

STEVEN J. SUCHECK, Ph.D.

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Education, Academic and Industrial Positions

2022-Present	Chair ACS CARB division https://acscarb.org/ , Chair Elect (2020-2021)
2020-Present	The University of Toledo, Center for Drug Design and Development (CD3) Advisory Board Member https://www.utoledo.edu/pharmacy/centers/centerForDrug/
2020-Present	Member of the US Advisory Committee for the International Carbohydrate Organization https://ico.chemistry.unimelb.edu.au/
2018-2020	Executive Secretary of the ACS CARB division and Program Chair
2015- Present	Professor of Chemistry, University of Toledo
2022- Present	Associate Editor for Frontiers in Chemical Biology
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

Synthesis and study of carbohydrates, glycoconjugates, glycopeptides, enzyme inhibitors, vaccines, and biologically active natural products.

Honors and Awards

2022	Program Review expert for Cleveland State University
2018	Kohler International Travel Award, University of Toledo
2016,2017	ad hoc member of the ACS CARB division Awards Committee
2015	Kohler International Travel Award, University of Toledo
2014	Discoverer Award (Ohio Cancer Research Associates)
1998-2000	Postdoctoral National Service Award (National Institute of Health)

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- 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:

- 08/16/2022 ZAI1 SB-I (S1) Investigator Initiated Program Project Applications (P01)
06/23/2022 Drug Discovery and Mechanisms of Antimicrobial Resistance Study Section (DDR)
Applied Immunology and Disease Control Integrated Review Group
11/04/2021 Drug Discovery and Mechanisms of Antimicrobial Resistance Study Section (DDR)
Applied Immunology and Disease Control Integrated Review Group
2021/05 VMD Vaccines Against Microbial Diseases Study Section
2021/01 ZRG1-BCMB-G-10 Biological Chemistry and Macromolecular Biophysics Member Conflict
2020 Austrian Science Fund (FWF) - FWF Der Wissenschaftsfonds
2020/10 ZRG1 IDM-Y-82 S Exploration of Antimicrobial Therapeutics and Resistance
2020/05 ZRG1-IDM-Y-82 Exploration of Antimicrobial Therapeutics and Resistance
2020/01 ZRG1 IDM-Y-82 S Exploration of Antimicrobial Therapeutics and Resistance
FY19 Peer Review Medical Research Program (PRMRP); Congressionally Directed Medical Research Programs (CDMRP); Infectious Disease
2019/10 ZRG1 IDM Y-83 S Exploration of Antimicrobial Therapeutics and Resistance
2019/10 ZRG1-IDM-T-07 S Exploration of Antimicrobial Therapeutics and Resistance
2019/10 ZRG1-IDM-Y-82 S Exploration of Antimicrobial Therapeutics and Resistance
2019/05 ZRG1 IDM-Y-82 S Exploration of Antimicrobial Therapeutics and Resistance
2019/01 ZRG1 IDM-S-02 M Member Conflict: Topics in drug discovery and clinical field studies
2019/01 ZRG1-IDM-T-07 S Exploration of Antimicrobial Therapeutics and Resistance
2019/01 ZRG1-IDM-Y-82 S Exploration of Antimicrobial Therapeutics and Resistance
2018/10 ZRG1 BCMB-H (02) M Biological Chemistry and Macromolecular Biophysics Member Conflict
2018/05 ZRG1 IDM S (02) Special Emphasis Panel
2018/01 ZRG1 BCMB-G (10) B SBIR/STTR Applications in Drug Discovery and Development
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

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Current Students

Radhika Thanvi	(Ph.D. in progress 4 th year)
Saniya S. Khan	(Ph.D. in progress 4 th year)
Umesha Kumbalathara Arachchige Dona	(Ph.D. in progress 1 st year)
Uzoamaka 'Clara' Bokolo	(Ph.D. in progress 1 st year)
Babatunde 'Samuel' Obadawo	(Ph.D. in progress 1 st year)
Chloe Olayinka Sebilleau	(Ph.D. in progress 1 st year)

Past Students and Postdocs

Dr. Samir Gosh	2022	Postdoctoral Associate, Binghamton University Department of Chemistry
Dr. Alexander Landgraf	Ph.D. 2021	Post Doc., Indiana University School of Medicine (IN)
Dr. Nur-E Alom	2020-2021	Assistant Professor, Chemistry, Dhaka University of Engineering & Technology, Gazipur, Bangladesh
Dr. Anshupriya Si	2019-2021	Guest Faculty, University of Delhi, India
Mr. Grace Irumva	M.S. 2019	RTI Laboratories (MI); University of Montreal, PhD Candidate.
Dr. Sunayana Kapil	Ph.D.2019	Sr. Scientist, QuantaBioDesign (OH)
Dr. Abhishek Vartak	Ph.D.2019	Pfizer (Pearl River, NY). Sr. Scientist, Early Bioprocess, Vaccine Development Division; Post Doc., Memorial Sloan Kettering Cancer Center (NY)
Ms. Fatma Salem	2017	Visiting Scholar, Port Said University
Dr. Sandeep Thanna	Ph.D. 2017	Post Doc., University of Pennsylvania Medical School; Current: Scientist, Medicinal Chemist Fox Chase Chemical Diversity Center Inc. (PA)
Dr. Sri Kumar Veleti	Ph.D. 2015	Post Doc., National Institutes of Health, NIAID, Current: Process Engineer, Intel Corporation (OR)
Ms. Samantha (Bouhall) Goodwin	M.S. 2015	Research and Development Chemist, Anatrice (OH); ISO QC Associate Scientist II, Caymen Chemical (MI)
Dr. Partha Karmakar	Ph.D. 2015	Post Doc., Washington University School of Medicine St. Louis (MO) Current: Staff Scientist Washington University School of Medicine St. Louis (MO)
Dr. Vishwanath Gaitonde	Ph.D. 2015	Sr. Research Scientist, Cambrex (NC)
Dr. Sourav Sarkar	Ph.D. 2012	Post Doc., U. of Georgia; Post Doc., Lehigh, University; Sr. Scientist; Hudson Biopharma Inc. (NJ); Sr. Scientist, Abzena (MA); Sr. Scientist, Cygnal Therapeutics (MA)
Prof. Francis Umesiri	Ph.D. 2010	Assistant Professor, John Brown University Current: Associate Professor, Wheaton College (IL)
Dr. Rommel S. Talan	Ph.D. 2010	Research Scientist, Peptides International (KY)
Mr. Parijat Srivastava	M.S. 2009	Laboratory Supervisor, St. John's University (NY)
Dr. Aditya K. Sanki	2007-2009	Senior Principal Investigator, Syngen Internatl. Ltd. Bengaluru, Karnataka, India,
Dr. Diaa Ibrahim	2008	Visiting Scholar, National Organization for Drug

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Control and Research, Cairo, Gizaa, Egypt;
Assistant Professor at Jazan University

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
Erin Eickholt	Fall 2019-Spring 2020
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) [†]
Brandi Michelle Kaskel	Fall 2018-Spring 2019
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)
Rudhasri Lakkuru	(Fall 2020)
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)
Kyle Myer	(Spring 2018-Summer 2018§)
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)
Natalie Schulte	(Spring 2018-Summer 2018§ Spring 2019 Summer 2019§ Fall 2019)
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)
Michaelangelo Zullo	(Summer 2018§)

*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 – Spring 2019, chair Fall 2013– Summer 2014, Fall 2021 – Summer 2022. (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 2019, Fall 2020-Spring 2021, 2021-22
Facilities, member, Fall 2019- Fall 2021
Graduate Recruitment, member, Fall 2009 – Spring 2012, chair Fall 2014-Summer 2016, Fall 2017 – Spring 2018, Summer 2021 – Spring 2023
Graduate Examinations Committee, member, 2005 – Summer 2009
Graduate Standings Committee, member, Fall 2012 – Summer 2014, Chair Summer 2021 – Summer 2023
Industrial Relations Fall 2016 – Summer 2020
Library Representative Fall 2020 – Fall 2022
Undergraduate Recruitment, member, Fall 2008 – Summer 2009
Webmaster, Fall 2011 – Summer 2012
Organic Chemistry Coordinator and Organic Transfer Agreement Coordinator, Fall 2018-Summer 2019
Safety Committee, Member Fall 2019 – Fall 2021
Director of Graduate Studies, Summer 2021 – Summer 2023

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

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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

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

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

College of Natural Science and Mathematics Committee on Academic Personnel CCAP, member 2019-2020, 2022-2023

The University of Toledo, College of Graduate Studies, Graduate Council, member 2019-2021

Currently Serving on The University of Toledo, College of Graduate Studies, Graduate Council, Bylaws committee 2019-2023

The University of Toledo, Faculty Senate, elected Senator 2022-2023, member of the Elections Committee 2022-2023

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

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Harinath Muvvala	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
Gurdar Premnauth	MS	Graduated 2016
Hosein Tafazolian	Ph.D.	Graduated 2016
Sharmeen Nishat	Ph.D.	Graduated 2016
Hai Nguyen	Ph.D.	Graduated 2017
Miriam Basiouny	Ph.D.	Graduated 2018
Patel Krishnakant	Ph.D.	Graduated 2018
Cecile Petit	Ph.D.	Graduated 2018
Amarendar Reddy Maddirala	Ph.D.	Graduated 2018
Padam Acharya	Ph.D.	Graduated 2019
Pradheep Eradi	Ph.D.	Graduated 2019
Hooain Farzana	Ph.D.	Graduated 2019
Gwendal Loarer	M.S.	Graduated 2019
Philemon Ngoje	PhD.	Graduated 2020 Wayne State University
Bishwas Raj Bhetuwal	Ph.D.	Graduated 2020
Nur-Alom	Ph.D.	Graduated 2020
Current Graduate Dissertation Advisory Committees or Dissertation Examination Committee Member		
Thanuja Sudasinghe Appuhamillage	Ph.D.	Graduated 2020
Vinod Kumar Gattoji	Ph.D.	6 th year
Ishani Hettiarachchi	Ph.D.	5 th year
Hanyang Zho	Ph.D.	5 th year
Andhina Satriani	M.S.	Graduated 2020
Maureen Kennell	M.S.	Graduated 2020
Amendra Liyanarachchi	Ph.D.	4 rd year
Koshala Olupothage	Ph.D.	3 rd year
Shrestha Kendra	Ph.D.	3 rd year
Akanksha Chhikara	Ph.D.	3 rd year
Sanduni Premathilaka	Ph.D.	3 rd year
Mathieu Geremia	Ph.D.	3 rd year

Support: Current

R01 AI105084 (Ronning P.I./PD; Sucheck, P.I.) 08/20/2018 - 08/31/2023 2 Summer
 NIH/NIAID \$160,000 directs/year (Suecheck)
 \$2,130,542 (total award)

Mycobacterial trehalose metabolism as drug targets

The major goals of this project are to study protein structure/function, inhibitor synthesis, and kinetics of enzymes responsible for the de novo biosynthesis of trehalose and the downstream use of trehalose in *Mycobacterium tuberculosis*.

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R01 AI148570 (Sucheck P.I./PD; Wall, P.I.) 01/01/2020 – 12/31/2024 1 Summer
NIH/NIAID \$142,000 directs/year (Sucheck)
\$2,338,199 (total award)

Methods to synthesize oligosaccharide-fusion protein conjugates and enhancement of their antigenicity.

The major goals of this project are to synthesize carbohydrate and protein antigens and convert them into vaccines. The vaccines will be studied for their immune response against *Pseudomonas aeruginosa*

1R01GM140191 (Karunaratne) 1/15/2021-1/14/2024 0.5 academic
NIH/NIGMS \$47,837 directs/year (Sucheck, co-I)
Optical control of endogenous G protein Coupled Receptor and G Protein Signaling.

The major goals of the project are to create tools to deliver photoligands to control endogenous protease-activated G protein-coupled receptors and engineer optogenetic tools to control signaling of endogenous G protein heterotrimers.

Completed Research Support:

R21 AI135313 (Sucheck P.I./PD; Rohde, P.I.) 07/01/2018 -NCE 5/31/2022 0 Summer
NIH/NIAID \$68,000 directs/year (Sucheck)
\$422,950 (total award)

Synthesis of natural product scaffold selectively active against dormant *Mycobacterium tuberculosis*

The major goals of this project are to study the mechanism of action of a class of marine natural products active against latent *Mycobacterium tuberculosis* and synthesize derivatives of the natural product.

deArce-Koch Memorial Fund 04/09/18 - 10/30/19 0.5 Summer
(Sucheck)
University of Toledo \$16,000 (total direct costs)
Probes for Chemical Proteomics in *M. Tuberculosis* and *M. Abscessus*.
Dragon Isailovic, Co-investigator (\$4,000 directs)

Project/Proposal: **Synthesis of Meroterpenoid Intermediates**
Source of Support: **The University of Toledo, Undergraduate Summer Research and Creative Activity Program (USRCAP)**
Total Award Amount: **\$ 3,000**. Total Award Period Covered: **06/1/2019 – 08/1/2019**.
Steven J. Sucheck (mentor); Natalie Schulte (Student)

R15 GM094734-02 (Wall) 05/01/2015 – 04/30/2019 .45 AY
NIH/NIGMS \$126,000 (total direct costs)

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Synthesis of Glycopeptide-Based Cancer Antigen Vaccines
Steven J. Sucheck, Co-investigator (42%); Katherine Wall, P.I. (58%)

The major goals of this project are to synthesize single molecule MUC1-based vaccines and the study of antigenicity enhancement mediated via targeting of Fc-gamma receptors

Project/Proposal: **Synthesis of Meroterpenoid Intermediates**
Source of Support: **The University of Toledo, Undergraduate Summer Research and Creative Activity Program (USRCAP)**
Total Award Amount: **\$ 3,000**. Total Award Period Covered: **06/1/2018 – 08/1/2018**.
Steven J. Sucheck (mentor); Natalie Schulte (Student)

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: **06/1/2018 – 08/1/2018**.
Steven J. Sucheck (mentor); Michaelangelo Raphael Zullo (Student)

Project/Proposal: **Synthesis of Forssman Disaccharide for Cancer Vaccine Construct**
Source of Support: **The University of Toledo, Undergraduate Summer Research and Creative Activity Program (USRCAP)**
Total Award Amount: **\$ 3,000**. Total Award Period Covered: **06/1/2018 – 08/1/2018**.
Steven J. Sucheck (mentor); Kyle Meyer (Student)

Project/Proposal Title: **Understanding trehalose synthesis and utilization in mycobacteria.**
Source of Support: **NIH: Research Project Grant (R01) R01AI105084-01**
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: **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**

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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)

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 Glucosyl 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)

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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**

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

67. Johnstone, M. A. Si, A.; Landgraf, A. D.; Sucheck, S. J.; Self, W. T. Evaluation of Derivatives of (+)-Puupehenone against *Clostridioides difficile* and Other Gram-Positive Bacteria. **2022** <https://doi.org/10.1021/acsomega.2c04471>.

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66. Thanvi, R.; Jayasinghe, T. D.; Sunayana, K.; Obadawo1, B.S.; Ronning, D.R.; and Sucheck, S.J. Synthesis of C7/C8-cyclitols and C7N-aminocyclitols from maltose and X-ray Structure of a *Streptomyces coelicolor* GlgE1 V279S in complex with an Amylostatin GXG-like derivative. *Front. Chem.* **2022**, <https://doi.org/10.3389/fchem.2022.950433>.
65. Si, A.; Landgraf, A. D.; Sucheck, S. J.; Rohde, K.H. Synthesis and evaluation of marine natural product-inspired meroterpenoids with selective activity towards dormant *Mycobacterium tuberculosis* *ACS Omega* **2022**, *7*, 23487–23496. <https://doi.org/10.1021/acsomega.2c01887>
64. Si, A. and Sucheck, S. J. Synthesis of aminoxy glycoside derivatives of the outer core domain of *Pseudomonas aeruginosa* lipopolysaccharide. *Front. Mol. Biosci.* **2021**, *8*, e750502. PMID: PMC8606414; PMID: 34820424; doi: 10.3389/fmolb.2021.750502
63. Khan, S. S.; Sudasinghe, T. D.; Landgraf, A. D.; Ronning, D. R.; Sucheck, S. J. Total synthesis of tetrahydrolipstatin, its derivatives, and evaluation of their ability to potentiate multiple antibiotic classes against *Mycobacterium* species. *ACS Infect. Dis.* **2021**, *7*, 2876–2888; PMID: 34478259 PMID: PMC8630808; doi: 10.1021/acscinfecdis.1c00283
62. Si, A.; Jayasinghe, T.D.; Thanvi, R.; Ronning, D. R.; Sucheck, S. J. Stereoselective synthesis of a 4- α -glucoside of valienamine and its X-ray structure in complex with *Streptomyces coelicolor* GlgE1-V279S. *Sci. Rep.* **2021**, *11*, 13413. <https://doi.org/10.1038/s41598-021-92554-9>
61. Landgraf, A. D.; Alsegiani, A. S.; Alaql, S.; Thanna, S.; Shah Z. A.; Sucheck, S. J. Neuroprotective and anti-neuroinflammatory properties of ebselen derivatives and their potential to inhibit neurodegeneration. *ACS Chem Neurosci.* **2020**, doi.org/10.1021/acscchemneuro.0c00328
60. Hossain, M. K.; Vartak, A.; Sucheck, S. J; Wall K.A. Synthesis and Immunological Evaluation of a Single Molecular Construct MUC1 Vaccine Containing L-Rhamnose Repeating Units. *Molecules* **2020**, *25*, 3137-3146. doi.org/10.3390/molecules25143137
59. Thanvi, R.; Kapil S.; and Sucheck, S. J. Strategies for Developing Carbohydrates as Glycoside Hydrolase Inhibitors. In *Carbohydrate Chemistry: Chemical and Biological Approaches Volume 44*; A. P. Rauter, T. K. Lindhorst, Y. Queneau, Eds.; Specialist Periodical Reports; Royal Society of Chemistry: Croydon, United Kingdom; **2020**; pp207-227. ISBN: 978-1-78801-368-0; <https://doi.org/10.1039/9781788013864-00207>
58. Nandedkar-Kulkarni, N.; Vartak, A.; Sucheck, S. J.; Wall, K.; Quinn, A.; Morran, M.; McInerney, M. Development of a bioconjugate platform for modifying the immune response of autoreactive cytotoxic T lymphocytes involved in type 1 diabetes. *Bioconj. Chem.* **2019**, *30*, 2049–2059 doi: 10.1021/acs.bioconjchem.9b00332
57. Vartak, A.; Goins, C.; Nogueira de Moura, V. C.; Schreidah, C. M.; Landgraf, A. D.; Lin B.; Du, J.; Jackson, M.; Ronning D. R.; Sucheck S. J. Biochemical and microbiological evaluation of *N*-aryl urea derivatives against *Mycobacteria* and *Mycobacterial* hydrolases. *MedChemComm*, **2019**, *10*, 1197–1204, PMID: 31741730; PMID: PMC6677023; doi: 10.1039/C9MD00122K

STEVEN J. SUCHECK, Ph.D.

56. Hossain, M. K.; Vartak, A.; Sucheck, S. J.; Wall, K.A. A liposomal Fc domain conjugated to a cancer vaccine enhances both humoral and cellular immunity. *ACS Omega*, **2019**, *4*, 5204–5208. PMID: PMC6441943, doi: 10.1021/acsomega.9b00029.
55. Kapil, S.; Petit, C.; Drago, V. N.; Ronning, D. R.; Sucheck, S. J. Synthesis and in vitro characterization of trehalose-based inhibitors of mycobacterial trehalose 6-phosphate phosphatases. *ChemBiochem* **2019**, *20*, 260–269. PMID: PMC6467533. doi: 10.1002/cbic.201800551
54. Vartak, A.; Thanna, S.; Meyer, K.; Dermanelian, M.; Sucheck, S. J. Oligosaccharide synthesis on soluble high-molecular weight pHEMA using a photo-cleavable linker. *RSC Adv.*, **2018**, *8*, 41612–41619. NIHM SID: 1026069, doi: 10.1039/C8RA08252A
53. Hossain, M. K.; Vartak, A.; Karmakar, P.; Sucheck, S. J. and K. A. Wall. Augmenting vaccine immunogenicity through the use of natural human anti-rhamnose antibodies. *ACS Chem. Biol.* **2018**, *13*, 2130–2142. PMID: PMC6103300, doi: 10.1021/acscchembio.8b00312.
52. Vartak, A. and Sucheck, S. J. Advances in synthetic approaches towards glycoantigens. In *Carbohydrate-Based Vaccines: From Concept to Clinic*; A. Krishna Prasad, Ed.; ACS Symposium Series 1290; American Chemical Society: Washington, DC, **2018**; pp175-195; ISBN13: 9780841233379; doi: 10.1021/bk-2018-1290.ch008
51. Vartak, A.; Hefny, F. M.; Sucheck, S. J. Synthesis of Oligosaccharide components of the outer core domain of *P. aeruginosa* lipopolysaccharide using a multifunctional hydroquinone-derived reducing-end capping group. *Org. Lett.* **2018**, *20*, 353–356. PMID: PMC6169316, doi:10.1021/acs.orglett.7b03590
50. Veleti S. K. and Sucheck, S. J. Glycoconjugate-based inhibitors of *Mycobacterium tuberculosis* GlgE. In *Glycoconjugate-based inhibitors of Mycobacterium tuberculosis GlgE*; Witzak, Z. J., Bielski, R., Eds.; Wiley: New Jersey, **2017**. pp91-107. ISBN 978-3-319-65587-1
49. 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
48. 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 selenen derivatives. *ACS Infect. Dis.*, **2017**, *3*, 378–387. doi: 10.1021/acscinfdis.7b00003 PMID: 28285521
47. 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-benziselenazol-3(2H)ones and evaluation against *Mycobacterium tuberculosis*. *J. Org. Chem.*, **2017**, *82*, 3844–3854. doi: 10.1021/acs.joc.7b00440 PMID: 28273423
46. Sucheck, S. J. Domino and intramolecular rearrangement reactions as advanced synthetic methods in glycosciences. Eds Z. J. Witzak and R. Bielski. *Angew. Chem. Int. Ed.* **2016**, *55*, 11337–11338. Book Review. doi: 10.1002/anie.201606642

STEVEN J. SUCHECK, Ph.D.

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. PMID: 27251120; PMCID: PMC4918453 doi: 10.1039/C6OB00821F.
44. Vartak, A. and Sucheck, S. J. Recent advances in subunit vaccine carriers. *Vaccines* (Basel) **2016**, 4, pii: E12. doi: 10.3390/vaccines4020012. PMCID: PMC4931629, 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. *Bioconj. Chem.* **2016**, 27, 110–20. PMCID: PMC4837471 doi: 10.1021/acs.bioconjchem.5b00528
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-hydroxypyridine-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. PMCID:PMC4172545 doi: 10.1016/j.bmc.2014.08.002
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
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. PMCID: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. PMCID: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. *Bioconj. Chem.* **2013**, 24, 363–375. PMCID: PMC3623543

STEVEN J. SUCHECK, Ph.D.

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. *Bioconj. 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.
25. Sanki, A. K.; Boucau, J.; Umesiri, F. E.; Ronning, D. R.; Sucheck, S. J. Design, synthesis and biological evaluation of sugar-derived esters, α -ketoesters and α -ketoamides as inhibitors for *Mycobacterium tuberculosis* antigen 85C. *Mol. BioSyst.* **2009**, *5*, 945–956. doi: 10.1039/b902284h. PMID: 19668859
24. Ragupathi, G.; Damani, P.; Srivastava, G.; Srivastava, O.; Sucheck, S. J.; Ichikawa, Y.; Livingston, P. O. Synthesis of sialyl Lewis^a (sLe^a, CA19-9) and construction of an immunogenic sLe^a vaccine. *Cancer Immunol. Immunother.* **2009**, *58*, 1397–1405.
23. Sanki, A. K.; Talan, R. S.; Sucheck, S. J. Synthesis of small glycopeptides by decarboxylative condensation and insight into the reaction mechanism. *J. Org. Chem.* **2009**, *74*, 1886–1896.
22. Sanki, A. K.; Boucau, J.; Ronning, D. R.; Sucheck, S. J. Antigen 85C-mediated acyl-transfer between synthetic acyl donors and fragments of the arabinan. *Glycoconjugate J.* **2009**, *26*, 589–596. doi: 10.1007/s10719-008-9211-z. PMID: 19052863
21. Boucau J.; Sanki, A. K.; Voss, B. J.; Sucheck, S. J.; Ronning D. R. A coupled assay measuring *Mycobacterium tuberculosis* antigen 85C enzymatic activity. *Anal. Biochem.* **2009**, *385*, 120–127. doi: 10.1016/j.ab.2008.10.018. PMID: 18992216
20. Sanki A. K.; Boucau J.; Srivastava P.; Adams S. S.; Ronning, D. R., Sucheck, S. J. Synthesis of methyl 5-*S*-alkyl-5-thio-arabinofuranosides and evaluation of their

STEVEN J. SUCHECK, Ph.D.

antimycobacterial activity. *Bioorg. Med. Chem.* **2008**, *16*, 5672–5682. doi: 10.1016/j.bmc.2008.03.062. PMID: 18450455

19. Demaray, J. A.; Thuener, J. E.; Dawson, M. N.; Sucheck, S. J. Synthesis of triazole-oxazolidinones via a one-pot reaction and evaluation of their antimicrobial activity. *Bioorg. Med. Chem. Lett.* **2008**, *18*, 4868–4871. doi: 10.1016/j.bmcl.2008.07.087. PMID: 18678487

Optimer Pharmaceuticals, Inc.

18. 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. Structure–activity relationships of bivalent aminoglycosides and evaluation of their microbiological activities. *Bioorg. Med. Chem. Lett.* **2005**, *15*, 2123–2128. PMID: 15808482
17. 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. An efficient entry to new sugar modified ketolide antibiotics. *Tet. Lett.* **2005**, *46*, 1483–1487.
16. Yao, S.; Sgarbi, P. W. M.; Marby, K. A.; Rabuka, D.; O’Hare, S. M.; Cheng, M. L.; Bairi, M.; Hu, C.; Hwang, S.-B.; Hwang, C.-K.; Ichikawa, Y.; Sears, P.; Sucheck, S. J. Glyco-optimization of aminoglycosides: new aminoglycosides as novel anti-infective agents. *Bioorg. Med. Chem. Lett.* **2004**, *14*, 3733–3738. PMID: 15203152
15. Lee, L. V.; Bower, K. E.; Liang, F. S.; Shi, J.; Wu, D.; Sucheck, S. J.; Vogt, P.K.; Wong, C.-H. Inhibition of the proteolytic activity of anthrax lethal factor by aminoglycosides. *J. Am. Chem. Soc.* **2004**; *126*, 4774–4775.
14. Agnelli, F.; Sucheck, S. J.; Marby, K. A; Rabuka, D.; S. -L., Yao; Sears, P. S.; Liang, F.-S.; Wong, C. -H. Dimeric aminoglycosides as antibiotics. *Angew. Chem. Int. Ed.* **2004**, *43*, 1562–1566. PMID: 15022234
13. Sucheck, S. J. and Shue, Y.-K. Combinatorial synthesis of aminoglycoside libraries. *Curr. Opin. Drug Discovery and Development* **2001**, *4*, 462–470.

Postdoctoral

12. Sucheck, S. J.; Wong, C.-H. RNA as a target for small molecules. *Curr. Opin. Chem. Biol.* **2000**, *4*, 678–686.
11. Sucheck, S. J.; Wong, A. L.; Koeller, K. M.; Boehr, D. D.; Draker, K.-A.; Sears, P.; Wright, G. D.; Wong, C.-H. Design of bifunctional antibiotics that target bacterial rRNA and inhibit resistance-causing enzymes. *J. Am. Chem. Soc.* **2000**, *122*, 5230–5231.
10. Sucheck, S. J.; Greenberg, W. A.; Tolbert, T., Wong, C.-H. Design of small molecules that recognize RNA: Development of aminoglycosides as potential antitumor agents that target oncogenic RNA sequences. *Angew. Chem., Int. Ed.* **2000**, *39*, 1080–1084.

Graduate

STEVEN J. SUCHECK, Ph.D.

9. Cagir, A.; Tao, Z.-F.; Sucheck, S. J.; Hecht, S. M. Solid phase synthesis and biochemical evaluation of conformationally constrained analogues of deglycobleomycin A₅ *Bioorganic Med. Chem. Lett.* **2003**, *11*, 5179–5187.
8. Sucheck, S. J. Study of naturally occurring nucleic acid interactive agents. 1998, 205 pp.
7. Chen, J.; Zhang, Y.-H.; Wang, L.-K.; Sucheck, S. J.; Snow, A. M.; Hecht, S. M. Inhibitors of DNA polymerase β from *Schoepfia Californica*. *Chem. Commun.* **1998**, 2769–2770.
6. Katono, K.; An, H.; Aoyagi, Y. Overhand, M.; Sucheck, S. J.; Stevens, W. C. Jr.; Hess, C. D.; Zhou, X.; Hecht, S. M. Total synthesis of bleomycin group antibiotics. The total synthesis of bleomycin demethyl A₂, bleomycin A₂ and decarbamoyl bleomycin demethyl A₂. *J. Am. Chem. Soc.* **1998**, *120*, 11285–11296.
5. Sucheck, S. J.; Ellena, J. F.; Hecht, S. M. Characterization of Zn(II).deglycobleomycin A₂ and interaction with d(CGCGATGCG)₂. Direct evidence for minor groove binding of the bithiazole moiety. *J. Am. Chem. Soc.* **1998**, *120*, 7450–7460.

Undergraduate

4. Skrzypczak-Jankun, E., Sucheck, S., Smith, D.A. 4-Methyl-3,5-dioxopiperazine acetic acid and 4-methyl-3,5-dioxopiperazine-*N*-methylacetic amide. Cambridge Crystallographic Data Centre, deposition no. CCDC 118966/CCDC 118967, 1999.
3. Smith, D. A., Sucheck, S.; Cramer, S.; Baker, D. Nitrilotriacetamide: Synthesis in concentrated sulfuric acid and stability in water *Synth. Commun.* **1995**, *25*, 4123–4132.
2. Cramer, S.; Sucheck, S. J.; Skrzypczak-Jankun, E.; Smith, D. A. Facile synthesis of substituted nitrilotriacetamides. *Tetrahedron Lett.* **1992**, *33*, 7765–7768.
1. Sucheck, S. J.; Pinkerton, A. A.; Smith, D. A. Characterization of [Pb(NO₃)(ntam)₂]NO₃ the first metal complex of the neutral tetradentate ligand nitrilotriacetamide (ntam). *J. Chem. Soc., Chem. Commun.* **1992**, 367–368.

Patents and Patent Applications

1. University of Central Florida Attorney Docket: 10669-389US0 Antimicrobial Compositions and Uses for Treatment of *Clostridioides difficile*, *Mycobacterium tuberculosis*, and *Enterococcus faecalis* Infection. Steven J. Sucheck, William T. Self. Kyle H. Rohde, Anshupriya Si, Alexander Landgraf, Sandra Geden, Michael Johnstone Filed: 5-06-2022
2. UT Docket D2019-03 Compositions and Methods for Organic Synthesis of Polysaccharides using poly(2-hydroxyethylmethacrylate) (pHEMA). S. J. Sucheck and A. R. Vartak Provisional Patent Appln. Filed: 7-11-2018.
3. UT Docket D2017-06 Synthetic lipopeptide vaccines and immunotherapeutics. A. R. Vartak, S. J. Sucheck, K. A. Wall, A. Quinn, M. F. Mcinerney. International Application No.: PCT/US2017/053359; International Filing Date: 26.09.2017; Pub. No.: WO/2018/058086; Publication Date: March 29, 2018 **Patent: US11007256B2, 2021-05-18**

STEVEN J. SUCHECK, Ph.D.

4. UT Docket D2015-17 Substituted Isoselenazolone Anti-Infective, Anti-Inflammatory, Anti-Cancer, Cytoprotective, Neuroprotective, and Anti-Oxidant Agents. Sucheck, S. J; Thanna, S.; Ronning, D.; Landgraf, A. Provisional Patent Appln. US Serial No.: 62/352,712 Filed: 6-21-2016; PCT/US17/38467 Filed: 6-21-2017. PCT Int. Appl. (Dec 28, 2017), WO 2017223160 A1 20171228 **Patent: US11053236B2, 2021-07-06**
5. UT Docket D2016-53 Anti-Infective 2-Aminothiophenes. Inventors: Sucheck, S. J; Thanna, S.; Slayden R. Provisional Patent Appln. US Serial No.: 62/325,755 Filed: 4-21-2016. PCT/US17/28782; Filed: 4-21-2017. PCT Int. Appl. (Oct 26, 2017), WO 2017184947 A1 20171026; US 2019/0119296 A1 Apr. 25, 2019. **Patent: US10647725B2, 2020-05-12**
6. UT Docket D2014-20: Amorphous Polyester from Bio-Based Bis-Furan Assembly. Inventors: Giatonde, V.; Sucheck, S. J. M. Coleman **Patent: US 9527952 B1. Dec 27, 2016.**
7. UT Docket D2012-01: Methods for forming peptides and peptide conjugates and peptides and peptide conjugates compositions formed thereby. Inventors: Talan, R. S.; Karmakar, P.; Sucheck, S. J. **US Patent: US 8,895,869 B1 Nov 25, 2014.**
8. UT Docket D2012-14: PCT Application. Xeno-antigen-Displaying Anti-Cancer Vaccines and Method of Making. Inventors: Sucheck, S. J.; Wall, K. A.; Sarkar, S. PCT Application No. PCT/US13/026271. Filed: 2-15-2013. US 14/378,805 Filed 8-14-2014. **Patent: AU 2013221448 June 8, 2017; US 10206988B2 Feb. 19, 2019.**
9. Bifunctional Antibiotics. Sucheck, S. J. and Wong, C.-H. **U.S. Patent 6,921,818.** Filed: 07-26-2005.
10. 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. Filed: 02-22-2005.
11. 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. **Patent 2013-12-26, 2013-12-26; US20130345410A1 US9200026B2, 2015-12-01**
12. 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. Filed: 06-26-2003.

Presentations at Scholarly Meetings

1. Thanvi, R; Sucheck, S. J. Potential carbasugar-based Maltoside inhibitors for Mtb. GlgE. Bertram Oliver Fraser-Reid Memorial Symposium on Synthetic & Medicinal Carbohydrate Chemistry. Abstracts of Papers, ACS Spring National Meeting & Events, Chicago, IL, United States, August 21, 2022.

STEVEN J. SUCHECK, Ph.D.

2. Khan, S. S.; Sucheck, S. J. Synthesis and inhibition studies of trehalose analogs for the inhibition Ag85 complex in mycobacterium tuberculosis Abstracts of Papers, ACS Spring National Meeting & Events, Chicago, IL, United States, August 21, 2022.
3. Bokolo, U.; Obadawo, B.; Sucheck, S. J. Progress towards a polymer supported synthesis of *Pseudomonas aeruginosa* exopolysaccharide (Psl) Abstracts of Papers, ACS Spring National Meeting & Events, Chicago, IL, United States, August 21, 2022.
4. Obadawo, B.; Bokolo, U.; Sucheck, S. J. Optimizing photocleavable linkers for oligosaccharide synthesis. Abstracts of Papers, ACS Spring National Meeting & Events, Chicago, IL, United States, August 21, 2022.
5. Dona, U. S. K. A.; Khan, S. S.; Sucheck, S. J. Synthesis of a chemical probe derived from a 2-aminothiophene and study proteomic interaction with *Mycobacterium smegmatis*. Abstracts of Papers, ACS Spring National Meeting & Events, Chicago, IL, United States, August 21, 2022.
6. Sebilliau, C.; Ubeysinghee, S.; Karunarathne, A.; Sucheck, S. J. In situ cell and liposome fluorescent-labelling using Sortase A. Abstracts of Papers, ACS Spring National Meeting & Events, Chicago, IL, United States, August 21, 2022.
7. Thanvi, R.; Nada, S.; Sebilliau, C.; Wall, K. A.; Sucheck, S. J. Synthesis of antigenic polysaccharides of *Pseudomonas aeruginosa*, their conjugates with outer membrane protein domains, and the study of antigenicity Abstracts of Papers, ACS Spring National Meeting & Events, Chicago, IL, United States, August 21, 2022.
8. Sucheck, S. J. Synthesis of anti-infective aminocyclitols. Pacificchem, December 18, 2021
9. Si, A.; Sucheck, S. J. Synthesis of aminoxy glycoside derivatives of the outer core domain of *Pseudomonas aeruginosa* lipopolysaccharide. Abstracts of Papers, ACS Spring National Meeting & Events, San Diego, CA, United States, March 20-24, 2022.
10. Thanvi, Radhika; Sucheck, Steven Joseph; Kapil, Sunayana Synthesizing and investigating the inhibitory activity of potential maltoside inhibitors for Mtb. GlgE Abstracts of Papers, ACS Spring National Meeting & Events, San Diego, CA, United States, March 20-24, 2022.
11. Khan, S. S.; Landgraf, A. D.; Sucheck, S. J. Synthesis of tetrahydrolipstatin and α -side chain congeners: Evaluation of activity against *Mycobacterium species* Abstracts of Papers, 261st ACS National Meeting, April 5-16, 2021.
12. Landgraf, A. D.; Alsegiani, A. S.; Alaqel, S.; Thanna, S.; Shah, Z. A.; Sucheck, S. J. Neuroprotective and anti-neuroinflammatory properties of ebselen derivatives. Abstracts of Papers, 261st ACS National Meeting, April 5-16, 2021.
13. Thanvi, R.; Sucheck, S. J.; Kapil, S. Synthesis of potential carbasugar-based inhibitors of *Mycobacterium tuberculosis* GlgE Abstracts of Papers, 261st ACS National Meeting, April 5-16, 2021.
14. Si, A.; Thanvi, R.; Sucheck, S. J. Stereoselective synthesis of a 4- α -glucoside of validamine and valienamine as potential inhibitors of hydrolase-like enzyme *Streptomyces coelicolor* GlgEI Abstracts of Papers, 261st ACS National Meeting, April 5-16, 2021.
15. Si, A. and Sucheck, S. J. Design and synthesis of serotype-independent *Pseudomonas aeruginosa* oligosaccharide-based antigens. The 16th Midwest Carbohydrate and Glycobiology Symposium, University of Michigan, Ann Arbor, MI. November 20th, 2020, Oral Presentation.
16. Si, A.; Thanvi, R.; Sucheck, S. J. Synthesis of O-glycosyl hydroxylamine oligosaccharide components for the preparation of glycoconjugates. ACS Fall 2020 Virtual Meeting & Expo, August 17-20, 2020, Presentation Format: Broadcast. PAPER ID: 3441278

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17. Si, A.; Thanvi, R.; Sucheck S. J. Synthesis of aminocyclitol-based inhibitors of glycoside hydrolase-like enzymes. ACS Fall 2020 Virtual Meeting & Expo, August 17-20, 2020, Presentation Format: On Demand. PAPER ID: 3438901
18. Landgraf, A. D.; Schulte, N.; Sucheck, Steve Synthesis and evaluation of meroterpenoid derivatives of puupehene. Abstracts of Papers, 259th ACS National Meeting & Exposition, Philadelphia, PA, United States, March 22-26, 2020 (2020), ORGN-0770. |
19. Thanvi, R.; Sucheck, S. J. Synthesis of potential carbasugar-based covalent inhibitors of Mycobacterium tuberculosis GlgE. Abstracts of Papers, 259th ACS National Meeting & Exposition, Philadelphia, PA, United States, March 22-26, 2020 (2020), CARB-0045.
20. Schulte, N.; Landgraf, A.; Rohde, K. H.; Sucheck, S. J. Synthesis of Meroterpenoid Derivatives. Undergraduate Research Symposium, Raleigh, NC, October 28-29, 2019.
21. Schulte, N.; Landgraf, A.; Rohde, K. H.; Sucheck, S. J. Synthesis of Meroterpenoid Derivatives. Wayne State Distinguished Researcher Workshop, Wayne State University, Detroit, MI, September 17th, 2019.
22. Schulte, N.; Landgraf, A.; Rohde, K. H.; Sucheck, S. J. Synthesis of Meroterpenoid Derivatives. End of Summer Research Symposium, The University of Toledo, Toledo, OH, Aug 1st, 2019.
23. Vartak, A.; Hossain, M. K. Wall, K. A.; Sucheck, S. J. Synthesis of an Fc domain-enhanced liposomal cancer vaccine and bacterial vaccine components. 2019 GRC on Carbohydrates, Regal Riverside Hotel, Hong Kong, China, June 23-28th, 2019.
24. Khan, S. S.; Sucheck, S. J. Synthesis of new tetrahydrolipstatin derivatives for inhibition of Mycobacterium tuberculosis. 50th Central Regional Meeting of the American Chemical Society, Midland, MI, United States, June 4-8th, 2019, CERM-61.
25. Kapil, S.; Sucheck, S. J. Synthesis of a cyclopropyl-containing mechanism-based glycoside hydrolase inhibitor. 257th ACS National Meeting & Exposition, Orlando, FL, United States, Mar 31st-Apr 4th, 2019, CARB-0096.
26. Sucheck, S. J. Solution and polymer-supported methods for the synthesis of oligosaccharide components of vaccine. 257th ACS National Meeting & Exposition, Orlando, FL, United States, Mar. 31st-Apr 4th, 2019, CARB-0081.
27. Vartak, A.; Hefny, F. M; Sucheck, S. J. Synthesis of Oligosaccharide Components of the Outer Core Domain of *P. aeruginosa* Lipopolysaccharide Using a Multifunctional Hydroquinone-Derived Reducing-End Capping Group. The 14th Midwest Carbohydrate and Glycobiology Symposium, Michigan State University, East Lansing, MI. September 21-22, 2018, Poster Presentation.
28. Kapil, S. Sucheck, S. J. Design and Synthesis of a Carbocyclic Maltose Intermediate Useful for Elaboration into Enzyme Inhibitors. The 14th Midwest Carbohydrate and Glycobiology Symposium, Michigan St ate University, East Lansing, MI. September 21-22, 2018, Poster Presentation.

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29. Vartak, A.; Sucheck, S.; Hefny, F. Synthesis of oligosaccharide components of the outer core domain of *P. aeruginosa* lipopolysaccharide using a multifunctional hydroquinone-derived reducing-end capping group. 256th ACS National Meeting & Exposition, Boston, MA, United States, August 19-23, 2018, CARB-116. Oral Presentation
30. Vartak, A.; Sucheck, S. J.; Nandedkar, N.; Hossain, Md K.; Wall, K. A.; McInerney, M. Synthesis of lipopeptide-based immunotherapeutics using a conjugatable immunoadjuvant and evaluation of immune responses. 256th ACS National Meeting & Exposition, Boston, MA, United States, August 19-23, 2018, ORGN-297. Oral Presentation
31. Sucheck S. J. Enhancing antigenicity of synthetic saccharide-based antigens by targeting Fcγ receptors. 2018 Frontiers in Chemical Biology, Yilan, Taiwan, Aug 4th, 2018
32. Sucheck S. J. Enhancing antigenicity of synthetic saccharide-based antigens by targeting Fcγ receptors. 2018 International Carbohydrate Symposium, Lisbon, Portugal, July 19th, 2018
33. Zullo, M. and Sucheck, S. J. Novel Route for the synthesis of trifunctional photoreactive crosslinking molecules for use in activity-based protein profiling. End of Summer Research Symposium, The University of Toledo, Toledo, OH, Aug 2nd, 2018.
34. Myer, K. and Sucheck, S. J. Synthesis of Cancer Vaccine Components. End of Summer Research Symposium, The University of Toledo, Toledo, OH, Aug 2nd, 2018.
35. Landgraf, A. D.; Schulte, N.; Sucheck, S. J. Synthesis of meroterpenoid derivatives. Glass City Chemistry Conference, Toledo, OH, United States, June 14-16 (2018), GCCC-118.
36. Vartak, A.; Hefny, F.; Sucheck, S. J. Synthesis of oligosaccharide components of the outer core domain of *P. aeruginosa* lipopolysaccharide using a multifunctional hydroquinone-derived reducing-end capping group. Glass City Chemistry Conference, Toledo, OH, United States, June 14-16 (2018).
37. Kapil, S.; Sucheck, S. J. Design and synthesis of a carbocyclic maltose intermediate useful for elaboration into enzyme inhibitors. Glass City Chemistry Conference, Toledo, OH, United States, June 14-16 (2018), GCCC-98.
38. Irumva, G. D. D. and Sucheck, S. J. Progress towards the synthesis of *Mycobacterium Tuberculosis* GlgE inhibitors. Glass City Chemistry Conference, Toledo, OH, United States, June 14-16 (2018), GCCC-103.
39. Hossain, Md. K.; Vartak, A.; Sucheck, S. J.; Wall, K. A. Augmenting vaccine immunogenicity through the use of natural human anti-Rha antibodies and monoclonal Fc domains. 255th ACS National Meeting & Exposition, New Orleans, LA, United States, March 18-22, 2018, BIOL-217. Oral Presentation.
40. Sucheck S. J. Synthesis of MUC1 Tumor-Associated Carbohydrate Antigens. Toledo Cancer Research Symposium, Toledo, OH, Dec 1st, 2017
41. Kapil, S.; Petit, C.; Ronning, D. R.; Sucheck S. J. Glycomimetics of maltose-1-phosphate as inhibitors of the glycoside hydrolase-like enzyme *Streptomyces coelicolor* GlgEI-V279S 254th ACS National Meeting & Exposition, Washington, DC, USA, August 20-24, 2017, CARB-19, Oral Presentation.

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42. Vartak, A.; Sucheck S. J; Wall, K. A. Synthesis of multi-component anti-tumor vaccine using strain promoted azide alkyne cycloaddition (SPAAC) and enhancement of immune response using human anti-rhamnose antibodies. 254th ACS National Meeting & Exposition, Washington, DC, USA, August 20-24, 2017, CARB-22, Oral Presentation.
43. Landgraf, A.; Thanna, S.; Sucheck S. J. Synthesis of ebselen derivatives and evaluation against *Mycobacterium tuberculosis*. 254th ACS National Meeting & Exposition, Washington, DC, USA, August 20-24, 2017, ORGN-414, Poster.
44. Kapil, S.; Sucheck S. J, Ronning, D. R.; Thanna, S. Synthesis and inhibition studies of substrate and suicide analogs for *Mycobacterium tuberculosis* for trehalose phosphate phosphatase (TPP2). 254th ACS National Meeting & Exposition, Washington, DC, USA, August 20-24, 2017, CARB-4141, Poster.
45. Salem, F.; Sucheck S. J; Thanna S. Synthesis and microbiological evaluation of 2-amino-4,5,6,7-tetrahydrothieno[2,3-c]pyridines against sensitive and drug resistant *Mycobacterium tuberculosis* 254th ACS National Meeting & Exposition, Washington, DC, USA, August 20-24, 2017, MEDI-327, Poster.
46. Vartak, A; Hossain, K.; Wall, K. A.; Sucheck S. J. Evaluation of the effect of targeting Fcγ receptors on humoral and cellular immune responses in a liposomal MUC1 glycopeptide-based immunotherapeutic. 2017 GRC on Carbohydrates, Mount Snow Resort West Dover, VT, June 25-30, 2017.
47. Wall, K. A. and Sucheck S. J. Synthesis of a liposomal MUC1 glycopeptide-based immunotherapeutic and evaluation of the effect of targeting Fc receptors on immune responses. New England Glyco-Chemistry Meeting, Northeastern University in Boston, Massachusetts June 23rd, 2017. Oral Presentation.
48. Sri Kumar Veleti, Cecile Petit, Donald R. Ronning and Steven J. Sucheck. Zwitterionic pyrrolidine-phosphonates: Transition state mimics of the glycoside hydrolase-like phosphorylase *Streptomyces coelicolor* GlgEI-V279S 253rd ACS National Meeting in San Francisco, California, April 2-6, 2017.
49. Thanna, S.; Knudson, S. E.; Goins, C. M.; Salem, F.; Kapil, S.; Grzegorzewicz, A.; Jackson, M.; Ronning, D. R.; Slayden, R. A.; Sucheck, S. J. Synthesis and evaluation of antitubercular agents 2-aminothiophenes and benzo-1,2-selenazol-3(2H)-ones targeting Pks13 and Ag85C respectively. 253rd ACS National Meeting & Exposition, San Francisco, CA, United States, April 2-6, 2017 (2017), MEDI-400.
50. Sucheck, S. J. Synthesis of natural and designed compounds with antibacterial and immunological activities. 4th Asian Chemical Biology Conference, Kaohsiung, Taiwan, November 28th – Dec 1st, 2016, Oral Presentation.
51. Abhishek Vartak, Katherine Wall, and Sucheck, S. J. Synthesis of a multi-component anti-tumor vaccine using strain-promoted azide alkyne cycloaddition (SPAAC) The 12th Midwest Carbohydrate and Glycobiology Symposium, Central Michigan University, Mt. Pleasant, MI, October 14-15, 2016, Oral Presentation.
52. Sandeep Thanna, Susan E. Knudson, Anna Grzegorzewicz, Sunayana Kapil, Christopher Goins, Donald R. Ronning, Mary Jackson, Richard A. Slayden, and Sucheck, S. J. Synthesis and Evaluation of new 2-aminothiophenes against *Mycobacterium tuberculosis*. The 12th Midwest Carbohydrate and Glycobiology Symposium, Central Michigan University, Mt. Pleasant, MI, October 14-15, 2016, Poster Presentation.

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53. Sunayana Kapil, Sandeep Thanna, Victoria Drago, Donald R. Ronning, and Suceck, S. J. Synthesis of substrate and suicide analogs for *Mycobacterium tuberculosis* trehalose phosphate phosphatase (TPP2). The 12th Midwest Carbohydrate and Glycobiology Symposium, Central Michigan University, Mt. Pleasant, MI, October 14-15, 2016, Poster Presentation.
54. Fatma Salem, Sandeep Thanna, Faten Zahran, Lamiaa Barakat, and Suceck, S. J. Synthesis and microbiological evaluation of 2-amino-4,5,6,7-tetrahydrothieno[2,3-c]pyridines against sensitive and drug resistant *Mycobacterium tuberculosis* The 12th Midwest Carbohydrate and Glycobiology Symposium, Central Michigan University, Mt. Pleasant, MI, October 14-15, 2016, Poster Presentation.
55. Miranda Dermanelian, Sunayana Kapil, and Suceck, S. J. Progress towards large scale oligosaccharide synthesis. The 12th Midwest Carbohydrate and Glycobiology Symposium, Central Michigan University, Mt. Pleasant, MI, October 14-15, 2016, Poster Presentation.
56. Karmakar, P.; Lee, K.; Wall, K. A.; Suceck, S. J. Evaluation of the effect of L-rhamnose targeting on cellular immune responses in a liposomal MUC1 glycopeptide-based immunotherapeutic. 28th International Carbohydrate Symposium, New Orleans, LA, United States, July 17-21, 2016, Oral Presentation.
57. Veleti, S. K.; Lindenberger, J. J.; Thanna, S.; Ronning, D. R.; Suceck, S. J. Glycoconjugate-based inhibitors of essential enzymes in *Mycobacterium tuberculosis*. The 2015 International Chemical Congress of Pacific Basin Societies (Pacifichem) Honolulu, HI, United States, December 15-20, 2015. Publication Number: 377.
58. Thanna, S.; Lindenberger, J. J.; Gaitonde, V. V.; Ronning, D. R. and Suceck, S. J. Synthesis of 2-deoxy-2,2-difluoro- α -maltosyl fluoride and its X-ray structure in complex with *Streptomyces coelicolor* GlgEI-V279S. The 11th Midwest Carbohydrate and Glycobiology Symposium, Cleveland State University, Cleveland, OH, October 23-24, 2015, Oral Presentation.
59. Kapil, S. and Suceck, S. J. Synthesis of putative substrate analogs for trehalose phosphate phosphatase. The 11th Midwest Carbohydrate and Glycobiology Symposium, Cleveland State University, Cleveland, OH, October 23-24, 2015, Poster Presentation.
60. Vartak, A.; Karmakar, P.; Lee, K. Wall, K. A. Steven J Suceck Synthesis of multi-component liposomal anti-cancer vaccine. The 11th Midwest Carbohydrate and Glycobiology Symposium, Cleveland State University, Cleveland, OH, October 23-24, 2015, Poster Presentation.
61. Veleti, S. K.; Lindenberger, J. J.; Thanna, S.; Ronning, D. R.; Suceck, S. J. Synthesis, Inhibition studies and X-ray structure for substrate analogue and transition-state inhibitor for *Mycobacterium tuberculosis* (Mtb) GlgE and *Streptomyces coelicolor* (Sco) GlgEI-V279S. The 11th Midwest Carbohydrate and Glycobiology Symposium, Cleveland State University, Cleveland, OH, October 23-24, 2015, Poster Presentation.
62. Veleti, S. K.; Lindenberger, J. J.; Thanna, S.; Ronning, D. R.; Suceck, S. J. Synthesis of substrate and transition state inhibitors of *S. coelicolor* GlgEI-V279S. 250th ACS National Meeting & Exposition, Boston, MA, United States, August 16-20, 2015, CARB-126.

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63. Veleti, S. K.; Lindenberger, J.; Thanna, S.; Ronning, D.; Sucheck, S. J. Inhibitors of *Mycobacterium tuberculosis* Ag85 and GlgE. Gordon Research Conference: Tuberculosis Drug Discovery & Development, Girona, Catalonia, Spain, July 12-17, 2015.
64. Veleti, S. K.; Lindenberger, J.; Ronning, D.; Sucheck, S. J. Synthesis of substrate and transition-state inhibitors for *S. coelicolor* GlgEI-V279S. Gordon Research Conference: Carbohydrates, Mt. Snow, VT, Jun 16, 2015.
65. Veleti, S. K.; Lindenberger, J.; Thanna, S.; Ronning, D.; Sucheck, S. J. Synthesis and inhibition studies of a transition-state inhibitor for *Mycobacterium tuberculosis* GlgE. 249th ACS National Meeting & Exposition, Denver, CO, United States, March 22-26, 2015, ORGN-275.
66. Veleti, S. K.; Lindenberger, J.; Thanna, S.; Ronning, D.; Sucheck, S. J. Synthesis and inhibition studies of substrate analog and transition-state inhibitor for *Mycobacterium tuberculosis* GlgE The 10th Midwest Carbohydrate and Glycobiology Symposium, The University of Michigan, Ann Arbor, MI, October 17-18, 2014, Oral Presentation.
67. Bouhall, S.; Giatonde, V.; Sucheck, S. J. "Synthesis of α -Glucan Substrate Analogs for the Characterization of *Mycobacterium tuberculosis* Enzyme GlgE" The 10th Midwest Carbohydrate and Glycobiology Symposium, The University of Michigan, Ann Arbor, MI, October 17-18, 2014, Poster Presentation.
68. Thanna, S.; Giatonde, V.; Sucheck, S. J. "Synthesis of 2- and 5-Fluoro glycosyl fluorides: potential mechanism-based inhibitors of glycoside hydrolases" The 10th Midwest Carbohydrate and Glycobiology Symposium, The University of Michigan, Ann Arbor, MI, October 17-18, 2014, Poster Presentation.
69. Thanna, S.; Veleti, S. K.; Lindenburger, J. J.; Ronning, D. R.; Sucheck, S. J. Synthesis and evaluation of glycoside-based inhibitors of *Mycobacterium tuberculosis* GlgE. Abstracts Of Papers, 248th ACS National Meeting & Exposition, San Francisco, CA, United States, August 10-14, 2014, CARB-99.
70. Veleti, S. K.; Thanna, S.; Gaitonde, V.; Lindenburger, J. J.; Ronning, D. R.; Sucheck, S. J. *Mycobacterium tuberculosis* GlgE: Structure, mechanism and inhibition. Keystone Symposia: Novel Therapeutic Approaches to Tuberculosis Keystone, CO March 30 - April 4, 2014.
71. Gaitonde, V. V.; Lee, K.; Kirschbaum, K.; Sucheck, S. J. Biobased bis-furan polymer: Crystal structure of a bisfuran diol (BFD) and synthesis of a low molecular weight amorphous polyester. Abstracts of Papers, 247th ACS National Meeting & Exposition, Dallas, TX, United States, March 16-20, 2014, POLY-574.
72. 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. Abstracts of Papers, 247th ACS National Meeting & Exposition, Dallas, TX, United States, March 16-20, 2014, ORGN-128.
73. Veleti, S. K.; Lindenburger, J. J.; Ronning, D. R.; Sucheck, S. J. Glycoside-based inhibitors of *Mycobacterium tuberculosis* GlgE. Abstracts of Papers, 247th ACS National Meeting & Exposition, Dallas, TX, United States, March 16-20, 2014, CARB-91.
74. Thanna, S.; Gaitonde, V.; Lindenberger, J. J.; Ronning, D. R.; Sucheck, S. J. Synthesis and study of covalent inhibitors of *Mycobacterium tuberculosis* GlgE. Abstracts of

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Papers, 247th ACS National Meeting & Exposition, Dallas, TX, United States, March 16-20, 2014, CARB-80.

75. Cluse, M. and Sucheck, S. J. Cyclic peptide Alkaloid Synthesis. End of Summer Research Symposium, The University of Toledo, Toledo, OH, July 31st, 2013, Poster #01.
76. Long, D. E.; Karmakar, P.; Wall, K. A.; Sucheck, S. J. Synthesis of L-rhamnosyl ceramide and evaluation of its binding to anti-rhamnose antibodies. The 9th Midwest Carbohydrate and Glycobiology Symposium, The University of Toledo, Toledo, OH, October 11-12th, 2013, Oral Presentation.
77. Wall, K. A.; Karmakar, P.; Lee, K.; Sarkar, S.; Sucheck, S. J. Anti-rhamnose antibodies as targeting agents for vaccine development. The 9th Midwest Carbohydrate and Glycobiology Symposium, The University of Toledo, Toledo, OH, October 11-12th, 2013, Oral Presentation.
78. Sandeep Thanna and Sucheck, S. J. Synthesis and study of covalent inhibitors for *Mycobacterium tuberculosis* GlgE. The 9th Midwest Carbohydrate and Glycobiology Symposium, The University of Toledo, Toledo, OH, October 11-12th, 2013, P17.
79. 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. The 9th Midwest Carbohydrate and Glycobiology Symposium, The University of Toledo, Toledo, OH, October 11-12th, 2013, P18.
80. Gaitonde, V.; Lee, K.; Kirschbaum K.; Sucheck, S. J. Bio-based bis-furan assembly: Synthesis and crystal structure evaluation with bisphenol A. The 9th Midwest Carbohydrate and Glycobiology Symposium, The University of Toledo, Toledo, OH, October 11-12th, 2013, P23.
81. Johnson, S. and Sucheck, S. J. The Synthesis and Application of a Biotin-conjugated Ebselen. End of Summer Research Symposium, The University of Toledo, Toledo, OH, August 2nd, 2013, Talk.
82. Veleti, S. K. and Sucheck, S. J. Synthesis of a C-phosphonate mimic of maltose-1-
83. phosphate. The 8th Midwest Carbohydrate and Glycobiology Symposium, Wayne State University, Detroit, MI, October 6-7th, 2012, P29.
84. Long, D. E.; Karmakar, P.; Sucheck, S. J. Synthesis of α -L-rhamnosylceramides. The 8th Midwest Carbohydrate and Glycobiology Symposium, Wayne State University, Detroit, MI, October 6-7th, 2012, P14.
85. Karmakar, P.; Sucheck, S. J. Evaluation of arylsulfonyl protected aziridine-2-carboxylates to participate in nucleophilic glycosylations to afford glycosyl serine derivatives. The 8th Midwest Carbohydrate and Glycobiology Symposium, Wayne State University, Detroit, MI, October 6-7th, 2012, P10.
86. Gaitonde, V.; Lee, K.; Kirschbaum, K.; Sucheck, S. J. Synthesis and X-ray analysis of 5,5'-(propane-2,2-diyl)bis(furan-5,2-diyl)dimethanol: Polymerizable furanic analog of bisphenol A. The 8th Midwest Carbohydrate and Glycobiology Symposium, Wayne State University, Detroit, MI, October 6-7th, 2012, P6.

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87. Sarkar, S.; Salyer, A. C.; Wall, K. A.; Sucheck, S. J. Improving vaccines with natural antibodies. 244th ACS National Meeting & Exposition, Philadelphia, PA, United States, August 19-23rd, 2012, CARB-101.
88. Sarkar, S.; Salyer, A. C.; Lee, K.; Wall, K. A.; Sucheck, S. J. Evaluation of in vitro T-cell proliferation for a L-Rhamnose displaying MUC1-based anticancer vaccine. 244th ACS National Meeting & Exposition, Philadelphia, PA, United States, August 19-23rd, 2012, CARB-70.
89. Long, D.; Sucheck, S. J. Synthesis of α -L-rhamnosylceramides. 244th ACS National Meeting & Exposition, Philadelphia, PA, United States, August 19-23rd, 2012, CARB-35.
90. Veleti, S. K.; Sucheck, S. J. Synthesis of a nonhydrolysable C-phosphonate mimic of maltose-1-phosphate. 244th ACS National Meeting & Exposition, Philadelphia, PA, United States, August 19-23rd, 2012, CARB-23.
91. Gaitonde, V.; Lee, K.; Kirschbaum, K.; Sucheck, S. J. Synthesis of 5,5'-(propane-2,2-diyl)bis(furan-5,2-diyl)dimethanol from biomass. 244th ACS National Meeting & Exposition, Philadelphia, PA, United States, August 19-23rd, 2012, CARB-22.
92. Karmakar, P.; Sucheck, S. J. Evaluation of arylsulfonyl protected aziridine-2-carboxylates to participate in nucleophilic glycosylations to afford glycosyl serine derivatives. 244th ACS National Meeting & Exposition, Philadelphia, PA, United States, August 19-23rd, 2012, CARB-22.
93. Long, D. E. and Sucheck, S. J. Synthesis of α -L-rhamnosylceramides. End of Summer Research Symposium, The University of Toledo, Toledo, OH, August 2nd, 2012, Poster #23.
94. Cluse M. and Sucheck, S. J. The Formation of glycosyl ceramide cores through the synthesis of aziridines and epoxides. End of Summer Research Symposium, The University of Toledo, Toledo, OH, August 2nd, 2012, Poster #22.
95. Gaitonde, V. V. and Sucheck, S. J. Synthesis of glycosyl amides via DNBS-thioacid ligation. The 7th Midwest Carbohydrate and Glycobiology Symposium, Michigan State University, East Lansing, MI, September 16-17th, 2011, Oral #14.
96. Karmakar, P.; Talan, R. S.; Sucheck, S. J. Mixed-phase synthesis of glycopeptides using a N-peptidyl-2,4-dinitrobenzenesulfonamide-thioacid ligation strategy. The 7th Midwest Carbohydrate and Glycobiology Symposium, Michigan State University, East Lansing, MI, September 16-17th, 2011, Poster #14.
97. Lee, K. and Sucheck, S. J. Conversion of pentose sugars derived from biomass. The 7th Midwest Carbohydrate and Glycobiology Symposium, Michigan State University, East Lansing, MI, September 16-17th, 2011, Poster #15.
98. Ibrahim, D. A.; Trabbic, K. R.; Li, S.; Zheng, S.; Adams, S. S.; Sanki, A. K.; Boucau, J.; Lajiness, D. H.; Ronning, D. R.; Sucheck, S. J. Design, synthesis and characterization of thiophene-arabino-side conjugates as inhibitors of *Mycobacterium tuberculosis* antigen 85C. The 7th Midwest Carbohydrate and Glycobiology Symposium, Michigan State University, East Lansing, MI, September 16-17th, 2011, Poster #16.

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99. Long, D. E. and Sucheck, S. J. Progress towards the synthesis of an L-rhamnosylceramide. The 7th Midwest Carbohydrate and Glycobiology Symposium, Michigan State University, East Lansing, MI, September 16-17th, 2011, Poster #17.
100. Sarkar, S.; Sayler, A. C. D.; Wall K. A.; Sucheck, S. J. Comparison of anti-L-rhamnose antibodies generated against Rha-Ficolin with Rha-OVA in BALB/c Mice. The 7th Midwest Carbohydrate and Glycobiology Symposium, Michigan State University, East Lansing, MI, September 16-17th, 2011, Poster #18.
101. Ibrahim, D. A.; Trabbic, K. R.; Adams, S. S.; Sanki, A. K.; Boucau, J.; Lajiness, D. H.; Ronning, D. R. Sucheck, S. J. Design, synthesis and characterization of thiophene-arabinoside conjugates as inhibitors of *Mycobacterium tuberculosis* antigen 85C. 241st ACS National Meeting & Exposition, Anaheim, CA, United States, March 27-31, 2011, CARB-138.
102. 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.
103. 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.
104. Gaitonde, V. V.; Sarkar, S.; Lodzinski, A. J.; Sucheck, S. J. Synthesis of N-□-glycosyl dinitrobenzenesulfonamides and their reaction with thioacids for the formation □-glycosyl amides. The 6th Midwest Carbohydrate and Glycobiology Symposium, University of Toledo, Toledo, OH, September 24-25th, 2011.
105. 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.
106. 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.
107. Trabbic, K. R. and Sucheck, S. J. End of summer research presentations. University of Toledo, Toledo, OH, August 5th, 2010.
108. 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.
109. 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.

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110. 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.
111. 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.
112. 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.
113. 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.
114. 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.
115. 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.
116. 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.
117. Sucheck, Steven J. Glycoconjugates: Design, synthesis and evaluation. 239th ACS National Meeting, San Francisco, CA, United States, March 21-25, 2010, CARB-84.
118. Ozga, K.; Sucheck, S. J. Controlling the diastereoselectivity of glycosylation reactions. 2009 REEL Student Symposium Wright State University, Dayton, OH, October 10th, 2009.
119. 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.
120. 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
121. 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.
122. 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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123. 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.
124. 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.
125. 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.
126. 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.
127. 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.
128. 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.
129. 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.
130. 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.
131. 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.
132. 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.
133. 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.
134. 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.

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135. 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.
136. 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.
137. 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.
138. 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.
139. 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.
140. 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.
141. Sanki, A. K.; Umesiri, F.; Boucau, J.; Ronning, D. R.; Sucheck, S. J. Synthesis of transition state inhibitors of antigen 85. The 4th Midwest Carbohydrate and Glycobiology Symposium, Cleveland, OH, Oct 3-4, 2008.
142. 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.
143. 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.
144. 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.
145. 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.
146. Sucheck, 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.
147. Sucheck, 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.

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148. Sucheck, 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.
149. 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.
150. 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.
151. 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.
152. 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.
153. Sucheck, S. J. Glycopeptide synthesis by decarboxylative condensation. 235th ACS National Meeting, New Orleans, LA, United States, April 6-10, 2008, CARB-115.
154. 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.
155. 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.
156. 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.
157. 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.
158. Sanki, A. K.; Srivastava, P. The synthesis of methyl-5-deoxy-5-*S*-thioalkyl-*D*-arabinofuranaosides and evaluation of their antimycobacterial activity. 3rd Midwestern Carbohydrate & Glycobiology Symposium, Columbus, OH, Oct 5-6, 2007.
159. Sanki, A. K.; Talan, R. S. Glycopeptide synthesis by traceless decarboxylative condensation. 3rd Midwestern Carbohydrate & Glycobiology Symposium, Columbus, OH, Oct 5-6, 2007.
160. 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.

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161. Sucheck, S. J. Synthesis of glycosylamino acid-containing tripeptides by decarboxylative ligation. 3rd Midwestern Carbohydrate & Glycobiology Symposium, Oct 5-6, 2007.
162. 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.
163. 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.
164. 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.
165. 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.
166. 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.
167. 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.
168. 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.
169. 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.
170. Sucheck, S. J. Carbohydrates in drug discovery. 1st Midwestern Carbohydrate Conference, Sept 30-Oct 1, 2005.
171. Sucheck, 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.
172. Sucheck, 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 OPopS glycosylation. 43rd Annual Interscience Conference on Antimicrobial Agents and Chemotherapy, Sept 14-17, 2003, Paper #3926.
173. 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.

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174. Sucheck, 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.
175. Sucheck, S. J.; Ellena, J. F.; Hecht, S. M. Characterization of Zn(II).deglycobleomycin A₂ and interaction with d(CGCGATGCG)₂. A binding model based on nmr experiments and molecular dynamics calculations. 214th American Chemical Society National Meeting, Sept. 7-11, 1997, Paper #301.
176. 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.
177. Sucheck, 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.
178. Sucheck, 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.
179. Sucheck, 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.

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.” *EurekaAlert*, June 8th, 2000.

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

Invited Lectures

1. “Synthesis of Natural and Designed Compounds with Antibacterial and Immunological Activities” Iowa State University, IA, 2023
2. “Synthesis of Natural and Designed Compounds with Antibacterial and Immunological Activities” University of Georgia, GA, 2022
3. “Synthesis of Natural and Designed Compounds with Antibacterial and Immunological Activities” Youngstown State University, OH, Feb 11, 2022
4. “Synthesis of Natural and Designed Compounds with Antibacterial and Immunological Activities” University of Maryland, College Park, MD, April 29, 2021
5. “Synthesis of Natural and Designed Compounds with Immunological Activities” St. Louis University, St. Louis, MO, March 25, 2021
6. “Synthesis of Natural and Designed Compounds with Antibacterial and Immunological Activities” Old Dominion University, Norfolk, VA, March 19, 2021.
7. “Synthesis of Natural and Designed Compounds with Antibacterial and Immunological Activities” University of Massachusetts, Lowell, MA, February 26, 2021.
8. “Synthesis of Natural and Designed Compounds with Antibacterial and Immunological Activities” Notre Dame University, IN, Nov 22nd 2019.
9. “Synthesis of Natural and Designed Compounds with Antibacterial and Immunological Activities” University of Alberta, Edmonton, AB, Canada, Oct 25th 2019.
10. “Synthesis of Natural and Designed Compounds with Antibacterial and Immunological Activities” Tufts University, MA, Sept 4th 2019.
11. “Synthesis of Natural and Designed Compounds with Antibacterial and Immunological Activities” San Diego CA, August 27th 2019.
12. “Synthesis of Natural and Designed Compounds with Antibacterial and Immunological Activities” Tufts University, MI, Sept 4th 2019.
13. “Synthesis of Natural and Designed Compounds with Antibacterial and Immunological Activities” Wayne State University, Detroit MI, Sept 27th 2017.
14. “Synthesis of Natural and Designed Compounds with Antibacterial and Immunological Activities” Aquinas College, Grand Rapids, MI, November 30th 2017.
15. “Synthesis of Natural and Designed Compounds with Antibacterial and Immunological Activities” Brown University, Providence, RI, October 24th 2017.
16. “Synthesis of Natural and Designed Compounds with Antibacterial and Immunological Activities” University of South Florida, Tampa, FL, March 28th, 2017.
17. “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.
18. “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.
19. “Synthesis of Natural and Designed Compounds with Antibacterial and Immunological Activities” Northeastern University, Boston, MA, September 21st, 2016.

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20. "Synthesis of Carbohydrate-Containing Compounds with Antibacterial and Immunological Activities" Georgia State University, Atlanta, GA, September 17th, 2016.
21. "Synthesis of Carbohydrate-Containing Compounds with Antibacterial and Immunological Activities" Central Florida University, Burnett School of Biomedical Sciences, Orlando, FL, April 1st, 2016.
22. "Synthesis of Carbohydrate-Containing Compounds with Antibacterial and Immunological Activities" Central Michigan University, Department of Chemistry, Mount Pleasant, MI, Feb 15th, 2016.
23. "Antitubercular Drugs Based on Carbohydrate Derivatives" Northeastern University, Department of Chemistry and Chemical Biology, Boston, MA, Aug 21th, 2015.
24. "Antitubercular Drugs Based on Carbohydrate Derivatives" University of Arkansas, Department of Chemistry and Biochemistry, Fayetteville, AR, Sept 29th, 2014.
25. "Antitubercular Drugs Based on Carbohydrate Derivatives" University of Iowa, Collage of Pharmacy, Iowa City, IA, Nov 19th, 2013.
26. "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.
27. "Glycoconjugate-based Inhibitors of Essential Enzymes in *Mycobacterium tuberculosis*" National Institutes of Health, NIDDK - Bethesda, MD, Dec 13th 2012.
28. "Improving Vaccines with Natural Antibodies". The 8th Midwest Carbohydrate and Glycobiology Symposium, Wayne State University, Detroit, MI, October 6-7th, 2012, IT2.
29. "Glycoconjugates: Design, Synthesis and Function" Southern Illinois University - St. Louis, Department of Chemistry, Oct 18th, 2011.
30. "Glycoconjugates: Design, Synthesis and Function" University of Missouri - St. Louis, Department of Chemistry, Oct 17th, 2011.
31. "Glycoconjugates: Design, Synthesis and Function" Otterbein University - Westerville, OH, Department of Chemistry, Oct 26th, 2010.
32. 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.
33. "Glycoconjugates: Design, Synthesis and Function" Michigan State University, Department of Chemistry, March 31st, 2010.
34. "Glycoconjugates: Design, Synthesis and Evaluation" Emerging Investigators in Glycoscience Symposium, 239th ACS National Meeting, San Francisco, CA, United States, March 21-25, 2010.
35. "The Sticky world of Glycoconjugates: Design, Synthesis and Function" West Virginia University, March 10th, 2010.
36. "The Sticky world of Glycoconjugates: Design, Synthesis and Function" Wayne State University, Department of Chemistry, March 3rd, 2010.
37. "The Sticky world of Glycoconjugates: Design, Synthesis and Function" University of Tennessee, Department of Chemistry, Feb 18th, 2010.

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38. "The Sticky world of Glycoconjugates: Design, Synthesis and Function" University of Cincinnati, Department of Chemistry, Feb 5th, 2010.
39. "Ligation of Glycopeptides by Decarboxylative Condensation" Cleveland State University, Department of Chemistry, Feb 27th, 2009.
40. "Synthesis of Carbohydrate-Containing Compounds with Antibacterial and Immunological Activities" University of Toledo Medical Center, Department of Microbiology and Immunology, Feb 25th, 2009.
41. "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.
42. "Synthesis of Glycopeptides by Decarboxylative Ligation" Youngstown State University, Department of Chemistry, Oct 5th, 2007
43. "Synthesis of Glycopeptides by Decarboxylative Ligation" Central Michigan University, Department of Chemistry, Oct 29th, 2007
44. "Synthesis of Glycopeptides by Decarboxylative Ligation" Indiana University Purdue University Fort Wayne, Department of Chemistry, Nov 16th, 2007.
45. "Carbohydrates in Drug Discovery" University of Toledo, Department of Medicinal Chemistry, Feb 20th, 2007.
46. "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 |

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 &

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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

2022 American Chemical Society Carb Division Session Organizer “Oligosaccharide synthesis, conjugation, and vaccine and antigenicity” ACS Spring National Meeting & Events, Chicago, IL, United States, August 24, 2022. Co-organizer Dr. Peter Andreana

2021 Pacificchem Lead Organizer for Advances in Glycan Engineering and Glycans from the Microbial World <https://pacificchem.org/>

Advances in Glycan Engineering and Glycans from the Microbial World (#385)

11:00pm - 03:00am Eastern Standard Time (EST) - December 17, 2021 | Room: Virtual
Katsunori Tanaka, Session Host; Prof. Suvarn S. Kulkarni, Session Host; Xuewei Liu, Session Host

Advances in Glycan Engineering and Glycans from the Microbial World (#385)

01:00pm - 05:00pm Eastern Standard Time (EST) - December 18, 2021 | Room: Virtual
Linda Hsieh-Wilson, Session Host; Dr. Steven Sucheck, Session Host

Advances in Glycan Engineering and Glycans from the Microbial World (#385)

06:00pm - 10:00pm Eastern Standard Time (EST) - December 18, 2021 | Room: Virtual
Katsunori Tanaka, Session Host; Xuefei Huang, Session Host; Xuewei Liu, Session Host

Advances in Glycan Engineering and Glycans from the Microbial World (#385)

11:00pm - 03:00am Eastern Standard Time (EST) - December 18, 2021 | Room: Virtual
Katsunori Tanaka, Session Host; Xuewei Liu, Session Host

Advances in Glycan Engineering and Glycans from the Microbial World (#385)

12:00am - 02:00am Eastern Standard Time (EST) - December 21, 2021 (poster session)

2018-2019 American Chemical Society Carb Division Program Chair.

2018-2019 American Chemical Society Carb Division Poster Session Organizer.

258th ACS National Meeting & Exposition

Aug 2, - Aug 29, 2019 San Diego, CA

257th ACS National Meeting & Exposition

March 31 - April 4, 2019 Orlando, FL

256th ACS National Meeting & Exposition

March 18-22, 2018 New Orleans, Louisiana

255th ACS National Meeting & Exposition

August 19-23, 2018 Boston, Massachusetts

The 14th Midwest Carbohydrate and Glycobiology Symposium, Michigan State University, East Lansing, MI, September 21-22, 2018, Oral Presentation. Session Chair.

STEVEN J. SUCHECK, Ph.D.

Glass City Chemistry Conference, Toledo, OH, United States, June 14-16 (2018). Biologically Active Organic Compounds. Organizer and Presider.

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)

2017 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)

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. 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

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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

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