

STEVEN J. SUCHECK, Ph.D.

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Education, Academic and Industrial Positions

2015- Present	Professor of Chemistry, University of Toledo
2011-2015	Associate Professor of Chemistry, University of Toledo
2005-2011	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: <i>Bifunctional Aminoglycoside Antibiotics</i> Research Supervisor: Professor Chi-Huey Wong
1998	Ph.D., Chemistry, University of Virginia Thesis: <i>Study of DNA Interactive Agents</i> 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.

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Honors and Awards

2018-2020	Executive Secretary of the ACS CARB division and Program Chair
2016,2017	ad hoc member of the ACS CARB division Awards Committee
2016-18	Elected Secretary of the ACS CARB division
2014	Discoverer Award (Ohio Cancer Research Associates)
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)

National Institutes of Health Ad hoc reviewer for:

2018 /01	Drug Discovery & Development SBIR/STTR
2018/01	ZAI1-LR-M (J1) Structure-based Discovery of Critical Vulnerabilities of Mycobacteria
2017/10	ZAI1-AZ-M (S1) 1 Partnerships for Development of Vaccines to Prevent Mycobacterium Tuberculosis and or Tuberculosis Disease
2017/10	SBCA Synthetic and Biological Chemistry A Study Section
2017/01	ZAI1 JRR-M (J1) Special Emphasis Panel
2016/10	ZRG1 IDM-W 50 (R) US – China Program for Collaborative Biomedical Research
2016/05	ZRG1 BCMB-U 50 (R) Facile Methods and Technologies for Synthesis of Biomedically Relevant Carbohydrates
2016/01	ZRG1 BCMB-G10 (B) Drug Discovery & Development SBIR/STTR
2015/05	ZGM1 PPBC-0 (GL) Large-Scale Collaborative Project Awards (R24/U54)
2013/05	ZRG1 BCMB-B (02) Biological Chemistry and Macromolecular Biophysics
2013/01	ZRG1 BCMB-B (02) Biological Chemistry and Macromolecular Biophysics
2012/05	ZRG1 IMST-G (10) Chemistry, Biochemistry and Drug Development
2010/10	ZAI1 AWA-M (S2) Special Emphasis Panel

Current Students

Ms. Sunayana Kapil	(Ph.D. in progress 4 th year)
Mr. Abhishek Vartak	(Ph.D. in progress 4 th year)
Mr. Alexander Landgraf	(Ph.D. in progress 2 st year)
Mr. Grace Irumva	(Ph.D. in progress 2 st year)
Ms. Fatma Salem	(Visiting Scholar, Port Said University)

Past Students and Postdocs

Dr. Sandeep Thanna	Ph.D. 2017	(Post Doc., University of Pennsylvania Medical School)
Dr. Sri Kumar Veleti	Ph.D. 2015	(Post Doc., National Institutes of Health, NIAID)
Ms. Samantha Bouhall	M.S. 2015	(Scientist at Caymen chemical (MI))
Dr. Partha Karmakar	Ph.D. 2015	(Post Doc., Washington University School of Medicine St. Louis (MO))
Dr. Vishwanath Gaitonde	Ph.D. 2015	(Scientist at Cambrex (NC))
Dr. Sourav Sarkar	Ph.D. 2012	(Sr. Scientist, Hudson Biopharma Inc. (NJ))

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Prof. Francis Umesiri	Ph.D. 2010 (Associate Professor, John Brown University)
Dr. Rommel S. Talan	Ph.D. 2010 (Scientist, Peptides International)
Mr. Parijat Srivastava	M.S. 2009 (Laboratory Supervisor, St. John's University)
Dr. Aditya K. Sanki	2007-2009 (Project Manager, Syngene Internatl. Ltd. Bangalore)
Dr. Diaa Ibrahim	2008 Visiting Scholar, National Organization for Drug Control and Research, Cairo, Gizaa, Egypt

Current/Past Undergraduate and High School Students Mentored

Name	Semesters Mentored
Samuel Adams	(Summer 2007, Fall 2008, Spring 2009)
Marcus Cluse	(Summer 2012§, Spring 2013, Summer 2013§, Fall 2013§)
Jonathon Crowe	(Summer 2008)
Matt Dawson	Fall (2007-Spring 2008*)
Jeffrey Demaray	(Fall 2006 - Summer 2008)
Miranda Dermanelian	(Fall 2016, Spring, Summer 2017§, Fall 2017
TaShayla Johnson	Woodward High School, Toledo, OH (Summer 2006)†
Samuel Johnson	(Summer 2014‡, 2013‡-Fall 2013)
David Juniper	(Spring 2006)
Gina Gass	Central Catholic High School ,Toledo, OH (Summer 2009)†
Mallory Ladd	(Summer 2008)
Nathan Lewis	Mercy College of Northwest Ohio (Summer 2015)
Shuangqianzi "Cocoa" Li	(Spring 2011-Summer 2011)
Kyunghee "Lydia" Lee	(Summer 2011)
Amanda Lodzinski	(Summer 2009-Spring 2011)
David Long	(Spring 2011-Fall 2012§, Spring 2013)
Stephen Markowiak	(Summer 2008)
Shannon McCann	(Summer 2008, Fall 2008)
Heta Mewada	(Fall 2007, Spring 2008, Fall 2008)
Adam Mierzwa	(Summer 2012-Spring 2013)
Minhthu Nguyen	Rogers High School, Toledo, OH (Summer 2007)†
Krzysztof Ozga	Anthony Wayne High School, Toledo, OH (Summer 2008†-Summer 2009§)
Charmee Patel	(Summer 2006)
Kevin Swiatek	(Summer 2008)
Jason Thuener	(Summer 2007 - Spring 2008)
Kevin Trabbic	(Summer 2009-Summer 2010§)
Shen "Ada" Zhang	(Spring 2011-Summer 2011, Spring 2013)

*Supported through the Glenn-Stokes Research Internship Program.

†Supported through ACS Project SEED

§Supported through a University of Toledo USRCAP fellowship

‡ Supported through a University of Toledo FYSRE fellowship

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Courses Taught

CHEM 4980 Advanced Organic Chemistry
CHEM 6400 Advanced Organic Chemistry
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
CHEM 2490 The Systematic Identification of Organic Compounds
CHEM 1120 Chemistry for Health Sciences
CHEM 1100 Chemistry and Society

Service

Academic Achievement, chair, 2006 – Summer 2009
Chair's Advisory Committee, member, Fall 2011 – Spring 2012
Colloquium Committee, member, 2007 – Spring 2008, Fall 2009, chair Fall 2010 – Spring 2011
Curriculum, member, Fall 2009 – Spring 2012
Departmental Personnel Committee, member Fall 2011 – present, chair Fall 2013 – Summer 2014. (Reviewed 4 tenure cases and 2 five year renewals as chair).
Departmental Merit Committee, member Spring 2012 – Summer 2013, chair Fall 2013 – Summer 2014, Fall 2017-Spring 2018
Facilities, member, Fall 2011-present
Graduate Recruitment, member, Fall 2009 – Spring 2012, chair Fall 2014-Summer 2016
Graduate Examinations Committee, member, 2005 – Summer 2009
Graduate Standings Committee, member, Fall 2012 – Summer 2014
Industrial Relations Fall 2016 – Summer 2017
Undergraduate Recruitment, member, Fall 2008 – Summer 2009
Webmaster, Fall 2011 – Summer 2012

Search Committees

Faculty Hire-Department of Chemistry, Organic Search, member 2014-2015
Faculty Hire-Department of Chemistry, BioAnalytical Search, member 2013-2014
Faculty Hire-Department of Chemistry, School of Green Chemistry Search, member 2012-2013
Faculty Hire-Department of Chemistry, School of Green Chemistry/Organic Search, member 2011-2012
Faculty Hire-Department of Chemistry, Visiting Assistant Professor Search, member 2010-2011
Faculty Hire-Department of Chemistry, Organic Search, member 2009-2010
Faculty Hire-Department of Medicinal and Biological Chemistry, Neurobiology Search, member 2008-2009
Faculty Hire-Department of Chemistry, (1) Organic and (1) Analytical Search, member 2007-2008

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Instructional Grants

Wrote and was awarded an \$8,100 ‘Tech Fee Request’ by the College of Natural Sciences & Mathematics Instructional Equipment & Technology Committee

The proposal for Schrodinger Basic Docking Package Token Library: 10 tokens for use with Glide, LigPrep, and Epik. Each Glide job requires 5 tokens, and each LigPrep and Epik job require 1 token. With this option we can run up to 2 simultaneous Glide jobs. 3 year license.

College and University Service

Graduate Faculty Membership. Status: Full Member, Active though 05/01/2020

Served a three year term as an elected Chemistry Department representative on the College of Mathematics and Natural Sciences Starting 08/31/2008

College Curriculum Committee, member, Fall 2010

College Curriculum Committee, chair, Spring 2011

Past Graduate Student Committees		
Xiaoning Li	M.S.	Graduated 2007-2008
Julie Boucau	Ph.D	Graduated 2008-2009
Xiaowei Lu	Ph.D.	Transferred 2008
Gilbert Wasonga	Ph.D.	Transferred 2008
Bo Yang	Ph.D.	Transferred 2008
Luyuan Zhou	M.S.	Transferred 2008
Hui Yang	Ph.D.	Graduated 2010-2011
Indrajeet Sharma	Ph.D.	Graduated 2010-2011
Daniel Lajiness	Ph.D.	Graduated 2010-2011
Andrew Behrle	Ph.D	Graduated 2011-2012
Shu Xu	Ph.D.	Graduated 2011-2012
Tien Ho	Ph.D.	Graduated 2011-2012
Haoyi Yao	M.S.	Graduated 2011-2012
Qin Quing	M.S.	Transferred 2013
Harinath Muvvula	M.S.	Graduated 2012
Kyunghee Lee	M.S.	Graduated 2013
Lorenza Favrot	Ph.D.	Graduated 2014
Vidhi Mishra	Ph.D.	Graduated 2014
Surya Adhikari	Ph.D.	Graduated 2015
Kedar Baryal	Ph.D.	Graduated 2015
Danyan Zhu	Ph.D.	Graduated 2015
Jared Lindenberger	Ph.D.	Graduated 2015
Paniz Rahmani	M.S.	Graduated 2015
Sreejit Menon	Ph.D.	Graduated 2016
Mengchao Shi	Ph.D.	Graduated 2016
Gurdatt Premnauth	MS	Graduated 2016
Hosein Tafazolian	Ph.D.	Graduated 2016
Sharmeen Nishat	Ph.D.	Graduated 2016
Hai Nguyen	Ph.D.	Graduated 2017
Current Graduate Dissertation Advisory Committees		
Miriam Basiouny	Ph.D.	6 th year

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Patel Krishnakant	Ph.D.	5 th year
Cecile Petit	Ph.D.	5 th year
Amarendar Reddy Maddirala	Ph.D.	5 th year
Padam Acharya	Ph.D.	4 th year
Pradheep Eradi	Ph.D.	4 th year
Bishwas Raj Bhetuwal	Ph.D.	3 rd year
Nur-Alom	Ph.D.	3 rd year
Thanuja Sudasinghe Appuhamillage	Ph.D.	2 nd year
Vinod Kumar Gattoji	Ph.D.	2 nd year
Gwendal Loarer	M.S.	2 nd year

Support: Current

Project/Proposal Title: **Understanding trehalose synthesis and utilization in mycobacteria.**

Source of Support: **NIH: Research Project Grant (R01) R01AI105084-01A1**

Total Award Amount Requested: **\$1,500,000.** Total Award Period Covered: **08/20/2013-07/31/2017. No Cost extension until 07/31/2018.** Location of Project: **The University of Toledo**

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

Donald R. Ronning, P.I. (50%); Steven J. Sucheck P.I. (50%); MPI grant

Project/Proposal Title: **Synthesis of Glycopeptide-Based Cancer Antigen Vaccines (renewal)**

Source of Support: **Source of Support: NIH: Academic Research Enhancement Award (AREA) Grants - (R15)**

Total Award Amount Requested: **\$ 450,895.** Total Award Period Covered: **2015– 2018**

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

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

Steven J. Sucheck, Co-investigator (42%); Katherine Wall, P.I. (58%)

Support: Pending

Title	Institute	PI's	Institution	Date Subited	Start-End Date	Mechanism	Status
Synthesis and evaluation of compounds active against M. tuberculosis and non-tuberculous mycobacteria (A)	NIH	Ronning, Donald Robert	UNIVERSITY OF TOLEDO	6/2/2017	4/15/2018-4/14/2023	R01	In Review
		Slayden, Richard A					
		Sucheck, Steven J (PD), Jackson, Mary (co-I)					
Polymer-supported solution-phase synthesis of biomedically relevant oligosaccharides (A)	NIH	Sucheck, Steven (PD)	UNIVERSITY OF TOLEDO	6/5/2017	4/15/2018-4/14/2022	R01	In Review
Synthesis of Glycopeptide-Based Bacterial Antigen Vaccines (A)	NIH	Sucheck, Steven (PD) Wall, Katherine (co-I)	UNIVERSITY OF TOLEDO	6/22/2017	4/15/2018-4/14/2021	R15	In Review

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Completed Research Support:

Project/Proposal: **Synthesis Pseudomonas aeruginosa Lipopolysaccharide Components**

Source of Support: **The University of Toledo, Undergraduate Summer Research and Creative Activity Program (USRCAP)**

Total Award Amount: **\$ 3,000**. Total Award Period Covered: **06/1/2017 – 08/1/2017**.

Steven J. Sucheck (mentor); Miranda Dermanelian (Student)

Project/Proposal Title: **Use of a Bioconjugate vaccine to alter Autoimmunity in Type 1 diabetes**

Source of Support: **University of Toledo: Interdisciplinary Research Initiation**

Total Award Amount: **\$40,000**. Total Award Period Covered: **05/16/2013 – 05/15/2017**

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

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

Marcia McInerney, P.I.(70%); Steven Sucheck (10%), Katherine Wall (10%), Anthony Quinn (10%), co-PIs

Project/Proposal Title: **Synthesis of Glycopeptide-Based Cancer Antigen Vaccines**

Source of Support: NIH: Academic Research Enhancement Award (AREA) Grants - (R15)

Total Award Amount: **\$ 334,649**. Total Award Period Covered: **07/1/2011 – 06/30/2015**.

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

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

Steven J. Sucheck, P.I. (63%); Katherine Wall P.I. (37%); MPI grant

Project/Proposal: **The Synthesis and Application of a Biotin-conjugated Ebselen**

Source of Support: **First Year Summer Research Experience program (FYSRE)**

Total Award Amount: **\$ 3,000**. Total Award Period Covered: **06/1/2014 – 08/1/2014**.

Steven J. Sucheck (mentor); Samuel Johnson (Student)

Project/Proposal Title: **Design, and Synthesis of Mechanism Based Inhibitors Targeting *Mycobacterium tuberculosis* GlgE**

Source of Support: **University of Toledo: URAF-DeArce- Koch**

Total Award Amount: **\$25,000**. Total Award Period Covered: **05/16/2013 – 05/15/2014**

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

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

Project/Proposal: **Cyclopeptide Alkaloid Synthesis**

Source of Support: **The University of Toledo, Undergraduate Summer Research and Creative Activity Program (USRCAP)**

Total Award Amount: **\$ 3,000**. Total Award Period Covered: **06/1/2013 – 08/1/2013**.

Steven J. Sucheck (mentor); Marcus Cluse (Student)

Project/Proposal: **The Synthesis and Application of a Biotin-conjugated Ebselen**

Source of Support: **First Year Summer Research Experience program (FYSRE)**

Total Award Amount: **\$ 3,000**. Total Award Period Covered: **06/1/2013 – 08/1/2013**.

Steven J. Sucheck (mentor); Samuel Johnson (Student)

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Project/Proposal Title: **Conversion of Biomass to Chemical Precursors and Polymers**
Source of Support: **University of Toledo URAF: Interdisciplinary Research Initiation Award**

Total Award Amount: **\$75,000**. Total Award Period Covered: **05/16/11 - 10/15/12**.

Steven J. Sucheck (12%), Mark Mason, Maria Coleman, Saleh Jabarin, Connie Schall, co-P.I.s

Project/Proposal: **The Formation of Glycosyl Ceramide Cores Through the Synthesis of Aziridines and Epoxides**

Source of Support: **The University of Toledo, Undergraduate Summer Research and Creative Activity Program (USRCAP)**

Total Award Amount: **\$ 3,000**. Total Award Period Covered: **06/1/2012 – 08/1/2012**.

Steven J. Sucheck (mentor); Marcus Cluse (Student)

Project/Proposal: **Synthesis of α -L-Rhamnosylceramides**

Source of Support: **The University of Toledo, Undergraduate Summer Research and Creative Activity Program (USRCAP)**

Total Award Amount: **\$ 3,000**. Total Award Period Covered: **06/1/2012 – 08/1/2012**.

Steven J. Sucheck (mentor); David E. Long (Student)

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

Source of Support: **National Science Foundation**

Total Subaward: **\$132,300**. Total Award Period Covered: **9/1/2005 – 8/31/2011**.

Prabir Dutta, P.I. (Ohio State University-CHE 0532250), Steven J. Sucheck (UT Subaward, co-P.I.)

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: **05/01/07-12/30/2009**

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

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

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**

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: **12/6/2006-12/30/2008**

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

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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)**

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

50. Veleti, S. K.; Petit, C.; Ronning, D. R.; Sucheck, S. J. Zwitterionic pyrrolidene-phosphonates: inhibitors of the glycoside hydrolase-like phosphorylase *Streptomyces coelicolor* GlgEI-V279S *Org. Biomol. Chem.*, **2017**, *15*, 3884–3891. doi: 10.1039/C7OB00388A (**Hot Article**) PMID: 28422240. Author Correction: Veleti, S. K.; Petit, C.; Lindenberger, J. J.; Ronning, D. R.; Sucheck, S. J. *Org. Biomol. Chem.*, doi: 10.1039/C7OB90121F
49. Goins, C. M.; Thanna, S.; Dajnowicz, S.; Sucheck, S. J.; Parks, J. M.; Ronning, D. R. Exploring covalent allosteric inhibition of Antigen 85C from *Mycobacterium tuberculosis* by ebselen derivatives. *ACS Infect. Dis.*, **2017**, *3*, 378–387. doi: 10.1021/acsinfecdis.7b00003 PMID: 28285521
48. Thanna, S.; Goins, C. M.; Knudson, S. E.; Slayden, R. A.; Ronning, D. R.; Sucheck S. J. Thermal and photoinduced copper-promoted C–Se bond formation: Synthesis of 2-alkyl-1,2-benzisoselenazol-3(2H)ones and evaluation against *Mycobacterium tuberculosis* *J. J. Org. Chem.*, **2017**, *82*, 3844–3854. doi: 10.1021/acs.joc.7b00440 PMID: 28273423
47. Sucheck, S. J. Domino and intramolecular rearrangement reactions as advanced synthetic methods in glycosciences. Eds Z. J. Witczak and R. Bielski. *Angew. Chem. Int. Ed.* **2016**, *55*, 11337–11338. Book Review. doi: 10.1002/anie.201606642
46. Veleti S. K. and Sucheck, S. J. Glycoconjugate-based inhibitors of *Mycobacterium tuberculosis* GlgE. In Strategies for coupling and decoupling diverse molecular units in the glycosciences; Witczak, Z. J., Bielski, R., Eds.; Wiley: New Jersey, in press

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45. Thanna, S.; Knudson, S. E.; Grezegorzewic, A.; Kapil, S.; Goins, C. M.; Ronning, D. R.; Jackson, M.; Slayden, R. A. Sucheck, S. J. Synthesis and evaluation of new 2-aminothiophenes against *Mycobacterium tuberculosis* *Org. Biomol. Chem.*, **2016**, 14, 6119–6133. doi: 10.1039/C6OB00821F. PMID: 27251120
44. Vartak, A. and Sucheck, S. J. Recent advances in subunit vaccine carriers. *Vaccines* (Basel) **2016**, 4, pii: E12. doi: 10.3390/vaccines4020012. PMID: 27104575
43. Thanna, S. and Sucheck S. J. Targeting the trehalose utilization pathways of *Mycobacterium tuberculosis*. *Med. Chem. Commun.*, **2016**, 7, 69–85. doi: 10.1039/C5MD00376H. PMID: 26941930
42. Karmakar, P.; Lee, K.; Sarkar, S.; Wall, K. A.; Sucheck, S. J. Synthesis of a liposomal MUC1 glycopeptide-based immunotherapeutic and evaluation of the effect of L-rhamnose targeting on cellular immune responses. *Bioconjug Chem.* **2016**, 27, 110–20. PMID: PMC4837471
41. Lindenberger, J. J.; Veleti, S. K.; Wilson, B.; Sucheck, S. J.; Ronning, D. R. Crystal structures of *Mycobacterium tuberculosis* GlgE and complexes with noncovalent inhibitors. *Sci. Reports.* **2015**, 5, 12830. doi: 10.1038/srep12830. PMID: 26245983
40. Giatonde, V. and Sucheck, S. J. Anti-tuberculosis drugs based on carbohydrate derivatives. In *Carbohydrates Chemistry: State-of-the-art and challenges for drug development*; Cipolla, L., Ed.; Imperial College Press: London, Aug 12, 2015. ISBN-10: 1783267194; ISBN-13: 978-1783267194.
39. Thanna, S.; Lindenberger, J. J.; Vishwanath, G.; Ronning, D. R.; Sucheck, S. J. Synthesis of 2-deoxy-2,2-difluoro- α -maltosyl fluoride and its X-ray structure in complex with *Streptomyces coelicolor* GlgEI-V279S. *Org. Biomol. Chem.* **2015**, 13, 7542–7550. doi: 10.1039/c5ob00867k. PMID: 26072729
38. Veleti, S. K.; Lindenberger, J. J.; Thanna, S.; Ronning, D. R.; Sucheck, S. J. Synthesis of a poly-hydroxypyrolidine-based inhibitor of *Mycobacterium tuberculosis* GlgE. *J. Org. Chem.* **2014**, 79, 9444–9450. PMID:25137149 (**Feature Article**)
37. Long, D. E.; Karmakar P.; Wall, K. A.; Sucheck, S. J. Synthesis of α -L-rhamnosyl ceramide and evaluation of its binding with anti-rhamnose antibodies. *Bioorg. Med. Chem.* **2014**, 22, 5279–89. PMID:PMC4172545
36. Bouhall S. K and Sucheck, S. J. In situ preactivation strategies for the expeditious synthesis of oligosaccharides: A review. *J. Carbohydr. Chem.* **2014**, 33, 347–367. PMID: 25328276

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35. Gaitonde, V.; Lee, K.; Kirschbaum, K.; Sucheck S. J. Bio-based bisfuran: synthesis, crystal structure, and low molecular weight amorphous polyester. *Tetrahedron Lett.* **2014**, *55*, 4141–4145. PMID:PMC4096679
34. Veleti, S. K.; Lindenberger, J. J.; Ronning, D. R.; Sucheck S. J. Synthesis of a C-phosphonate mimic of maltose-1-phosphate and inhibition studies on *Mycobacterium tuberculosis* GlgE. *Bioorg. Med. Chem.* **2014**, *22*, 1404–1411. PMID:PMC4023634
33. Sarkar, S.; Sayler, A. C. D.; Wall, K. A.; Sucheck, S. J. Synthesis and immunological evaluation of a MUC1 glycopeptide incorporated into L-rhamnose displaying liposomes. *Bioconjugate Chem.* **2013**, *24*, 363–375. PMID: PMC3623543
32. Ibrahim, D. A.; Boucau, J.; Lajiness, D. H.; Veleti, S. K.; Trabbic, K. R.; Adams, S. S.; Ronning, D. R.; Sucheck S. J. Design, synthesis and X-ray analysis of a glycoconjugate bound to *Mycobacterium tuberculosis* Antigen 85C. *Bioconjugate Chem.* **2012**, *23*, 2403–2416. PMID: PMC3548330
31. Gaitonde, V. and Sucheck S. J. Synthesis of β -Glycosyl amides from N-glycosyl dinitrobenzenesulfonamides *J. Carbohydr. Chem.* **2012**, *31*, 433–450. PMID: PMC3551597
30. Karmakar, P.; Talan, S. R.; Sucheck, S. J. Mixed-phase synthesis of glycopeptides using a N-peptidyl-2,4-dinitrobenzenesulfonamide-thioacid ligation strategy. *Org. Lett.* **2011**, *13*, 5298–5301. PMID: PMC3188410
29. Sarkar, S.; Sucheck S. J. Comparing the use of 2-methylenenaphthyl, 4-methoxybenzyl, 3,4-dimethoxybenzyl and 2,4,6-trimethoxybenzyl as N-H protecting groups for *p*-tolyl 2-acetamido-3,4,6-tri-*O*-acetyl-2-deoxy-1-thio- β -D-glucosides. *Carbohydr. Res.* **2011**, *346*, 393–400.
28. Sarkar, S.; Lombardo, S. A.; Herner, D. N.; Talan, R. S.; Wall, K. A.; Sucheck S. J. Synthesis of a single molecule L-rhamnose-containing three component vaccine and evaluation of antigenicity in the presence of anti L-rhamnose antibodies. *J. Am. Chem. Soc.* **2010**, *132*, 17236–17246.
27. Umesiri, F. E.; Sanki, A. K.; Boucau, J.; Ronning, D. R.; Sucheck, S. J. Recent advances towards the inhibition of mAG and LAM synthesis in *Mycobacterium tuberculosis*. *Med. Res. Rev.* **2010**, *30*, 290–326. doi: 10.1002/med.20190. PMID: 20099253
26. Talan, R. S.; Sanki, A. K.; Sucheck, S. J. Facile synthesis of N-glycosyl amides using a N-glycosyl-2,4-dinitrobenzenesulfonamide and thioacids. *Carbohydr. Res.* **2009**, *344*, 2048–2050.
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conjugates as inhibitors of *Mycobacterium tuberculosis* antigen 85C. 241st ACS National Meeting & Exposition, Anaheim, CA, United States, March 27-31, 2011, CARB-138.

Sarkar, S.; Talan, R. S.; Lombardo, S. A.; Wall K. A.; Sucheck, S. J. Synthesis of a single molecule L-rhamnose-containing three component vaccine and evaluation of antigenicity in the presence of anti L-rhamnose antibodies. 240th ACS National Meeting, Boston, MA, United States, August 22-26, 2010, CARB-17.

Sarkar, S.; Talan, R. S.; Lombardo, S. A.; Wall K. A. and Sucheck, S. J. Synthesis of a single molecule L-rhamnose-containing three component vaccine and evaluation of antigenicity in the presence of anti L-rhamnose antibodies. The 6th Midwest Carbohydrate and Glycobiology Symposium, University of Toledo, Toledo, OH, September 24-25th, 2011.

Gaitonde, V. V.; Sarkar, S.; Lodzinski, A. J.; Sucheck, S. J. Synthesis of N- β -glycosyl dinitrobenzenesulfonamides and their reaction with thioacids for the formation β -glycosyl amides. The 6th Midwest Carbohydrate and Glycobiology Symposium, University of Toledo, Toledo, OH, September 24-25th, 2011.

Sarkar, S. and Sucheck, S. J. Comparing the use of 2-methylenenaphthyl, 4-methoxybenzyl, 3,4-dimethoxybenzyl and 2,4,6-trimethoxybenzyl as N-H protecting groups for *p*-tolyl 3,4,6-*O*-triacetyl-2-acetamido-2-deoxy-1-thio- β -D-glucosides. The 6th Midwest Carbohydrate and Glycobiology Symposium, University of Toledo, Toledo, OH, September 24-25th, 2011.

Ibrahim, D. A.; Trabbic, K. R.; Adams, S. S.; Sanki, A. K.; Boucau, J.; Ronning, D. R.; Sucheck, S. J. Inhibitors of *Mycobacterium tuberculosis* antigen 85. The 6th Midwest Carbohydrate and Glycobiology Symposium, University of Toledo, Toledo, OH, September 24-25th, 2011.

Trabbic, K. R. and Sucheck, S. J. End of summer research presentations. University of Toledo, Toledo, OH, August 5th, 2010.

Ibrahim, D. A.; Adams, S. S.; Sucheck, S. J.; Trabbic, K. R.; Ronning, D. R.; Sanki, A. K.; Boucau, J. Inhibitors of *Mycobacterium tuberculosis* antigen 85. 42nd Central Regional Meeting of the American Chemical Society, Dayton, OH, June 16-19, 2010, CERMACS-307.

Sarkar, S.; Talan, R. S.; Lombardo, S.; Wall K. A.; Sucheck, S. J. Synthesis of a L-rhamnose-containing three component vaccine and evaluation of antigenicity in the presence of anti L-rhamnose antibodies. NIH & FDA Glycosciences Research Day, Bethesda MD, May 24th, 2010.

Talan, R. S. and Sucheck, S. J. Progress towards the ligation of glycopeptides by thioacid-sulfonamide chemistry. NIH & FDA Glycosciences Research Day, Bethesda, MD, May 24th, 2010.

Ibrahim, D.A.; Trabbic, K. R. Adams, S. A.; Sanki, A. K. Boucau, J. Ronning, D. R. Sucheck, S. J. Inhibitors of *Mycobacterium tuberculosis* antigen 85. NIH & FDA Glycosciences Research Day, Bethesda, MD, May 24th, 2010.

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Umesiri, F. E.; Sanki, A. K.; Boucau, J.; Ronning, D. R.; Sucheck, S. J. Exploring carbohydrate-based transition state inhibitors of antigen 85, a potential anti-tubercular target. NIH & FDA Glycosciences Research Day, Bethesda, MD, May 24th, 2010.

Sarkar, S.; Lombardo, S.; Wall K. A.; Sucheck, S. J. Synthesis of a single molecule L-rhamnose-containing three component vaccine and evaluation of antigenicity in the presence of anti L-rhamnose antibodies. The 5th Midwest Carbohydrate and Glycobiology Symposium, Cincinnati, OH, October 2-3, 2009.

Talan, R. S.; Sanki, A. K. Sucheck, S. J. Conjugation of glycan to thioacids using a *N*-glycosyl-2,4-dinitrobenzenesulfonamide donor. The 5th Midwest Carbohydrate and Glycobiology Symposium, Cincinnati, OH, October 2-3, 2009.

Umesiri, F. E.; Sanki, A. K.; Boucau, J.; Ronning, D. R.; Sucheck, S. J. Synthesis and biological evaluation of carbohydrate-based 1,2-dicarbonyl compounds as inhibitors of *Mycobacterium tuberculosis* antigen 85C. The 5th Midwest Carbohydrate and Glycobiology Symposium, Cincinnati, OH, October 2-3, 2009.

Sanki, A. K.; Sucheck, S. J.; Ronning, D. R.; Boucau, J.; Umesiri, F. E.; Ibrahim, D. A. Inhibitors of antigen 85 from *Mycobacterium tuberculosis*. 239th ACS National Meeting, San Francisco, CA, United States, March 21-25, 2010, ORGN-118.

Sucheck, Steven J. Glycoconjugates: Design, synthesis and evaluation. 239th ACS National Meeting, San Francisco, CA, United States, March 21-25, 2010, CARB-84.

Ozga, K.; Sucheck, S. J. Controlling the diastereoselectivity of glycosylation reactions. 2009 REEL Student Symposium Wright State University, Dayton, OH, October 10th, 2009.

Talan, R. S.; Sanki, A. K.; Sucheck, S. J. Facile synthesis of *N*-glycosyl amides using *N*-glycosyl-2,4-dinitrobenzenesulfonamide and thioacids. 42nd Annual Mid-Atlantic Graduate Student Symposium (MAGSS) in Medicinal Chemistry, University of Toledo, Toledo, OH, June 21-23, 2009.

Umesiri, F.; Sucheck, S. J. Synthesis of transition state inhibitors of antigen 85. 42nd Annual Mid-Atlantic Graduate Student Symposium (MAGSS) in Medicinal Chemistry, University of Toledo, Toledo, OH, June 21-23, 2009

Sucheck, S. J.; Sucheck, T. J. The development of a research-based laboratory module for the undergraduate organic chemistry laboratory. Central Regional Meeting of the American Chemical Society, Cleveland, OH, United States, May 20-23, 2009, CRM-500.

Sucheck, S. J. Synthesis of functionalized carbohydrates and their conjugates. Central Regional Meeting of the American Chemical Society, Cleveland, OH, United States, May 20-23, 2009, CRM-487.

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Bruneau, E. A.; Feirstine, B. N.; Monroe, J. J.; Mucci, J. F.; Oliver, C. M.; Sy, N.; Talan, R. S.; Sucheck, S. J. exploring halide catalysts in a microwave-accelerated cycloaddition between epoxides and isocyanates. Central Regional Meeting of the American Chemical Society, Cleveland, OH, United States, May 20-23, 2009, CRM-432.

Arumugasamy, N.; Kraemer, S. K.; Lodzinski, A. J.; Newmyer, A. N.; Talan, R. S.; Sucheck, Steven J. Microwave-accelerated halide-catalyzed cycloaddition between glycidyl ethers and isocyanates. Central Regional Meeting of the American Chemical Society, Cleveland, OH, United States, May 20-23, 2009, CRM-431.

Sanki, A. K.; Umesiri, F. E.; Boucau, J.; Ronning, D. R.; Sucheck, S. J. Synthesis of transition state inhibitors of antigen 85. Central Regional Meeting of the American Chemical Society, Cleveland, OH, United States, May 20-23, 2009, CRM-290.

Talan, R. S.; Sanki, A. K.; Sucheck, S. J. decarboxylative condensation between O18-labeled phenylpyruvic acid and *N*-hydroxyphenethylamine affords O16-amide products. Central Regional Meeting of the American Chemical Society, Cleveland, OH, United States, May 20-23, 2009, CRM-289.

Ibrahim, D. A.; Adams, S. S.; Sanki, A. K. Sucheck, S. J. Design, synthesis and biological evaluation of arabinose-based compound as inhibitor for antigen 85C. Posters at the Capitol: Undergraduate Research in Northwest Ohio, Columbus, OH, April 2nd, 2009.

Adams, S. S.; Sucheck, S. J. Design, synthesis and preliminary of inhibitors of antigen 85C, a crucial enzyme involved in biosynthesis of mycobacterial cell wall. Department of Biological Sciences, 14th Annual Undergraduate Research Symposium, University of Toledo, Toledo, OH March 28th, 2009.

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 3rd, 2008.

Crowe, J. W.; Ladd, M. P.; McCann, S. C.; Mull, D. L.; Casarotto, V.; Lind, C.; 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 3rd, 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 3rd, 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 1st, 2008.

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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. 1st, 2008.

Umesiri, F. and Sucheck, S. J. Synthesis of transition state inhibitors of antigen 85. 29th Annual Sigma Xi Student Research Symposium, Toledo, OH, Nov 1st, 2008.

Lombardo, S.; Talan, R. S.; Sucheck, S. J.; Wall, K. A. The development of monoclonal antibodies against a tumor associated carbohydrate antigen. 29th Annual Sigma Xi Student Research Symposium, Toledo, OH, Nov 1st, 2008.

Adams, S. S. and Sucheck, S. J. Synthesis of methyl 5-*S*-alkyl-5-thio-*D*-arabinofuranosides and evaluation of their antimycobacterial activity. 29th Annual Sigma Xi Student Research Symposium, Toledo, OH, Nov 1st, 2008.

Talan, R. S.; Sanki, A. K.; Sucheck, S. J. Synthesis of small glycopeptides by decarboxylative condensation and insight into the reaction mechanism. 29th Annual Sigma Xi Student Research Symposium, Toledo, OH, Nov 1st, 2008.

Sucheck, S. J. Carbohydrate-Based Inhibitors of Antigen 85: A potential target for treating *Mycobacterium tuberculosis*. The 4th Midwest Carbohydrate and Glycobiology Symposium, Cleveland, OH, Oct 3-4, 2008.

Sanki, A. K.; Talan, R. S.; Sucheck, S. J. Synthesis of small glycopeptides by decarboxylative condensation and insight into the reaction mechanism. The 4th Midwest Carbohydrate and Glycobiology Symposium, Cleveland, OH, Oct 3-4, 2008.

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 4th Midwest Carbohydrate and Glycobiology Symposium, Cleveland, OH, Oct 3-4, 2008.

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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 4th Midwest Carbohydrate and Glycobiology Symposium, Cleveland, OH, Oct 3-4, 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, A. K.; 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. 236th ACS National Meeting, Philadelphia, PA, United States, Aug 17-21, 2008, CARB-045.

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Talan, R. S.; Sanki, A. K.; Sucheck, S. J. Decarboxylative condensation between 18O-labeled α -ketoacids and hydroxylamines. 236th ACS National Meeting, Philadelphia, PA, United States, Aug 17-21, 2008, CARB-044.

Suceck, Steven J. Carbohydrate-based inhibitors of antigen 85: A potential target for treating *Mycobacterium tuberculosis*. 236th ACS National Meeting, Philadelphia, PA, United States, Aug 17-21, 2008, CARB-010.

Suceck, S. J.; Anderson, P.; Clark, T.; Spinney, R. Taylor, R. REEL innovations in organic chemistry courses: A multi-institutional perspective. 20th Biennial Conference on Chemical Education Indiana University, Bloomington, IN, United States, July 27-31, 2008, P722.

Suceck, S. J. Research in the teaching lab: A microwave accelerated synthesis of oxazolidin-2-ones. 40th Central Regional Meeting of the American Chemical Society, Columbus, OH, United States, June 10-14, 2008, CRM-469.

Demaray, J. A.; Thuener, J. E.; Dawson, M. N.; Sucheck, S. J. Synthesis of 1,4-disubstituted 1,2,3-triazole-oxazolidin-2-ones via a three-component reaction. 40th Central Regional Meeting of the American Chemical Society, Columbus, OH, United States, June 10-14, 2008, CRM-490.

Crowe, J. W.; Ladd, M. P.; McCann, S. C.; Mull, D. L.; Casarotto, Vi.; Lind, C.; Sucheck, S. J. To nuke or not to nuke: The joys and pitfalls of microwaves. 40th Central Regional Meeting of the American Chemical Society, Columbus, OH, United States, June 10-14, 2008, CRM-489.

Sanki, A. K.; Talan, R. S.; Sucheck, S. J. Effect of amino acid side chain size on peptide formation by decarboxylative condensation. 40th 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. 235th ACS National Meeting, New Orleans, LA, United States, April 6-10, 2008, SOCED-005.

Suceck, S. J. Glycopeptide synthesis by decarboxylative condensation. 235th ACS National Meeting, New Orleans, LA, United States, April 6-10, 2008, CARB-115.

Sanki, A. K.; Srivastava, P.; Adams, S. S.; Boucau, J.; Ronning, D. R.; Sucheck, S. J. Synthesis of methyl 5-deoxy-5-S-thioalkyl-D-arabinofuranosides and evaluation of their antimycobacterial activity. 235th ACS National Meeting, New Orleans, LA, United States, April 6-10, 2008, CARB-091.

Sanki, A. K.; Talan, R. S.; Sucheck, S. J. Glycopeptide synthesis by traceless decarboxylative condensation. 235th ACS National Meeting, New Orleans, LA, United States, April 6-10, 2008, CARB-089.

Boucau, J.; Sanki, A. K.; Sucheck, S. J.; Ronning, D. R. Development of a high-throughput enzymatic assay for *Mycobacterium tuberculosis* antigen 85C. 235th ACS National Meeting, New Orleans, LA, United States, April 6-10, 2008, BIOL-058.

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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 10th, 2007.

Sanki, A. K.; Srivastava, P. The synthesis of methyl-5-deoxy-5-S-thioalkyl-D-arabinofuranosides and evaluation of their antimycobacterial activity. 3rd Midwestern Carbohydrate & Glycobiology Symposium, Columbus, OH, Oct 5-6, 2007.

Sanki, A. K.; Talan, R. S. Glycopeptide synthesis by traceless decarboxylative condensation. 3rd Midwestern Carbohydrate & Glycobiology Symposium, Columbus, OH, Oct 5-6, 2007.

Boucau, J.; Sanki, A. K.; Sucheck, S. J.; Ronning D. R. Development of a high-throughput glycoconjugate-based acyltransferase assay. 3rd Midwestern Carbohydrate & Glycobiology Symposium, Columbus, OH, Oct 5-6, 2007.

Sucheck, S. J. Synthesis of glycosylamino acid-containing tripeptides by decarboxylative ligation. 3rd Midwestern Carbohydrate & Glycobiology Symposium, Oct 5-6, 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 21-22, 2007.

Talan, R. S.; Sanki, A. K.; Sucheck S. J. Synthesis of glycopeptides by decarboxylative ligation. 28th Annual Sigma Xi Student Research Symposium, Toledo, OH, Sept 15th, 2007.

Thuener, J. E.; Demaray, J. A.; Dawson M. N.; The synthesis of 1,2,3-triazole-containing oxazolidinones by a three-component reaction. 28th Annual Sigma Xi Student Research Symposium, Toledo, OH, Sept 15th, 2007.

Dawson M. N.; Demaray, J. A.; Thuener, J. E.; Adams, S. S.; Sucheck, S. 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.; Sucheck, 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. 39th Central Regional Meeting of the American Chemical Society, Covington, KY, United States, May 20-23, 2007, CRM-075.

Sucheck, T. J.; Sucheck, S. J. The preparation of 1,2,3-triazole oxazolidinone derivatives: A research oriented multistep parallel synthesis module for the organic chemistry laboratory. 39th 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.; Sucheck, S. J. Synthesis of glycosylamino acid containing dipeptides possessing a C-terminal α -ketoacid. 233rd American Chemical Society Meeting, National Meeting, March 25–29, 2007, Paper #40.

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Zheng, H.; Talan, R.; Srivastava, P.; Sucheck, S. J. Progress toward the synthesis of intermediates useful for traceless peptide ligations. 2nd Midwestern Carbohydrate Conference, Sept 29-30, 2006.

Suceck, S. J. Carbohydrates in drug discovery. 1st Midwestern Carbohydrate Conference, Sept 30-Oct 1, 2005.

Suceck, S. J. A facile and efficient synthesis of sialyl Lewis^a hexasacchide blood group antigen. 3rd Annual Conference. Glycomics and Carbohydrates in Drug Development, March 21-22, 2005.

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.; Hwang, S. B.; New aminoglycosides by OPopSTM glycosylation. 43rd Annual Interscience Conference on Antimicrobial Agents and Chemotherapy, Sept 14-17, 2003, Paper #3926.

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. The synthesis and biological activity of multivalent aminoglycoside analogues of OPT-11. 42nd Annual Interscience Conference on Antimicrobial Agents and Chemotherapy Sept 27-30, 2002, Paper #F-1687.

Suceck, S. J.; Greenberg, W. A.; Tolbert, T., Wong, C.-H. Design of small molecules that recognize RNA: An approach for the development of potential antitumor therapeutics based on aminoglycosides. 3rd Annual Scripps Research Institute Society of Fellows Fall Symposium, Nov 2nd, 1999.

Suceck, S. J.; Ellena, J. F.; Hecht, S. M. Characterization of Zn(II).deglycobleomycin A₂ and interaction with d(CGCATGCG)₂. A binding model based on nmr experiments and molecular dynamics calculations. 214th American Chemical Society National Meeting, Sept. 7-11, 1997, Paper #301.

Cramer, S.; Sucheck, S. J.; Smith, D. A. Synthesis and ring opening reactions of 2, 6-piperazines. American Chemical Society Joint 24th Central Regional Meeting, May 26-29, 1992.

Suceck, S. J.; Skrzypczak-Jankun, E.; Smith, D. A. A comparative x-ray crystallographic study of hydrogen bonding in 2,6-piperazinediones. American Chemical Society Joint 24th Central Regional Meeting, May 26-29, 1992.

Suceck, S. J.; Finnen, D. C.; Pinkerton, A. A.; Skrzypczak-Jankun, E.; Vijayakumar, S.; Smith, D. A. Coordination complexes of cobalt, lead and mercury with nitrilotriacetamide. American Crystallographic Association National Meeting, July 21-26, 1991, Abstract #PJ17.

Suceck, S. J.; Finnen, D. C.; Pinkerton, A. A.; Smith, D. A. Coordination complexes of cobalt and lead with nitrilotriacetamide. American Chemical Society Joint 23rd Central 124th Great Lakes Regional Meeting, May 29-31, 1991, Abstract #223.

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News Features Covering Work

“Improving Vaccines Aimed at Cancer.” *Chemical & Engineering News*, 2011, 89(22), 53-57.

“Hot Articles.” Design, synthesis and biological evaluation of sugar-derived esters, α -ketoesters and α -ketoamides as inhibitors for *Mycobacterium tuberculosis* antigen 85C. <http://www.rsc.org/Publishing/Journals/cb/HotArticles.asp> 2010.

“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.

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

“New Approach to Antibiotic Resistance.” *EurekAlert*, June 8th, 2000.

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

Invited Lectures

“Synthesis of Natural and Designed Compounds with Antibacterial and Immunological Activities” University of South Florida, Tampa, FL, March 28th, 2017.

“Synthesis of natural and designed compounds with antibacterial and immunological activities” 4th Asian Chemical Biology Conference, Nov 28th – Dec 1st, Kaohsiung, Taiwan, International Invited Oral Presentation.

“Synthesis of Carbohydrate-Containing Compounds with Antibacterial and Immunological Activities” Colorado State University, Dept. of Cell and Molecular Biology, Fort Collins, CO, October 20th, 2016.

“Synthesis of Natural and Designed Compounds with Antibacterial and Immunological Activities” Northeastern University, Boston, MA, September 21st, 2016.

“Synthesis of Carbohydrate-Containing Compounds with Antibacterial and Immunological Activities” Georgia State University, Atlanta, GA, September 17th, 2016.

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“Synthesis of Carbohydrate-Containing Compounds with Antibacterial and Immunological Activities” Central Florida University, Burnett School of Biomedical Sciences, Orlando, FL, April 1st, 2016.

“Synthesis of Carbohydrate-Containing Compounds with Antibacterial and Immunological Activities” Central Michigan University, Department of Chemistry, Mount Pleasant, MI, Feb 15th, 2016.

“Antitubercular Drugs Based on Carbohydrate Derivatives” Northeastern University, Department of Chemistry and Chemical Biology, Boston, MA, Aug 21th, 2015.

“Antitubercular Drugs Based on Carbohydrate Derivatives” University of Arkansas, Department of Chemistry and Biochemistry, Fayetteville, AR, Sept 29th, 2014.

“Antitubercular Drugs Based on Carbohydrate Derivatives” University of Iowa, Collage of Pharmacy, Iowa City, IA, Nov 19th, 2013.

“Evaluation of Antigenicity of an L-Rhamnose Displaying MUC1-Based Anti-cancer Vaccine in Presence of Anti-L-Rhamnose Antibodies” National Institutes of Health, NIDDK - Bethesda, MD, Dec 14th 2012.

“Glycoconjuate-based Inhibitors of Essential Enzymes in *Mycobacterium tuberculosis*” National Institutes of Health, NIDDK - Bethesda, MD, Dec 13th 2012.

“Improving Vaccines with Natural Antibodies”. The 8th Midwest Carbohydrate and Glycobiology Symposium, Wayne State University, Detroit, MI, October 6-7th, 2012, IT2.

“Glycoconjugates: Design, Synthesis and Function” Southern Illinois University - St. Louis, Department of Chemistry, Oct 18th, 2011.

“Glycoconjugates: Design, Synthesis and Function” University of Missouri - St. Louis, Department of Chemistry, Oct 17th, 2011.

“Glycoconjugates: Design, Synthesis and Function” Otterbein University - Westerville, OH, Department of Chemistry, Oct 26th, 2010.

Sucheck, S. J.; Wall K. A. “Enhancing Immunogenicity of TACA-based Cancer Vaccines” 241st ACS National Meeting & Exposition, Anaheim, CA, United States, March 27-31, 2011, CARB-138.

“Glycoconjugates: Design, Synthesis and Function” Michigan State University, Department of Chemistry, March 31st, 2010.

“Glycoconjugates: Design, Synthesis and Evaluation” Emerging Investigators in Glycoscience Symposium, 239th ACS National Meeting, San Francisco, CA, United States, March 21-25, 2010.

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“The Sticky world of Glycoconjugates: Design, Synthesis and Function” West Virginia University, March 10th, 2010.

“The Sticky world of Glycoconjugates: Design, Synthesis and Function” Wayne State University, Department of Chemistry, March 3rd, 2010.

“The Sticky world of Glycoconjugates: Design, Synthesis and Function” University of Tennessee, Department of Chemistry, Feb 18th, 2010.

“The Sticky world of Glycoconjugates: Design, Synthesis and Function” University of Cincinnati, Department of Chemistry, Feb 5th, 2010.

“Ligation of Glycopeptides by Decarboxylative Condensation” Cleveland State University, Department of Chemistry, Feb 27th, 2009.

“Synthesis of Carbohydrate-Containing Compounds with Antibacterial and Immunological Activities” University of Toledo Medical Center, Department of Microbiology and Immunology, Feb 25th, 2009.

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

“Synthesis of Glycopeptides by Decarboxylative Ligation” Youngstown State University, Department of Chemistry, Oct 5th, 2007

“Synthesis of Glycopeptides by Decarboxylative Ligation” Central Michigan University, Department of Chemistry, Oct 29th, 2007

“Synthesis of Glycopeptides by Decarboxylative Ligation” Indiana University Purdue University Fort Wayne, Department of Chemistry, Nov 16th, 2007.

“Carbohydrates in Drug Discovery” University of Toledo, Department of Medicinal Chemistry, Feb 20th, 2007.

“Synthetic Investigations of the Role of Carbohydrates in Natural Products” Andrew’s University, Department of Chemistry, Oct 12th, 2006.

Memberships

2006-present The American Association for the Advancement of Science: since 2006

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

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Professional Activities

Consultant: MPEX Pharmaceuticals, Inc. (2006-2011)

Ad hoc reviewer for the following journals (2005-present): ACS Applied Materials & Interfaces, ACS Sustainable Chemistry & Engineering, ACS Symposium Book Series, Australian Journal of Chemistry, Bioconjugate Chemistry, Cancer Immunology Immunotherapy, Carbohydrate Research, ChemComm, Chemical Biology & Drug Design, Bioorganic & Medicinal Chemistry, Bioorganic & Medicinal Chemistry Letters, European Journal of Medicinal Chemistry, Heteroatom Chemistry, Journal of Applied Microbiology and Biotechnology, Journal of the American Chemical Society, Journal of Carbohydrate Chemistry, Journal of Combinatorial Chemistry, Journal of International Research in Medical and Pharmaceutical Sciences, Journal of Organic Chemistry, Letters in Drug Design & Discovery, Medicinal Chemistry Communications, Medicinal Research Reviews, Molecules, Organic & Biomolecular Chemistry, Organic Letters, The Protein Journal, SYNLETT, Tetrahedron Letters. (10 articles per year reviewed)

Ad hoc reviewer for the following grant agencies (2005-present): American Chemical Society (Petroleum Research Fund), European Research Area in Chemistry: ERA-Chemistry Open Initiative, The National Science Foundation, Swiss National Science Foundation, Health Research Board of Ireland, The Wellcome Trust, U.S. Civilian Research and Development Foundation.

Organization and Chairing of Professional Meetings

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March 18-22, 2018 New Orleans, Louisiana

Program:

Symposium Title	Symposium Type (Oral/Poster)	Submission Type (Contributed/Invited)	Symposium Organizer	Symposium Organizer #2
Wolfrom Award	Oral	Invited	Eriks Rozners	
Isbell Award	Oral	Invited	Eriks Rozners	
Gin New Investigator Award	Oral	Invited	Eriks Rozners	
Horton Award	Oral	Invited	Eriks Rozners	
Emerging Young Investigator Symposium	Oral	Contributed	Kamil Godula	
Advances in Molecular Recognition of Double-helical DNA and RNA	Oral	Contributed	Dev Arya	Eriks Rozners
Recent Advances in Catalytic Carbohydrate Reaction Development	Oral	Contributed	Hien Nguyen	Weiping Tang
General Posters	Poster	Contributed	Steven Sucheck	

GRC on Carbohydrates, Mount Snow Resort West Dover, VT, June 25-30, 2017. Carbohydrate Vaccines, Discussion Leaders: Xuefei Huang (Michigan State University, USA) and Steve Sucheck (University of Toledo, USA)

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The 12th Midwest Carbohydrate and Glycobiology Symposium, Central Michigan University, Mt. Pleasant, MI, October 14-15, 2016, Oral Presentation. Session Chair.

251st ACS National Meeting & Exposition, San Diego, CA, United States, March 13-17, 2016.

STEVEN J. SUCHECK, Ph.D.

Glycosylases: Inhibition and Therapeutic Applications: Organizers: Donald R. Ronning, Susanne Striegler and Steven J. Sucheck. Session Chair: Steven J. Sucheck.

The 11th Midwest Carbohydrate and Glycobiology Symposium, Cleveland State University, Cleveland, OH, October 23-24, 2015. Session Chair.

The 10th Midwest Carbohydrate and Glycobiology Symposium, University of Michigan Ann Arbor, MI, October 17–8, 2014. Session Chair.

248th ACS National Meeting & Exposition, San Francisco, CA, United States, Aug 10–14th, 2014. Current Topics in Glycoscience. Session Chair.

The 9th Midwest Carbohydrate and Glycobiology Symposium, University of Toledo, Toledo OH, October 11–2, 2013. Co-Organizer.

The 8th Midwest Carbohydrate and Glycobiology Symposium, Wayne State University, Detroit, MI, October 6-7th, 2012. Session Chair.

The 7th Midwest Carbohydrate and Glycobiology Symposium, East Lansing, MI, September 16–17th, 2011. Awards co-chair.

241th ACS National Meeting & Exposition, Anaheim, CA, United States, March 27–30, 2011. Carbohydrate-Based Immunotherapeutics: Organizers: Peter R. Andreana and Steven J. Sucheck.

The 6th Midwest Carbohydrate and Glycobiology Symposium, Toledo OH, September 24–25, 2010. Organizer.

The 5th Midwest Carbohydrate and Glycobiology Symposium, Cincinnati OH, October 2–3, 2009. Session Chair & Awards Chair.

41th Central Regional Meeting of the American Chemical Society, Cleveland, OH, United States, June 10-14, 2009

- Organic Chemistry (1); Organizer: Steven J. Sucheck; Presider: Steven J. Sucheck
- Organic Chemistry (2); Organizer: Steven J. Sucheck; Presider: Michael W. Justik
- Organic Chemistry: New Synthetic Methodologies (1); Organizers: Suri S. Iyer and Steven J. Sucheck; Presider: Suri S. Iyer
- Organic Chemistry: New Synthetic Methodologies (2); Organizers: Suri S. Iyer and Steven J. Sucheck; Presider: Suri S. Iyer
- Organic Chemistry: Nucleic Acids, Peptides, and Glycans (1); Organizers: Xue-long Sun and Steven J. Sucheck; Presiders: Jun J. Hu and Xue-long Sun
- Organic Chemistry: Nucleic Acids, Peptides, and Glycans (2); Organizers: Xue-long Sun and Steven J. Sucheck; Presiders: Jun J. Hu and Steven J. Sucheck
- Organic Chemistry: Cope Scholar Symposium; Organizers: Kana Yamamoto and Steven J. Sucheck; Presider: Kana Yamamoto

STEVEN J. SUCHECK, Ph.D.

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

2nd Midwestern Carbohydrate Conference, Sept 29-30, 2006. Session Chair

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

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