.; Taylor, Richard T., "The consequences of methyl substitution on the efficiency and regioselectivity of C-H insertion during intramolecular cyclization of norcaran-7-, 3-norcarene-7-, and tricyclo[5.1.0.0<sup>3,5</sup>]octan-8-ylidenes." *Journal of the American Chemical Society*, **1977**, 99(17), 5708-15.

Taylor, Richard T.; Degenhardt, Charles R.; Melega, William P.; Paquette, Leo A., "Direct conversion of ketones to vinylsilanes, -germanes, and -stannanes," *Tetrahedron Letters*, **1977**, (2), 159-62.

Paquette, Leo A.; Taylor, Richard T., "Cyclopropylidenebicyclo[1.1.0]butane interactions. The generation and intramolecular rearrangement of tetracyclo[5.1.0.0<sup>2,4</sup>.0<sup>3,5</sup>]octanylidene," *Tetrahedron Letters*, **1976**, (32), 2745-8.

Taylor, Richard T.; Paquette, Leo A., "Silver(I) ion catalyzed rearrangements of strained  $\sigma$  bonds. Part XXXII. Convenient synthetic routes to tricyclo[4.1.0.0<sup>2,7</sup>]hept-3-ene and its derivatives," *Tetrahedron Letters*, **1976**, (32), 2741-4.

Taylor, Richard T.; Paquette, Leo A., "Simple conversion of 3-norcarene to trans-bishomobenzene." *Angewandte Chemie*, **1975**, 87(13), 488-9.

Paquette, Leo A.; Zon, Gerald; Taylor, Richard T., "Substituent effects on the regioselectivity of carbon-hydrogen insertion arising during stereospecific intramolecular cyclization of 7-norcaranylidene." *Journal of Organic Chemistry*, **1974**, 39(18), 2677-85.

Rothenberger, Otis S.; Taylor, Richard T.; Dalrymple, David L.; Moore, James A., "Heterocyclic studies. 35. Cycloaddition reactions of a 1,2-diazepinium betaine. 1,3- and 1,5-Dipolar addition in a vinylogous azomethine imine." *Journal of Organic Chemistry*, **1972**, 37(16), 2640-2.

#### *Commissioned Work*

Encyclopedia of Reagents for Organic Synthesis, Leo A. Paquette, Editor in Chief, seven commissioned articles over the past ten years.

### *Patents*

Sherman, Jeffrey H.; Taylor, Richard T.. Method of removing contaminants from used oil by using phase transfer catalysts. U.S. (2001), 5 pp., Cont.-in-part of U.S. 6,007,701.

Sherman, Jeffrey H.; Hershberger, James W.; Taylor, Richard T.; Conn, Garrett M. Method of removing contaminants from petroleum distillates. PCT Int. Appl. (2000), 47 pp.

Sherman, Jeffrey H.; Taylor, Richard T.; Hofacker, Amanda L.; Hershberger, James W.; Conn, Garrett M.; Gorman, William A. Removal of contaminants from petroleum distillates. PCT Int. Appl. (2000), 31 pp.

Sherman, Jeffrey H.; Taylor, Richard T.. Method of removing contaminants from used oil. U.S. (1999), 6 pp.

### *External Grants*

- |         |  |
|---------|--|
| 1979-83 | Research Corporation, \$9200, "Synthetic Approaches to Octavalene"   |
| 1979-82 | PRF Type G, \$10000, "Mild Preparation and Synthetic Utility of Vinylsilanes"  |
| 1984-86 | NIGMS, \$28969, "Enantioselective Synthesis of Megaphone"  |
| 1987    | Geocenters, Inc., \$15000, "Domonio Diels-Alder Reaction" subcontract form DOD   |
| 1991-92 | Ohio Dept. of Development (Edison), \$50000, "Removal of Transition Metals from Used Oil by an ion Exchange Process" (with N.D. Danielson) |
| 1998    | Avista Resources, \$78000 (since raised to \$150000) for "Improved Technologies for Oil Decontamination." With James W. Hershberger        |
| 2000    | Zeneca Ag, \$16000, Enhancing Technologies for Combinatorial Chemistry   |
| 2000-02 | Dreyfus Foundation, \$20000, "Combinatorial chemistry in organic chemistry laboratory instruction"   |
| 2003    | NSF-CCLI through Georgia State University, \$17535, "Workshop in Combinatorial Chemistry"  |
| 2003    | Proctor and Gamble Company, \$104201, Equipment Donation in Laboratory Robotics  |

2001-present NSF-CCLI, \$121238, "Collaborative Research: Undergraduate Instruction in Combinatorial Chemistry." With Susan Marine.

2005 NSF-CCLI through Georgia State University, \$16912, "Workshop in Combinatorial Chemistry"

**Curriculum Vitae**  
**Christopher S. Callam**

**Contact Information:**

*Home:* 185 Rivers Edge Way  
Gahanna, Ohio 43230

*Work:* Department of Chemistry  
The Ohio State University  
120 W. 18<sup>th</sup> Avenue  
Columbus, Ohio 43210

Phone: 614-476-4091 (H)  
614-292-0679 (W)

e-mail: ccallam@chemistry.ohio-state.edu

**Birthdate:** June 15, 1976

**Citizenship:** United States of America

**Education:** Ph.D, Organic Chemistry, June 1998-May 2003  
The Ohio State University, Columbus, OH  
Dissertation – “Experimental and Theoretical Studies of Methyl 4A-carba-D-Arabinofuranosides and 2,3 Anhydrosugars in Glycoside Bond Synthesis.”  
Thesis Advisor: Todd L. Lowary

B.S., Chemistry, Magna Cume Laude, June 1998,  
John Carroll University, University Heights, Ohio  
GPA - 3.76

**Post Doctoral Training:** Ruth L. Kirschstein NIH Post-Doctoral Research Fellow  
“Azaspirene Library Analog Synthesis by Fluorous Mixture  
Synthesis.”  
The University of Pittsburgh, Pittsburgh, PA  
Advisor: Dennis P. Curran

**Positions Held and Financial Support Received**

August 2004-present

Aux. Assistant Professor and Director of Undergraduate Organic  
Laboratories  
Department of Chemistry, The Ohio State University, Columbus, OH

August 2003-July 2004

Ruth L. Kirschstein NIH Post-Doctoral Research Fellow  
The University of Pittsburgh, Pittsburgh, PA

May 2003-July 2003

Organic Chemistry Lecturer  
Department of Chemistry, The Ohio State University, Columbus, OH

October 2002-May 2003

Ohio State University Presidential Graduate Research Fellow  
Department of Chemistry, The Ohio State University, Columbus, OH

August 2001-October 2002

American Chemical Society Organic Division Fellow sponsored by Aventis  
Pharmaceuticals  
Department of Chemistry, The Ohio State University, Columbus, OH

August 1998-August 2001

GANN Graduate Research Fellow  
Department of Chemistry, The Ohio State University, Columbus, OH

### **Honors and Awards:**

- 1997-1998      National Council of Undergraduate Research Fellowship  
                    Sherwin Williams Corporation Chemistry Scholarship  
                    Outstanding Undergraduate Teaching Assistant Award
- 1998-1999      Graduated Magna Cume Laude from John Carroll University  
                    Yaeger Undergraduate Research Spectroscopy Award ACS/National Institute of  
                    Spectroscopy  
                    American Institute of Chemists Undergraduate Chemistry Award
- 2001-2002      GANN Graduate Research Fellow Ohio State University  
                    Ohio State University Graduate Associate Teaching Award  
                    ACS Division of Organic Chemistry Graduate Research Fellow sponsored by  
                    Aventis Pharmaceuticals
- 2002-2003      Ohio State University Presidential Graduate Research Fellow
- 2003-2004      Ruth L. Kirschstein NIH Post-Doctoral Research Fellow
- 2004-2005      College of Arts and Sciences Outstanding Teaching Award for the Ohio State  
                    University
- 2005-2006      Golden Key Honorary Member  
                    Outstanding Teaching Award – Order of the Omega
- 2006-2007      OSU Presidential Salute to Undergraduate Academic Achievement  
                    College of Arts and Sciences Outstanding Teaching Award Finalist for the Ohio State  
                    University
- 2007-2008      Outstanding Teaching Award – Order of the Omega  
                    OSU Presidential Salute to Undergraduate Academic Achievement  
                    College of Arts and Sciences Outstanding Teaching Award Finalist  
                    National Society of Collegiate Scholars – Inspire Integrity Nominee

## Research Experience and Skills:

Lab Scale, Multi-Step Organic Synthesis, Natural Product Synthesis, Oligosaccharide Synthesis, Oligonucleotide Synthesis; Fluorous Mixture Synthesis; Computational Chemistry : MacroModel 6.5, Gaussian 98, DeMon NMR, Microsoft Word, Microsoft Excel, Linux.

Spectroscopy : IR, 1D and 2D NMR Experiments, Bruker NMR-Simulation, LC-NMR, HPLC, LC-MS , GC, GC-MS.

## Refereed Publications:

1. Callam, C. S.; Lowary, T. L. **“Total Synthesis of Methyl 4a-carba-D-arabinofuranosides.”** *Org. Lett.* **2000**, *2*, 167-169.
2. Callam, C. S.; Gadikota, R. R.; Lowary, T. L. **“An Efficient Synthesis of Methyl 2,3-anhydro- $\alpha$ -D-ribofuranoside.”** *Carbohydr. Res.* **2001**, *330*, 267-270.
3. Callam, C. S.; Lowary, T. L. **“Synthesis of Methyl 2,3,5-tri-O-benzoyl- $\alpha$ -D-arabinofuranoside in the Organic Laboratory.”** *J. Chem. Educ.* **2001**, *78*, 73-74.
4. Gadikota, R. R.; Callam, C. S.; Lowary, T. L. **“Stereocontrolled Synthesis of 2,3-Anhydro- $\beta$ -D-lyxofuranosyl Glycosides.”** *Org. Lett.* **2001**, *3*, 607-610.
5. Callam, C. S.; Lowary, T.L. **“Suzuki Cross Coupling Reactions: Synthesis of Unsymmetrical Biaryls in the Organic Laboratory.”** *J. Chem. Educ.* **2001**, *78*, 964-966.
6. Callam, C. S.; Gadikota, R. R.; Lowary, T. L. **“Sensitivity of  $^1J_{\text{Cl-H}}$  magnitudes to Anomeric Stereochemistry in 2,3-Anhydro-O-furanosides.”** *J. Org. Chem.* **2001**, *66*, 4549-4558.
7. Callam, C. S.; Singer, S. J.; Lowary, T. L.; Hadad, C. M. **“Computational Analysis of the Potential Energy Surfaces of Glycerol in the Gas and Aqueous Phases. Effects of Level of Theory, Basis Set, and Solvation on Strongly Intramolecularly Hydrogen-Bonded Systems.”** *J. Am. Chem. Soc.* **2001**, *123*, 11743-11754.
8. Callam, C. S.; Lowary, T. L. **“Synthesis and Conformational Investigation of Methyl 4a-carba-D-arabinofuranosides.”** *J. Org. Chem.* **2001**, *66*, 8961-8972.
9. Gadikota, R. R.; Callam, C. S.; Lowary, T.L. **“The Total Synthesis of (6*S*,7*S*,9*S*,10*S*)-6,9-epoxynonadec-18-ene-7,10-diol and Formal synthesis of (+)-*trans*-Kumausyne from D-Arabinose.”** *J. Org. Chem.* **2001**, *66*, 9046-9051.
10. Gadikota, R. R.; Callam, C. S.; Wagner, T., Del Friano, B.; Lowary, T. L. **“2,3-Anhydrosugars in Glycoside Bond Synthesis. Highly Stereoselective Syntheses of Oligosaccharides Containing  $\alpha$ - and  $\beta$ -Arabinofuranosyl Linkages.”** *J. Am. Chem. Soc.* **2003**, *125*, 4155-4165.

11. Callam, C. S.; Gadikota, R. R.; Krein, D. M.; Lowary, T. L.; “**2,3-Anhydrosugars in Glycoside Bond Synthesis. Low Temperature NMR and Computational Mechanistic Investigations.**” *J. Am. Chem. Soc.* **2003**, *125*, 13112-13119.
12. Gadikota, R. R.; Keller, A. I.; Callam, C. S.; Lowary, T. L.; “**Efficient syntheses of *trans*-(+)-laurediol from carbohydrate precursors.**” *Tetrahedron Asym.* **2003**, *14*, 737-742.
13. Gadikota, R. R.; Callam, C. S.; Appelmelk, B. J.; Lowary, T. L.; “**Synthesis of Oligosaccharide Fragments of Mannosylated Lipoarabinomannan Appropriately Functionalized for neoglyconjugate Preparation.**” *J. Carb. Chem.* **2003**, *22*, 459-480.
14. Callam, C. S.; Gadikota, R. R.; Lowary, T. L. “**An Efficient Route to Pyrimidine Nucleosides with the 2,3-anhydro- $\beta$ -D-lyxofuranosyl stereochemistry.**” *Synlett.* **2003**, *9*, 1271-1274.
15. Wagner, T. R.; Gadikota, R. R.; Callam, C. S.; Lowary, T. L. “**1-(2',3'-5'-O-benzoyl- $\beta$ -D-lyxofuranosyl)-5-fluoro-uracil.**” *Acta. Cryst.* **2003**, *E59*, o1063-o1065.
16. Darwish, O. S.; Callam, C. S.; Hadad, C. M.; Lowary, T. L. “**Regioselectivity in Alkylation Reactions of 1,2-O-Stannylene Acetals of D-Arabinofuranose.**” *J. Carb. Chem.* **2003**, *22*, 963-981.
17. Woodruff, M.; Callam, C. S. “**Ammonia Borane Reductions – Studies in Diastereoselectivity.**” *Manuscript in Preparation.*
18. Plunkett, S.; Aten, A.; DiBartola, M.; Callam, C. S. “**Fluorous tagged Carbohydrate Synthesis – Donor and Acceptor Strategies.**” *Manuscript in Preparation.*

#### Presentations:

1. Callam, C. S.; Lowary, T. L.; Hadad, C. M. “**Ab initio Investigations into the Conformational Preferences of Both Methyl 4a-carba-D-arabinofuranosides.**” Poster Presentation, 220<sup>th</sup> National American Chemical Society Meeting, Washington, DC, August 2000.
2. Callam, C. S.; Lowary, T. L. “**Synthesis and Conformational Studies of Both Methyl 4a-carba-D-arabinofuranosides and their Derivatives.**” Oral Presentation, 220<sup>th</sup> National American Chemical Society Meeting, Washington, DC, August 2000.
3. Callam, C. S.; Lowary, T. L. “**Synthesis and Conformational Studies of Both Methyl 4a-carba-D-arabinofuranosides.**” Poster Presentation, Carbohydrates Gordon Research Conference, June 2001.
4. Callam, C. S.; Gadikota, R. R.; Lowary, T. L. “**Stereocontrolled Glycosylations Using 2,3-anhydro-D-furanosides.**” Poster Presentation, Carbohydrates Gordon Research Conference, Tilton, New Hampshire, June 2001.

5. Callam, C. S.; Lowary, T. L. **“Synthesis and Conformational Studies of Both Methyl 4a-carba-D-arabinofuranosides.”** Poster Presentation, Northeast Regional ACS Meeting, Durham, New Hampshire, June 2001.
6. Callam, C.S.; Gadikota, R.R.; Lowary, T.L. **“Stereocontrolled Glycosylations Using 2,3-anhydro-D-furanosides.”** Poster Presentation, Northeast Regional ACS Meeting, Durham, New Hampshire, June 2001.
7. Callam, C. S.; Singer, S. J.; Lowary, T. L.; Hadad, C. M. **“Computational Analysis of the Potential Energy Surfaces of Glycerol in the Gas and Aqueous Phases. Effects of Level of Theory, Basis Set, and Solvation on Strongly Intramolecularly Hydrogen-Bonded Systems.”** Poster Presentation, 222<sup>nd</sup> National American Chemical Society Meeting, Chicago, IL, August 2001.
8. Callam, C. S.; Gadikota, R. R.; Lowary, T. L. **“Stereoselective Glycosylation Reactions Involving 2,3 Anhydro-D-furanosyl Sulfoxides. NMR Based Mechanistic Investigations.”** Poster Presentation, 222<sup>nd</sup> National American Chemical Society Meeting, Chicago, IL, August 2001.
9. Gadikota, R. R.; Callam, C. S.; Lowary, T. L. **“Stereocontrolled Synthesis of 2,3-Anhydro-D-furanosyl Glycosides.”** Poster Presentation, 222<sup>nd</sup> National American Chemical Society Meeting, Chicago, IL, August 2001.
10. Callam, C. S.; Gadikota, R. R.; Krein, D. M.; Lowary, T. L. **“Stereoselective Glycosylation Reactions Involving 2,3 Anhydro-D-furanosyl Sulfoxides. NMR Based Mechanistic Investigations.”** Poster Presentation, 29<sup>th</sup> Reaction Mechanism Conference, Columbus, OH, June 2002.
11. Kline, M. A.; Ahmed, M.; Dalal, P.; Callam, C. S.; **“Conformational Preferences of Piperidine Derivatives using Ab Initio and Density Functional Theory Calculations.”** Poster Presentation, The Ohio State University, REEL Conference, Columbus, OH, November 2006.
12. Woodruff, M.; Donehue, J.; Callam, C. S. **“Fluorous Carbohydrate Synthesis – Preparation of 1H, 1H, 2H, 2H – Perfluorodecane-1-thiol and 4-(1H, 1H, 2H, 2H – Perfluorodecyl) benzyl alcohol tagged acceptors and Applications to Glycoside Bond Synthesis.”** Poster Presentation, Cleveland State University, REEL Conference, Cleveland, OH, November 2007.
13. Woodruff, M.; Callam, C. S. **“Diastereoselective Reductions using Ammonia Borane”** Poster Presentation, CERMACS, Columbus, OH, June 2008.
14. Saqr, A.; Keller, A. I.; Callam, C. S. **“Ammonia Borane in the Undergraduate Organic Laboratory”** Poster Presentation, CERMACS, Columbus, OH, June 2008.
15. DiBartola, M.; Uhas, N.; Aten, A; Callam, C. S. **“Fluorous Carbohydrate Synthesis – Tagged acceptors and Donor Strategies for Applications to Glycoside Bond Synthesis.”** Poster Presentation, CERMACS, Columbus, OH, June 2008.

16. Collins, D.; Woodruff, M.; Callam, C. S. **“Diastereoselective Reductions using Ammonia Borane – Concentration and Stoichiometric Studies”** Poster Presentation, Miami University, REEL Conference, Oxford, OH, November 2008.

**Society Memberships:**

American Chemical Society  
Sigma Xi

## **STEVEN J. SUCHECK, Ph.D.**

Department of Chemistry, MS602  
2801 W. Bancroft Street  
The University of Toledo, Toledo, OH 43606  
Ph: (419) 530-1504  
Fax: (419) 530-4033  
Steve.Succheck@UToledo.edu

### **EDUCATION, ACADEMIC and INDUSTRIAL POSITIONS**

2005-Present      Assistant Professor of Chemistry, University of Toledo

2003-2005      Group Leader, Optimer Pharmaceuticals, Inc.

2000-2002      Sr. Scientist, Optimer Pharmaceuticals, Inc.

1998-2000      NIH Postdoctoral Fellow, The Scripps Research Institute  
Research: Bifunctional Aminoglycoside Antibiotics  
Research Supervisor: Professor Chi-Huey Wong

1998      Ph.D., Chemistry, University of Virginia  
Thesis: *Study of DNA Interactive Agents*  
Research Supervisor: Professor Sidney M. Hecht

1992      B.S., Chemistry, University of Toledo

### **RESEARCH INTERESTS**

*Synthetic investigations useful for defining structure-function relationships.*

*Synthesis and study of nucleic acid-interactive small molecules, carbohydrates, glycoconjugates, glycopeptides, and biologically active natural products.*

### **HONORS and AWARDS**

1998-2000      Postdoctoral National Service Award (National Institute of Health)

1996      Alfred A. Burger Fellowship (Virginia)

1994      Dean's Reserve Fellowship of the Graduate School of Arts and Sciences (Virginia)

1991      The Arthur H. Black Prize in Analytical Chemistry (Toledo)

### **CURRENT STUDENTS**

## **STEVEN J. SUCHECK, Ph.D.**

Rommel S. Talan (Ph.D in progress)  
Parijat Srivastava (M.S. in progress)  
Francis Umesiri (Ph.D. in progress)  
Aditya K. Saki (Postdoctoral Student)

### **CURRENT/PAST UNDERGRADUATE and HIGH SCHOOL STUDENTS**

Samuel Adams (Summer 2007, Fall 2008)  
Matthew Dawson\* (Spring 2007 - Fall 2008)  
Jason Thuener (Summer 2007 - Spring 2008)  
Jeffrey Demaray (Fall 2006 - Summer 2008)  
Minhthu Nguyen, Rogers High School, Toledo, OH (Summer 2007)<sup>†</sup>  
David Juniper, B.S. (Spring 2006)  
Charmee Patel, B.S. (Summer 2006)  
TaShayla Johnson, Woodward High School, Toledo, OH (Summer 2006)<sup>†</sup>  
Heta Mewada (Fall 2007, Spring 2008, Fall 2008)  
Jonathon Crowe (Summer 2008)  
Mallory Ladd (Summer 2008)  
Shannon McCann (Summer 2008, Fall 2008)  
Kevin Swiatek (Summer 2008)  
Stephen Markowiak (Summer 2008)  
Krzysztof Ozga (Summer 2008, Fall 2008)<sup>†</sup>

\*Supported through the Glenn-Stokes Research Internship Program.

<sup>†</sup>Supported through ACS Project SEED.

### **COURSES TAUGHT**

CHEM 8400 Advanced Organic Chemistry  
CHEM 8330 Spectroscopic Methods & Analysis  
CHEM 1910 Introduction to Research  
CHEM 2410 Organic Chemistry I  
CHEM 2430 Organic Chemistry I recitation  
CHEM 2420 Organic Chemistry II  
CHEM 2440 Organic Chemistry II recitation

### **SERVICE**

Colloquium Committee, member, 2007 – Spring 2008  
Academic Achievement, chair, 2006 - present  
Graduate Examinations Committee, member, 2005 – present  
Undergraduate Recruitment, member, Fall 2008 – present

### **GRADUATE STUDENT COMMITTEES**

**STEVEN J. SUCHECK, Ph.D.**

Matthew Hertel	Chemistry, MS	
Xiaowei Lu	Chemistry, Ph.D.	Transferred 2008
Gilbert Wasonga	Chemistry, Ph.D.	Transferred 2008
Bo Yang	Chemistry, Ph.D.	Transferred 2008
Luyuan Zhou	Chemistry, MS	Transferred 2008
Jian Liang	Chemistry, Ph.D.	
Julie Boucau	Chemistry, Ph.D.	
Andrew Behrle	Chemistry, Ph.D.	
Xiaoning Li	Chemistry, MS	Completed 7/25/2007
Shue Xu	Chemistry, Ph.D.	
Indrajeet Sharma	Chemistry, Ph.D (Wayne State, Outside Member)	

*Continuation of Grant Support:*

Startup Fund / The University of Toledo

Project /Proposal Title: **An Orthogonal Ligation Strategy for the Synthesis of Multi-Epitope Tumor-Associated MUC1 Glycopeptides**

Source of Support: **Elsa U. Pardee Foundation, Program: Cancer Research**

Total Award Amount: **\$134,421** Total Award Period Covered: **12/6/2006-12/5/2007**

**No cost extension to 12/30/2008**

Location of the Project: **The University of Toledo**

Person-Months Per Year Committed to the Project: Sumr: **3.0**

Project/Proposal Title: **Development Towards Carbohydrate-Based Cancer Vaccines**

Source of Support: **Interdisciplinary Research Award, The University of Toledo**

Total Award Amount: **\$50,000** Total Award Period Covered: **05/01/07-06/30/2008**

**No cost extension to 12/30/2008**

Location of the Project: **The University of Toledo**

Person-Months Per Year Committed to the Project: Acad: **0.5**

Co-PIs Xuefei Huang, Marcia McInerney, Hermann Von Grafenstein, Katherine Wall

*Recent Grants Awarded:*

Project/Proposal Title: **Solid Phase Synthesis of Cancer Antigens Containing Decarboxylative Ligation Functionality**

Source of Support: **Ohio Cancer Research Associates**

Total Award Amount: **\$50,000** Total Award Period Covered: **07/01/07-06/30/2009**

Location of the Project: **The University of Toledo**

Person-Months Per Year Committed to the Project: Acad: **1.0**

Date Submitted: **2/15/2007**

Project/Proposal Title: **Ohio Consortium for Undergraduate Research: Research Experiences to Enhance Learning (REEL)**

## **STEVEN J. SUCHECK, Ph.D.**

Source of Support: **National Science Foundation**

Cumulative UT Subaward **\$109,300** Total Award Period Covered: **9/1/2005 – 8/31/2009**.

PI: Prabir Dutta (Ohio State University) (CHE 0532250)

### *Subaward History*

Original Subaward: UT subrecipient: Xuefei Huang, **9/1/2005 – 9/31/2009**. Award amount: \$ **20,000**.

Subrecipient Modification Number 1 (1 CEM microwave, reagents, summer support etc): UT subrecipient: Steve Sucheck, **9/1/2005 – 9/31/2009**. Award amount: \$ **35,000**.

Subrecipient Modification Number 2 (2 CEM microwaves): UT subrecipient: Steve Sucheck, **9/1/2005 – 9/31/2009**. Award amount: \$ **35,800**.

Subrecipient Modification Number 3 (Summer Research Stipends for 6 Undergraduate Students): UT subrecipient: Steve Sucheck, **9/1/2005 – 9/31/2009**. Award amount: \$ **7,500**.

Subrecipient Modification Number 4 (summer support): UT subrecipient: Steve Sucheck, **9/1/2005 – 9/31/2009**. Award amount: \$ **11,000**.

### *Grants Pending:*

Project/Proposal Title: **CAREER: Synthesis of Glycopeptide-Based Tumor Markers**

Source of Support: **NSF**

Total Award Amount: **\$974,982**. Total Award Period Covered: **5/01/2009 – 4/30/2014**.

Location of the Project: **The University of Toledo**

Person-Months Per Year Committed to the Project: Acad: **2.0**

Date Submitted: **7/18/2008**

### *Completed Research Support:*

Project/Proposal Title: **A Convergent and Chemoselective Chemical Ligation Strategy for the Homogenous Preparation of N-linked Glycopeptides**

Source of Support: **deArce Memorial Endowment Fund**

Total Award Amount: **\$17,000**. Total Award Period Covered: **5/2006 – 4/2007**

Location of the Project: **The University of Toledo**

Project/Proposal Title: **New Aminoglycosides to Treat Drug Resistant Bacteria**

Source of Support: **NIH/NIAD/SBIR (R43AI056617)**

## STEVEN J. SUCHECK, Ph.D.

Total Award Amount: **\$100,000**. Total Award Period Covered: **07/01/03 – 01/31/04**

Location of the Project: **Optimer Pharmaceuticals, Inc.**

Project/Proposal Title: **Synthesis of Aminoglycosides Mimetics**

Source of Support: **NIH/ NIGMS (F32GM19404)**

Total Award Amount: **\$30,256** Total Award Period Covered: **12/14/89 – 05/31/00**

Location of the Project: **The Scripps Research Institute**

### PUBLICATIONS

#### *The University of Toledo*

“Synthesis of small glycopeptides by decarboxylative condensation and insight into the reaction mechanism.” Sanki, A. K.; Talan, R. S.; Sucheck, S. J. *J. Org. Chem.* Submitted, 2008.

“Antigen 85C-mediated acyl-transfer between synthetic acyl donors and fragments of the arabinan.” Sanki, A. K.; Boucau, J.; Ronning, D. R.; Sucheck, S. J. *Glycoconj. J.* in press. 2008.

“A coupled assay measuring *Mycobacterium tuberculosis* antigen 85C enzymatic activity.” Boucau J.; Sanki, A. K.; Voss, B. J.; Sucheck, S. J.; Ronning D. R. *Anal. Biochem.* in press. 2008.

“Synthesis of methyl 5-S-alkyl-5-thio-arabinofuranosides and evaluation of their antimycobacterial activity.” Sanki A. K.; Boucau J.; Srivastava P.; Adams S. S.; Ronning, D. R., Sucheck, S. J. *Bioorg. Med. Chem.* 2008, 16, 5672-82.

“Synthesis of triazole-oxazolidinones via a one-pot reaction and evaluation of their antimicrobial activity.” Demaray, J. A.; Thuener, J. E.; Dawson, M. N.; Sucheck, S. J. *Bioorg. Med. Chem. Lett.* 2008, 18, 4868–4871.

#### *Optimer Pharmaceuticals, Inc.*

“Structure–activity relationships of bivalent aminoglycosides and evaluation of their microbiological activities.” Liang, C.-H.; Romero, A.; Rabuka, D.; Sgarbi, P. W. M.; Marby, K. A.; Duffield, J.; Yao, S.; Cheng, M. L.; Ichikawa, Y.; Sears, P.; Hu, C.; Hwang, S.-B.; Shue, Y.-K.; Sucheck, S. J. *Bioorg. Med. Chem. Lett.* **2005**, 15(8), 2123-8.

“An efficient entry to new sugar modified ketolide antibiotics.” Romero, A.; Liang, C.-H.; Chiu, Y.-H.; Yao, S.; Duffield, J.; Sucheck, S. J.; Marby, K.; Rabuka, D.; Leung, P. Y.; Shue, Y.-K.; Ichikawa, Y.; Hwang, C. -K. *Tet. Lett.* **2005**, 46(9), 1483-7.

“Glyco-optimization of aminoglycosides: new aminoglycosides as novel anti-infective agents.” Yao, S.; Sgarbi, P. W. M.; Marby, K. A.; Rabuka, D.; O’Hare, S. M.; Cheng, M. L.; Bairi, M.;

## STEVEN J. SUCHECK, Ph.D.

Hu, C.; Hwang, S.-B.; Hwang, C.-K.; Ichikawa, Y.; Sears, P.; Sucheck, S. J. *Bioorg. Med. Chem. Lett.* **2004**, *14*(14), 3733-8.

“Inhibition of the proteolytic activity of anthrax lethal factor by aminoglycosides.” Lee L.V., Bower K.E., Liang F.S., Shi J., Wu D., Sucheck S. J., Vogt P.K., Wong C.-H. *J. Am. Chem. Soc.* **2004**; *126*(15), 4774-5.

“Dimeric Aminoglycosides as Antibiotics.” Agnelli, F.; Sucheck, S. J.; Marby, K. A; Rabuka, D.; S.-L., Yao; Sears, P. S.; Liang, F.-S.; Wong, C.-H. *Angew. Chem. Int. Ed.* **2004**, *43*(12), 1562-6.

“Combinatorial Synthesis of Aminoglycoside Libraries.” Sucheck, S. J. and Shue, Y.-K. *Curr. Opin. Drug Discovery and Development* **2001**, *4*(4), 462-70.

### Postdoctoral

“RNA as a Target for Small Molecules.” Sucheck, S. J.; Wong, C.-H. *Curr. Opin. Chem. Biol.* **2000**, *4*(6), 678-86.

“Design of Bifunctional Antibiotics that Target Bacterial rRNA and Inhibit Resistance-Causing Enzymes.” Sucheck, S. J.; Wong, A. L.; Koeller, K. M.; Boehr, D. D.; Draker, K.-A.; Sears, P.; Wright, G. D.; Wong, C.-H.. *J. Am. Chem. Soc.* **2000**, *122*(21), 5230-1.

“Design of Small Molecules that Recognize RNA: Development of Aminoglycosides as Potential Antitumor Agents that Target Oncogenic RNA Sequences.” Sucheck, S. J.; Greenberg, W. A.; Tolbert, T., Wong, C.-H. *Angew. Chem., Int. Ed.* **2000**, *39*(6), 1080-4.

### Graduate

“Solid Phase Synthesis and Biochemical Evaluation of Conformationally Constrained Analogues of Deglycobleomycin A<sub>5</sub>” Cagir, A.; Tao, Z.-F.; Sucheck, S. J.; Hecht, S. M. *Bioorganic Med. Chem. Lett.* **2003**, *11*(23), 5179-87.

“Study of Naturally Occurring Nucleic Acid Interactive Agents.” Sucheck, S. J. 1998, 205 pp.

“Inhibitors of DNA Polymerase  $\beta$  from *Schoepfia Californica*.” Chen, J.; Zhang, Y.-H., Wang, L.-K.; Sucheck, S. J.; Snow, A. M.; Hecht, S. M. *Chem. Commun.* **1998**, 2769-70.

“Total Synthesis of Bleomycin Group Antibiotics. The Total Synthesis of Bleomycin Demethyl A<sub>2</sub>, Bleomycin A<sub>2</sub> and Decarbamoyl Bleomycin Demethyl A<sub>2</sub>.” Katono, K.; An, H.; Aoyagi, Y. Overhand, M.; Sucheck, S. J.; Stevens, W. C. Jr.; Hess, C. D.; Zhou, X.; Hecht, S. M. *J. Am. Chem. Soc.* **1998**, *120*, 11285-96.

“Characterization of Zn(II)•Deglycobleomycin A<sub>2</sub> and Interaction with d(CGCGATGCG)<sub>2</sub>. Direct Evidence for Minor Groove Binding of the Bithiazole Moiety.” Sucheck, S. J.; Ellena, J. F.; Hecht, S. M. *J. Am. Chem. Soc.* **1998**, *120*, 7450-60.

## STEVEN J. SUCHECK, Ph.D.

### *Undergraduate*

“4-Methyl-3,5-dioxopiperazine Acetic Acid and 4-Methyl-3,5-dioxopiperazine-*N*-methylacetic amide.” Skrzypczak-Jankun, E., Sucheck, S., Smith, D.A. Cambridge Crystallographic Data Centre, deposition no. CCDC 118966/CCDC 118967, 1999.

“Nitrilotriacetamide: Synthesis in Concentrated Sulfuric Acid and Stability in Water” Smith, D. A., Sucheck, S.; Cramer, S.; Baker, D. *Synth. Commun.* **1995**, 25, 4123-32.

“Facile Synthesis of Substituted Nitrilotriacetamides.” Cramer, S.; Sucheck, S. J.; Skrzypczak-Jankun, E.; Smith, D. A. *Tetrahedron Lett.* **1992**, 33, 7765-8.

“Characterization of  $[Pb(NO_3)(ntam)_2]NO_3$  the First Metal Complex of the Neutral Tetradentate Ligand Nitrilotriacetamide (ntam).” Sucheck, S. J.; Pinkerton, A. A.; Smith, D. A. *J. Chem. Soc., Chem. Commun.* **1992**, 367-8.

### **PATENTS and PATENT APPLICATIONS**

“Method for Specific Chemoenzymatic acylation of Carbohydrates” Ronning, D. R.; Sucheck, S. J.; Boucau, J.; Sanki A. K. Provisional Patent Appln: 61/109,110; Filing Date: 2008-10-23

“Biochemical Assay for Acyltransferase Enzymes” Ronning, D. R.; Sucheck, S. J.; Sanki A. K.; Boucau J. U.S. Patent Appln: 12/245,004; Filing Date: 2008-10-03.

“Bifunctional Antibiotics.” Sucheck, S. J. and Wong, C.-H. U.S. Patent 6,921,818, July 26<sup>th</sup>, 2005.

“Processes for the Preparation of Glycoconjugates of the Breast Cancer Antigen Globo-H.” O. Srivastava, O.; Srivastava, G.; Liang, C.-H.; Yao, S.; Rabuka, D.; Wacowich-Scarbi, S.A.; Sucheck S. J.; Ichikawa. Y. 60/655,311, February 22, 2005.

“Novel Antibacterial Agents.” Liang, C.-H.; Duffield, J.; Romero, A.; Chiu, Y.-H.; Rabuka, D.; Yao, S., Sucheck, S. J.; Marby, K. A.; Shue, Y.-K.; Ichikawa, Y.; Hwang, C.-K. WO 2004/080391, September 23, 2004.

“New Aminoglycoside Antibiotics as Novel Anti-Infective Agents.” Liang, C.-H.; Marby, K. A.; Rabuka, D.; Romero, A.; Sgarbi, P. W. M.; Sucheck, S. J.; Shue Y.-K.; Yao S. U.S. Patent 10/606,700 June 26, 2003.

### **PRESENTATIONS at SCHOLARLY MEETINGS**

## **STEVEN J. SUCHECK, Ph.D.**

Ozga, K.; Swiatek, K.; Sucheck, S. J. "Microwave-Accelerated Halide-Catalyzed Synthesis of *N*-Aryloxazolidin-2-ones from Carbamates and Epoxides." National Science Foundation Active Awards at the University of Toledo, Toledo, OH, Nov 3<sup>rd</sup>, 2008.

Crowe, Jonathan W.; Ladd, Mallory P.; McCann, Shannon C.; Mull, Derek L.; Casarotto, Virginia; Lind, Cora; Sucheck, S. J. "To Nuke or Not to Nuke: The Joys and Pitfalls of Microwaves." National Science Foundation Active Awards at the University of Toledo, Toledo, OH, Nov 3<sup>rd</sup>, 2008.

Demaray, Jeffrey A.; Thuener, Jason E.; Dawson, Matthew N.; Sucheck, Steven J. "Synthesis of 1,4-Disubstituted 1,2,3-Triazole-Oxazolidin-2-Ones Via a Three-Component Reaction." National Science Foundation Active Awards at the University of Toledo, Toledo, OH, Nov 3<sup>rd</sup>, 2008.

Ladd, M. P.; Crowe, J. W.; Mull, D. L.; McCann, S. C.; Swiatek, K.; Sucheck, S. J. "Halide-Catalyzed Microwave Accelerated Synthesis of *N*-Aryloxazolidin-2-Ones and their Conversion to C5-Substituted-Triazole-Oxazolidin-2-ones via a Three-Component Reaction." 2008 REEL Student Symposium Miami University, Oxford, OH, Nov. 1<sup>st</sup>, 2008.

Ozga, K.; Swiatek, K.; Sucheck, S. J. "Microwave-Accelerated Halide-Catalyzed Synthesis of *N*-Aryloxazolidin-2-ones from Carbamates and Epoxides." 2008 REEL Student Symposium Miami University, Oxford, OH, Nov. 1<sup>st</sup>, 2008.

Umesiri, F. and Sucheck, S. J. "Synthesis of Transition State Inhibitors of Antigen 85." 29<sup>th</sup> Annual Sigma Xi Student Research Symposium, Toledo, OH, Nov 1<sup>st</sup>, 2008.

Lombardo, S.; Talan, R. S.; Sucheck, S. J.; Wall, K. A. "The Development of Monoclonal Antibodies Against a Tumor Associated Carbohydrate Antigen" 29<sup>th</sup> Annual Sigma Xi Student Research Symposium, Toledo, OH, Nov 1<sup>st</sup>, 2008.

Adams, S. S. and Sucheck, S. J. "Synthesis of Methyl 5-*S*-Alkyl-5-thio-D-arabinofuranosides and Evaluation of their Antimycobacterial Activity." 29<sup>th</sup> Annual Sigma Xi Student Research Symposium, Toledo, OH, Nov 1<sup>st</sup>, 2008.

Talan, R. S.; Sanki, A. K.; Sucheck, S. J. "Synthesis of Small Glycopeptides by Decarboxylative Condensation and Insight into the Reaction Mechanism." 29<sup>th</sup> Annual Sigma Xi Student Research Symposium, Toledo, OH, Nov 1<sup>st</sup>, 2008.

Sucheck, S.J. "Carbohydrate-Based Inhibitors of Antigen 85: A Potential Target for Treating *Mycobacterium tuberculosis*." The 4<sup>th</sup> Midwest Carbohydrate and Glycobiology Symposium, Cleveland OH, October 3<sup>rd</sup> – 4<sup>th</sup>, 2008.

Sanki, A. K.; Talan, R. S.; Sucheck, S. J. "Synthesis of Small Glycopeptides by Decarboxylative Condensation and Insight into the Reaction Mechanism." The 4<sup>th</sup> Midwest Carbohydrate and Glycobiology Symposium, Cleveland OH, October 3<sup>rd</sup> – 4<sup>th</sup>, 2008.

## **STEVEN J. SUCHECK, Ph.D.**

Sanki, A. K.; Julie Boucau, J.; Mewada, H. R. Ronning, D. R.; ; Sucheck, S. J. "Determination of the Substrate Specificity of Antigen 85C-Mediated Acyl-Transfer on Synthetic Arabinofuranosides" The 4<sup>th</sup> Midwest Carbohydrate and Glycobiology Symposium, Cleveland OH, October 3<sup>rd</sup> – 4<sup>th</sup>, 2008.

Sanki, A. K.; Umesiri, F.; Boucau, J.; Ronning, D. R.; Sucheck, S. J "Synthesis of Transition State Inhibitors of Antigen 85." The 4<sup>th</sup> Midwest Carbohydrate and Glycobiology Symposium, Cleveland OH, October 3<sup>rd</sup> – 4<sup>th</sup>, 2008.

Sarkar, S.; Herner, D. N.; Wall, K. A.; Sucheck, S. J. "Synthesis of an L-Rhamnose-BSA Conjugate and Evaluation of Anti-L-Rhamnose Antibody Titers in Mice." The 4<sup>th</sup> Midwest Carbohydrate and Glycobiology Symposium, Cleveland OH, October 3<sup>rd</sup> – 4<sup>th</sup>, 2008.

Lombardo, S. Sucheck, S. J.; Wall, K. A. "The Development of Monoclonal Antibodies Against a Tumor Associated Carbohydrate Antigen" Undergraduate Research Symposia, University of Toledo, Toledo, OH, Fall, 2008.

Sanki, Aditya K.; Boucau, Julie; Mewada, Heta R.; Ronning, Donald R.; Sucheck, Steven J.. "Determination of the Substrate Specificity of Antigen 85C-Mediated Acyl Transfer on Synthetic Arabinofuranosides." Abstracts of Papers, 236<sup>th</sup> ACS National Meeting, Philadelphia, PA, United States, August 17-21, (2008), CARB-045.

Talan, Rommel S.; Sanki, Aditya K.; Sucheck, Steven J. "Decarboxylative Condensation Between 18O-labeled  $\alpha$ -Ketoacids and Hydroxylamines." Abstracts of Papers, 236<sup>th</sup> ACS National Meeting, Philadelphia, PA, United States, August 17-21, (2008), CARB-044.

Sucheck, Steven J. "Carbohydrate-Based Inhibitors of Antigen 85: A Potential Target for Treating *Mycobacterium tuberculosis*." Abstracts of Papers, 236<sup>th</sup> ACS National Meeting, Philadelphia, PA, United States, August 17-21, (2008), CARB-010.

Sucheck, Steven Anderson, Paul Clark, Ted Spinney, Rick Taylor Richard "REEL Innovations in Organic Chemistry Courses: A Multi-Institutional Perspective" 20<sup>th</sup> Biennial Conference on Chemical Education Indiana University, Bloomington, Indiana, United States, July 27-31 (2008), P722.

Sucheck, Steven J. "Research in the Teaching Lab: A Microwave Accelerated Synthesis of Oxazolidin-2-Ones." Abstracts, 40<sup>th</sup> Central Regional Meeting of the American Chemical Society, Columbus, OH, United States, June 10-14, 2008, CRM-469.

Demaray, Jeffrey A.; Thuener, Jason E.; Dawson, Matthew N.; Sucheck, Steven J. "Synthesis of 1,4-Disubstituted 1,2,3-Triazole-Oxazolidin-2-Ones Via a Three-Component Reaction" Abstracts, 40<sup>th</sup> Central Regional Meeting of the American Chemical Society, Columbus, OH, United States, June 10-14, 2008, CRM-490.

## **STEVEN J. SUCHECK, Ph.D.**

Crowe, Jonathan W.; Ladd, Mallory P.; McCann, Shannon C.; Mull, Derek L.; Casarotto, Virginie; Lind, Cora; Sucheck, Steven J. "To Nuke or Not to Nuke: The Joys and Pitfalls of Microwaves." Abstracts, 40<sup>th</sup> Central Regional Meeting of the American Chemical Society, Columbus, OH, United States, June 10-14, 2008, CRM-489.

Sanki, Aditya K.; Talan, Rommel S.; Sucheck, Steven J. "Effect of Amino Acid Side Chain Size on Peptide Formation by Decarboxylative Condensation." Abstracts, 40<sup>th</sup> Central Regional Meeting of the American Chemical Society, Columbus, OH, United States, June 10-14, 2008, CRM-438.

Mayer, L. P.; Sucheck, S. J. "Ohio REEL: Models for advancing research in the teaching laboratory" 235<sup>th</sup> ACS National Meeting, New Orleans, LA, United States, April 6-10, 2008, SOCED-005.

Sucheck, Steven J. Glycopeptide synthesis by decarboxylative condensation. Abstracts of Papers, 235<sup>th</sup> ACS National Meeting, New Orleans, LA, United States, April 6-10, 2008, CARB-115.

Sanki, Aditya K.; Srivastava, Parijat; Adams, Samuel S.; Boucau, Julie; Ronning, Donald R.; Sucheck, Steven J. Synthesis of methyl 5-deoxy-5-S-thioalkyl-D-arabinofuranosides and evaluation of their antimycobacterial activity. Abstracts of Papers, 235<sup>th</sup> ACS National Meeting, New Orleans, LA, United States, April 6-10, 2008, CARB-091.

Sanki, Aditya K.; Talan, Rommel S.; Sucheck, Steven J. Glycopeptide synthesis by traceless decarboxylative condensation. Abstracts of Papers, 235<sup>th</sup> ACS National Meeting, New Orleans, LA, United States, April 6-10, 2008, CARB-089.

Boucau, Julie; Sanki, Aditya K.; Sucheck, Steven J.; Ronning, Donald R. Development of a high-throughput enzymatic assay for Mycobacterium tuberculosis antigen 85C. Abstracts of Papers, 235<sup>th</sup> ACS National Meeting, New Orleans, LA, United States, April 6-10, 2008, BIOL-058.

Demaray, J. A.; Thuener, J. E.; Dawson, M. N. Sucheck, S. J. "Synthesis of 4-Substituted 1,2,3-Triazole-Oxazolidinones via a Three-Component Reaction." 2007 REEL Student Symposium Cleveland State University Cleveland, OH, Nov. 10<sup>th</sup>, 2007.

Sanki, A. K.; Srivastava, P. "The Synthesis of Methyl-5-Deoxy-5-S-Thioalkyl-D-Arabinofuranosides and Evaluation of their Antimycobacterial Activity." 3<sup>rd</sup> Midwestern Carbohydrate & Glycobiology Symposium, Columbus, OH, Oct 5<sup>th</sup>-6<sup>th</sup>, 2007.

Sanki, A. K.; Talan, R. S. Glycopeptide Synthesis by Traceless Decarboxylative Condensation" 3<sup>rd</sup> Midwestern Carbohydrate & Glycobiology Symposium, Columbus, OH, Oct 5<sup>th</sup>-6<sup>th</sup>, 2007.

Boucau, J.; Sanki, A. K.; Sucheck, S. J.; Ronning D. R. "Development of a High-Throughput Glycoconjugate-Based Acyltransferase Assay." 3<sup>rd</sup> Midwestern Carbohydrate & Glycobiology Symposium, Columbus, OH, Oct 5<sup>th</sup>-6<sup>th</sup>, 2007.

## **STEVEN J. SUCHECK, Ph.D.**

Suceck, S. J. "Synthesis of Glycosylamino Acid-Containing Tripeptides by Decarboxylative Ligation." 3<sup>rd</sup> Midwestern Carbohydrate & Glycobiology Symposium, Oct 5<sup>th</sup>-6<sup>th</sup>, 2007.

Dawson, M. N.; Demaray, J. A.; Thuener, J. E.; Adams, S. S. "Synthesis of 4-Substituted 1,2,3-Triazole-Oxazolidinones via a Three Component Reaction." The Journey Conference, Case Western Reserve University, Cleveland, OH, Sept. 21<sup>st</sup>-22<sup>st</sup>, 2007.

Talan, R. S.; Sanki, A. K.; Suceck S. J. "Synthesis of Glycopeptides by Decarboxylative Ligation." 28<sup>th</sup> Annual Sigma Xi Student Research Symposium, Toledo, OH, Sept 15<sup>th</sup>, 2007.

Thuener, J. E.; Demaray, J. A.; Dawson M. N.; The Synthesis of 1,2,3-Triazole-Containing Oxazolidinones by a Three-Component Reaction." 28<sup>th</sup> Annual Sigma Xi Student Research Symposium, Toledo, OH, Sept 15<sup>th</sup>, 2007.

Dawson, Matthew N.; Demaray, Jeffrey A.; Thuener, Jason E.; Adams, Samuel S.; Suceck, Steven J. "Synthesis of 4-Substituted 1,2,3-Triazole-Oxazolidinones via a Three Component Reaction." Ohio Student Research Forum, Dayton, OH, Aug 9-10, 2007.

Demaray, J. A.; Dawson, M. N.; Adams, S. S.; Thuener, J. E.; Suceck, S. J. "An Efficient Preparation of 3-*p*-tolyl-2-oxooxazolidines Containing 4-Substituted 1,2,3-triazoles and Preliminary Evaluation of their Antibacterial Activity." 39<sup>th</sup> Central Regional Meeting of the American Chemical Society, Covington, KY, United States, May 20-23, 2007, CRM-075.

Suceck, T. J.; Suceck, S. J. "The Preparation of 1,2,3-triazole Oxazolidinone Derivatives: A Research Oriented Multistep Parallel Synthesis Module for the Organic Chemistry Laboratory." 39<sup>th</sup> Central Regional Meeting of the American Chemical Society, Covington, KY, United States, May 20-23, 2007, CRM-018.

Sanki, A. K.; Talan, R.; Zheng, H.; Suceck, S. J. "Synthesis of Glycosylamino Acid Containing Dipeptides Possessing a C-terminal  $\alpha$ -Ketoacid." 233<sup>rd</sup> American Chemical Society Meeting, National Meeting, March 25<sup>th</sup>-29<sup>th</sup>, 2007, Paper #40.

Zheng, H.; Talan, R.; Srivastava, P.; Suceck, S. J. "Progress Toward the Synthesis of Intermediates Useful for Traceless Peptide Ligations." 2<sup>nd</sup> Midwestern Carbohydrate Conference, Sept 29<sup>th</sup>-Sept 30<sup>th</sup>, 2006.

"Carbohydrates in Drug Discovery." Suceck, S. J. 1<sup>st</sup> Midwestern Carbohydrate Conference, Sept 30-Oct 1, 2005.

"A facile and Efficient Synthesis of Sialyl Lewis<sup>a</sup> Hexasacchide Blood Group Antigen." Suceck, S. J. 3<sup>rd</sup> Annual Conference. Glycomics and Carbohydrates in Drug Development, March 21-22, 2005.

"New Aminoglycosides by OPopS<sup>TM</sup> Glycosylation." Suceck, S. J.; Yao, S.; Sgarbi, P. W. M.; Marby, K.; Rabuka, D.; Hwang, C. K.; Ichikawa, Y.; Shue, Y. K.; Bairi, M.; Sears, P.; Hu, C.;

## **STEVEN J. SUCHECK, Ph.D.**

Hwang, S. B.; 43<sup>rd</sup> Annual Interscience Conference on Antimicrobial Agents and Chemotherapy September 14<sup>th</sup>-17<sup>th</sup>, 2003, Paper #3926.

“The Synthesis and Biological Activity of Multivalent Aminoglycoside Analogues of OPT-11.” Duffield, J. J.; Liang C.-H.; Marby, K. A.; Romero, A.; Sgarbi, P. W. M.; Shue, Y.-K.; Sucheck, S. J.; Yao, S.; Zhang, Z.; Cheng, M. Chan, F. K.; Hu, C.; Ng, S. P.; Hwang S.-B., 42<sup>nd</sup> Annual Interscience Conference on Antimicrobial Agents and Chemotherapy September 27<sup>th</sup>-30<sup>th</sup>, 2002, Paper #F-1687.

“Design of Small Molecules that Recognize RNA: “An Approach for the Development of Potential Antitumor Therapeutics Based on Aminoglycosides.” Sucheck, S. J.; Greenberg, W. A.; Tolbert, T., Wong, C.-H. 3<sup>rd</sup> Annual Scripps Research Institute Society of Fellows Fall Symposium, Nov. 2<sup>nd</sup>, 1999.

“Characterization of Zn(II)•Deglycobleomycin A<sub>2</sub> and Interaction with d(CGCATGCG)<sub>2</sub>. A Binding Model Based on NMR Experiments and Molecular Dynamics Calculations.” Sucheck, S. J.; Ellena, J. F.; Hecht, S. M. 214<sup>th</sup> American Chemical Society National Meeting, Sept. 7-11<sup>th</sup>, 1997, Paper #301.

“Synthesis and Ring Opening Reactions of 2, 6-Piperazines.” Cramer, S.; Sucheck, S. J.; Smith, D. A. American Chemical Society Joint 24<sup>th</sup> Central Regional Meeting, May 26-29, 1992.

“A Comparative X-ray Crystallographic Study of Hydrogen Bonding in 2, 6-Piperazinediones.” Sucheck, S. J.; Skrzypczak-Jankun, E.; Smith, D. A. American Chemical Society Joint 24<sup>th</sup> Central Regional Meeting, May 26-29, 1992.

“Coordination Complexes of Cobalt, Lead and Mercury with Nitrilotriacetamide.” Sucheck, S. J.; Finnen, D. C.; Pinkerton, A. A.; Skrzypczak-Jankun, E.; Vijayakumar, S.; Smith, D. A. American Crystallographic Association National Meeting, July 21-26, 1991, Abstract #PJ17

“Coordination Complexes of Cobalt and Lead with Nitrilotriacetamide.” Sucheck, S. J.; Finnen, D. C.; Pinkerton, A. A.; Smith, D. A. American Chemical Society Joint 23<sup>rd</sup> Central 124<sup>th</sup> Great Lakes Regional Meeting, May 29-31, 1991, Abstract #223

### **NEWS FEATURES COVERING WORK**

“Carbohydrate Vaccines.” *Chemical & Engineering News*, 2004, 82(32), 31-35.

“Chemistry Highlights 2000.” *Chemical & Engineering News*, 2000, 78(51), 24-31.

“Targeting RNA.” *Chemical & Engineering News*, 2000, 78(40), 54-57.

“Against Bifunctional Antibiotics, Resistance Is Futile.” *Chemical & Engineering News*, 2000, 78(22), 12.

## STEVEN J. SUCHECK, Ph.D.

“Antibiotic, Modified Neamine, Scripps Research Institute and Scripps Clinic Research Foundation Develops Antibiotic.” *R & D Focus Drug News*, July 3<sup>rd</sup>, 2000.

“New Approach to Antibiotic Resistance.” *EurekaAlert*, June 8<sup>th</sup>, 2000.

“Lifelines: Trumping Bacterial Resistance.” *Nature Science Update*, June 12<sup>th</sup>, 2000.

### INVITED LECTURES

“Carbohydrate-Based Inhibitors of Antigen 85: A Potential Target for Treating *Mycobacterium tuberculosis*.” The 4<sup>th</sup> Midwest Carbohydrate and Glycobiology Symposium, Cleveland OH, October 3<sup>rd</sup> – 4<sup>th</sup>, 2008.

“Synthesis of Glycopeptides by Decarboxylative Ligation”

Youngstown State University, Department of Chemistry, Oct 5<sup>th</sup> 2007

Central Michigan University, Department of Chemistry, Oct 29<sup>th</sup> 2007

Indiana University Purdue University Fort Wayne, Department of Chemistry, Nov 16<sup>th</sup> 2007

“Carbohydrates in Drug Discovery”

University of Toledo, Dept. of Medicinal Chemistry, Feb 20<sup>th</sup> 2007

“Synthetic Investigations of the Role of Carbohydrates in Natural Products”

Andrew’s University, Department of Chemistry, Oct 12<sup>th</sup> 2006

### MEMBERSHIPS

1992-present            American Chemical Society: since 1992  
Divisions: Organic, Carbohydrate and Medicinal Chemistry

2006-present            Member of the Organic/Biological Development Team for the Ohio  
Consortium for Undergraduate Research OCUR <http://ohio-reel.osu.edu/>

### SERVICE to the PROFESSION

Review of Peer Reviewed Journals, Grants and Book Chapters

*Australian Journal of Chemistry*

*Carbohydrate Research*

*Bioorganic & Medicinal Chemistry*

*European Journal of Medicinal Chemistry*

*Journal of the American Chemical Society*

*Journal of Organic Chemistry*

*Organic Letters*

*ACS Symposium Book Series, Several Grants*

## **STEVEN J. SUCHECK, Ph.D.**

### Other

41<sup>th</sup> Central Regional Meeting of the American Chemical Society, Cleveland, OH, United States, June 10-14, 2009 Chair/Organizer for General Organic Symposium, Cope Scholar Symposium, Nucleic acids, Peptides, and Glycans Symposium, and New Synthetic Methodologies (Including Metal/Enzyme-Mediated Transformations) Symposium.

The 4<sup>th</sup> Midwest Carbohydrate and Glycobiology Symposium, Cleveland OH, October 3<sup>rd</sup> – 4<sup>th</sup>, 2008. Awards Chair

2<sup>nd</sup> Midwestern Carbohydrate Conference, Sept 29-30, 2006. Session Chair

236<sup>th</sup> ACS National Meeting, Philadelphia, PA, United States, August 17-21, 2008, Carbohydrate in Drug Discovery; Presiding: Gary Evans and Steven J. Sucheck

235<sup>th</sup> ACS National Meeting, New Orleans, LA, United States, April 6-10, 2008. Carbohydrate Chemistry and Biochemistry; Presiding: Thomas J. Tolbert and Steven J. Sucheck

**Treasure Sucheck**  
*Curriculum vitae*

**Work Address**

Mercy College  
Department of Chemistry  
Toledo, OH 43606  
Tel.: (419) 251-8924

**Home Address**

7713 Sioux Ridge Drive  
Maumee, OH 43537  
Tel.: (419) 867-8553

**Educational Background**

Ph.D., Chemistry, University of Toledo, Toledo, Ohio, 1992  
B.S., Natural Systems, Defiance College, Defiance, Ohio, 1989

**Teaching Experience**

- 2008-present Associate Professor of Chemistry, Mercy College, Toledo
- 2005-2008 Visiting Associate Professor of Chemistry, The University of Toledo, Toledo OH
- 1998-2005 Professor of Chemistry, Southwestern College, Chula Vista, CA
- 1993-1998 Associate Professor of Chemistry, Eastern Mennonite University, Harrisonburg, VA

**Curriculum Development**

- ♦ Co-Developed an research based-organic chemistry laboratory module at The University of Toledo (2007)
  - ⇒ *Preparation of 1,2,3-Triazole Oxazolidinone Derivatives*
- ♦ Co-Developed the *Chemical Technology Program* at Southwestern College; created, 2004
- ♦ Developed four new courses at Southwestern College (1999-2004)
  - ⇒ *Organic Chemistry II, Organic Analysis and Spectroscopy, Introductory Biochemistry, and Biochemical Techniques*
- ♦ Developed two new courses, at Eastern Mennonite University (1993-1994)
  - ⇒ *Biochemistry I and Biochemistry II*
- ♦ Created a *Biochemistry Laboratory Manual*  
**Treasure J. Sucheck** (1994-1998) Eastern Mennonite University
- ♦ Created a *Laboratory Manual for Biology as Inquiry*  
Roman J. Miller, Laura E. Powers, and **Treasure J. Sucheck** (1996-1997)

### **Fellowships and Special Honors**

- ♦ Curriculum Development Award, Southwestern College, (1999, 2000, and 2001)
- ♦ Quality Service Award, Eastern Mennonite University, (1997)
- ♦ Release Time for Faculty Research and Development, Eastern Mennonite University, (1995-1996)

### **Professional Experience**

- ♦ Grant Reviewer: National Science Foundation – CCLI (2001, 2003, 2006, 2008)
- ♦ Co-Chair: SWC Chemical Technology Alliance (2001-2005)

### **Professional Affiliations:**

- ♦ Sigma Xi (National Science Honorary Society)
- ♦ American Chemical Society
- ♦ Iota Sigma Pi (National Chemistry Society for Women)
- ♦ Two Year College Chemistry Consortium (2YC3)

### **Grants:**

- ♦ 2001 NSF-ATE Grant (\$211,000)
  - ➔ National Science Foundation
  - ➔ “Development of a Chemical Technology Program at Southwestern College”
- ♦ 2001 CLC-Block Grant (\$45,000)
  - ➔ College Leadership Council-Southwestern College
  - ➔ “Micro-Scale Equipment for Organic Chemistry” and “Equipment to Promote the Introduction of Micro-scale Biochemical Techniques into the Chemistry Curriculum”
- ♦ 1995-1996 Cottrell College Science Award (\$25,000)
  - ➔ Research Corporation
  - ➔ The Biochemical Characterization of Male Accessory Sex Gland Proteins Induced by 5- $\alpha$ -Dihydrotestosterone and the Epidermal Growth Factor”.
- ♦ 1996-1997 Research Experience for Undergraduates (\$11,000)
  - ➔ National Science Foundation- James Madison University

### **Research Experience:**

- ♦ Undergraduate Research Mentor at Southwestern College
- ♦ Undergraduate Research Mentor at Eastern Mennonite University,

## Research Publications

### Abstracts

C. Guzman, **T. Sucheck**, A.Tirona, Z. Santillanes, and M. Delgado, (2002) "HPLC Detection of Polyamine Levels in Prostate Epithelial and Stromal Cells." *Book of Abstracts-Rocky Mountain Regional ACS Meeting*.

M.A. Cardenos, **T.J. Sucheck**, and M.A Kasem, (2001) "HPLC Detection of Polyamine Levels in Accessory Sex Gland Tissue." *Book of Abstracts, Annual Biomedical Research Conference of Minority Students, ABRMS National Meeting*.

**T.J. Sucheck**, B.J. Keener, C.R. Charles, and B.D. Kauffman, (1997) "The Biochemical Effects of Dihydrotestosterone and Estradiol on The Anterior Prostate of Male Mice." *Book of Abstracts, 214<sup>th</sup> ACS National Meeting*.

**T.J. Sucheck**, R.M. Phillips, and D.E. Gingerich, (1996) "Biochemical and Physiological Effects Induced in Male Accessory Sex Glands by 5- $\alpha$ -Dihydrotestosterone." *The Virginia Journal of Science*.

**T.J. Sucheck**, R.A. Gingrich, P.E. Zapanta, and D.E. Gingerich, (1995) "The Characterization of Male Accessory Sex Gland Proteins Induced by the Epidermal Growth Factor and 5- $\alpha$ -Dihydrotestosterone." *The Zoologist*.

### Journal Articles

M.J. Wheelock, **T.J. Richards**, R.T. Carroll, and M.O. Funk, "Preparation and Characterization of Monoclonal Antibodies against Soybean Lipoyxygenase Isoenzymes." *Archives of Biochemistry and Biophysics*, Vol. 288, August 1, pp 578-583, 1991.

**T.J. Richards-Sucheck**, S. Ramachandran, and M.O. Funk, "Catalysis Sensitive Conformation Changes in Soybean Lipoyxygenase Revealed by Monoclonal Antibody and Limited Proteolysis Experiments." *Biochemistry*, November, 1995