

# AMANDA LEE SKARLUPKA, PH.D., M.S.

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GITHUB: [HTTPS://GITHUB.COM/ASKARLUPKA](https://github.com/ASKARLUPKA)  
CITIZENSHIP: U.S.  
VETERANS' PREFERENCE: NONE

## SUMMARY OF QUALIFICATIONS

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Program Officer in the Division of Cancer Prevention and a Presidential Management Fellow alumni. I am a trained health and data scientist with specialized experience in foster collaboration between clinicians, researchers, administrative staff, and data scientists. My areas of interest include data governance, Tribal data sovereignty, data reuse, FAIR/CARE/TRUST principles, trustworthy application of artificial intelligence and machine learning to public health solutions, and identification and application of innovations to NIH's programs.

## PROFESSIONAL EXPERIENCE

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**Health Scientist Administrator - Program Officer** June 5, 2024 - Present  
National Cancer Institute, National Institutes of Health, Bethesda, MD **GS-0601-13-01**  
*Division of Cancer Prevention; Office of the Director* 40 hours/week  
Supervisor: Dr. Erin Lavik

Duties:

- Manage a grant and cooperative agreement portfolio centered on data science applications to cancer prevention
- Facilitate industry partnerships and collaborations with the Division of Cancer Prevention's programs and resources
- Ensure respect for Tribal data sovereignty in the portfolio and programs
- Draft and publish funding announcements and notices for my portfolio area

**Presidential Management Fellow (PMF) (Health Specialist)** June 5, 2022 - June 4, 2024  
National Institutes of Health, Bethesda, MD **GS-0601-12-01**  
40 hours/week

**National Cancer Institute** Dec 18, 2023 - June 4, 2024  
*Division of Cancer Prevention; Office of the Director* June 5, 2022 - June 16, 2023  
Supervisor: Dr. Lori Minasian

Duties:

- Synthesize and evaluate solutions to increase quality and quantity of accessible data in the Early Detection Research Network (EDRN) repository
- Advise on best practices for artificial intelligence and machine learning in the context of public health research
- Intentionally design data collection and storage methods for the Multi-Cancer Detection (MCD) clinical network to optimize data sharing and reuse
- Meeting organizer for the *Statistical Adjustment for Multiplicity Virtual Workshop* with DCP - Biometry Group
- Improve public access and utilization of NIH, NCI, and DCP tools and data

- Define, collect, and evaluate user metrics for the Clinical Trial Randomization tool and quantify usership growth over time. Creation of figures to clearly communicate randomization concepts to a general audience (DCP)
- Test the capacity and user-friendliness of using SAS Viya as a data scientist in analyzing controlled cancer trial data in the cloud (DCP)
- Updating the current NCI Artificial Intelligence webpage with current information and figures with the Trans-NCI AI work group (NCI)
- Organizing workshop/challenge prize with the Biomedical Data Science Cross-disciplinary Collaboratory Common (DS3C) Working Group to increase data science and biomedical science collaborations and NIH data reuse (NIH)

Accomplishments:

- Improved communication between biospecimen repository, NCI, and the data management and coordinating center which allowed investigators to receive timely data reports
- Wrote an R Shiny application that displays informational interviews in a tree-based visual to assist the fellows in tracking their connections
- Designed the presentation and wrote in plain language the DCP Director's welcome message for the Statistical Adjustment for Multiplicity Virtual Workshop

Committees/Working Groups:

- Trans-NIH Biomedical Data Science Cross-disciplinary Collaboratory Common (DS3C) Working Group (Jan 2023)
- NIH PMF Annual Report Committee – Lead (Dec 2022)
- Multi-cancer Detection (MCD) Clinical Research Screening Network - Tiger Team (Oct 2022)
  - MCD Assay Criteria Working Group (Sep 2022)
  - Accrual and Recruitment Working Group (Nov 2022)
- Statistical Adjustment for Multiplicity Virtual Workshop Planning Committee (Sep 2022 – Jan 2023)
- DCP Biometry Machine Learning Model Selection Working Group (Aug 2022)
- NIH's Interagency Modeling and Analysis - Multiscale Modeling and Viral Pandemics Working Group (Aug 2021)
  - Immunology Modeling Subgroup – Meeting Coordinator

**National Institutes of Health**

June 19, 2023 – Dec 15, 2023

*Division of Program Coordination, Planning, and Strategic Initiatives; Office of Data Science Strategy (ODSS)*

Supervisor: Ishwar Chandramouliswara

Duties:

- Drafted and prepared for publication Notice of Special Interest for data reuse of NIH resources
- Conceptualized and conducted an NIH Guide portfolio analysis investigating institute's research investment for data reuse and secondary analysis
- Ensured reproducible research by writing my analysis in the R coding language
- Prepared, coordinated and submitted materials for data calls related to ODSS' contributions to the NIH Strategic Plan mid-course review and the White House Initiative for Hispanics
- Conducted a portfolio analysis of applications resulting from data reuse announcements available on the NIH Guide

- Planned, organized, and coordinated the Data Repository and Knowledgebase Principal Investigator Meeting with the other committee members. In addition, I made sure to focused on improving inclusion and accessibility for attendees
- Edited, reviewed and published the application related frequently asked questions for notice of funding opportunities
- Reviewed and provided feedback on the DRKB pre-application webinar presentation for the notice of funding opportunities
- Reviewed and edited a Request for Information solicitation for software sharing practices in the research community
- Provided subject matter expertise to colleagues in the Office of Research Infrastructure Programs for a contracted data management center. Also reviewed contract materials to ensure the contract's transition and close-out plan was within compliance with the contract terms from a data science perspective
- Coordinated the data call for the Mid-course Review of the NIH-wide Strategic Plan. I collected the responses from individual units in ODSS, consolidated responses for leadership review, and worked to submit them.
- Wrote the #19 Bold Prediction of the NIH-wide Strategic Plan, "AI will reveal molecular signatures associated with the return to health after an acute illness (e.g., COVID-19)" by using contributions provided by other institutes and offices, which was reviewed by ODSS leadership
- Coordinated, managed, and completed the data call for the "White House Initiative for Hispanics Executive Order"
- Maintained expertise in data sharing and artificial intelligence ethics by actively attending and engaging in continuing learning opportunities, including the VA National Artificial Intelligence Institute's (NAII) International Summit for AI in Healthcare

University of Georgia

**Doctoral Graduate Researcher**

Jan 1, 2018 – Dec 31, 2021

Center for Vaccines and Immunology, Department of Infectious Diseases, Athens, GA 40 hours/week

Supervisor: Dr. Ted Ross

Duties:

- Conceptualized, designed, and conducted experiments for publication and funding sources
  - NIH Center for Influenza Vaccine Research for High-Risk Populations (CIVR-HRP)  
Funding Source
- Analyzed results and data using statistical approaches
- Coordinated with and maintained working collaborations with 4 research groups
- Mentored 3 undergraduate researchers
- Managed 4 concurrent projects, all of which resulted in publication
  - Swine H1 Influenza Cross-Species Vaccine Development
    - Determined the ability of a swine/human computationally optimized broadly reactive vaccine to protect against both human and swine influenza A H1 or N1 viruses in mice
    - Characterized the protection of COBRA vaccines in swine and the elicited sera for antibody cross-reactivity
  - Influenza Sequence Similarity and Antigenicity Comparison

- Analysis of the correlation between variations in influenza epitopes and antigenic cross reactivity
- Mathematical analysis to generate a tool for hierarchical vaccine selection
- Visualization of antigenic clusters and relationships between groups
- Neuraminidase COBRA as a Human Seasonal and Pre-Pandemic Vaccine Antigen
  - Designed and characterized an N1 COBRA vaccine based on the neuraminidase protein of human influenza (H1N1), swine influenza, and pandemic influenza (H5N1)
  - Developed protocols for visualizing mouse and ferret nasal cavity tissue
  - Developed and optimized neuraminidase-specific assays for use across CIVIC network
- Influenza and SARS-CoV-2 Pathobiology in the Ferret Animal Model
  - Investigation of influenza and SARS-CoV-2 co-infection
  - Quantification of the effects of influenza vaccination during co-infection
- Prepared data reports for funding agencies

Accomplishments:

- Applied and obtained \$21,000 in funding for dissertation completion, \$7,430 in trainee funds, \$500 for travel, and \$2500 in fellowship

Related skills:

- Excellent written and oral skills
  - Presented findings at 1 invited seminar, 5 oral, and 7 poster presentations
  - Authored and contributed to over 15 peer-reviewed publications over 4 years and 2 grant submissions
- Maintained rigorous ethical and safety standards for USDA animal, Biosafety Level 3, and Federal Select Agent approved research

University of Georgia

**Master's Graduate Researcher**

Sept 1, 2019 – May 13, 2022

Department of Epidemiology and Biostatistics, School of Public Health, Athens, GA 20 hours/week

Supervisor: Dr. Andreas Handel

Duties:

- Conceptualized, designed, and conducted data analyses for publication
- Define an initial metric for quantifying antibody breadth of an influenza vaccine
  - Data analysis using multi-dimensional scaling, principal component analysis, and amino acid similarities
  - Utilization and harmonization of publicly accessible and unpublished data
- Maintain research and documents so that they are reproducible by a third party
- Present research and findings to collaborators and funding agency (NIAID)

Accomplishments:

- Earned MS in Biostatistics and Epidemiology degree concurrently with PhD without delaying PhD graduation timeline

Related skills:

- Excellent project management
- Interdisciplinary communication between data scientists and biomedical scientists
- Coding and data reuse experience

University of Georgia

**Doctoral Graduate Researcher**

Jan 1, 2017 – Dec 31, 2017

Department of Infectious Disease, Athens, GA

Supervisor: Dr. Eric Harvill

- Studied *Bordetella* spp. interactions within the mouse model system
- Identified suitable potential funding sources, prepared and submitted grant proposal

Food Research Institute

**Associate Research Specialist**

July 1, 2014 – July 31, 2016

Applied Food Laboratory, Madison, WI

40 hours/week

Supervisor: Dr. Kathleen Glass

- Approved for the Tier 1 Federal Select Agent Program.
- Wrote protocols and procedures for different food studies:
  - Pathogens - *Clostridium botulinum*, *Clostridium perfringens*, *Salmonella* sp., *Listeria monocytogenes*, *Bacillus cereus*, and *Staphylococcus aureus*.
  - Growth studies – inoculate product to determine if conditions are conducive to pathogen growth.
  - Inactivation studies – inoculate product before, during, and after a procedure (i.e. thermal cooking) to measure pathogen death/inactivation.
- Managed the preparation, inoculation, and sampling of experiments.
- Analyzed and reviewed data generated from experiments.
- Trained and supervised undergraduate students.
- Interpreted and communicated study results to clients.

University of Wisconsin - Madison

**Undergraduate Researcher**

Feb 1, 2013 – May 15, 2014

Department of Bacteriology, Madison, WI

Supervisor: Dr. Jae-hyuk Yu

- Molecular genetics:
  - Characterized gene expression at the transcriptional level
  - Constructed gene deletion mutant strains of *Aspergillus* spp.
- Trained graduate student and intern in laboratory techniques.
- Maintained a safe and sterile environment when working with hazardous materials and organisms.
- Collaborated with international PhD scientists and graduate students.

## EDUCATION

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Ph.D., Infectious Disease University of Georgia Oral defense completed: 12/02/2021 Dissertation title: "Broadly-Protective Influenza N1 Neuraminidase Vaccine Development and Characterization" GPA: 3.92/4.00 Total Credits Earned: 202 semester hours	Jan 2018-May 2022
M.S., Epidemiology and Biostatistics Emphasis: Data Analysis and Modeling University of Georgia Oral defense completed: 04/07/2022 Thesis title: "Breadth Quantification of the Human Antibody Response to Influenza Vaccination" GPA: 3.94/4.00 Total Credits Earned: 47 semester hours	Jan 2020 – May 2022
B.S., Microbiology B.S., Botany University of Wisconsin – Madison, WI GPA: 3.86/4.00	Aug 2010- May 2014
Hazard Analysis and Critical Control Point (HACCP) Certification Covance, Madison, WI	Oct 2013

## AWARDS AND HONORS

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NIH Office of the Director Honor Award - Emerging Leader 2023	April 1, 2024
NCI Group Award: Development of Selection Criteria for the Assays in the Vanguard Study	April 14, 2023
Presidential Management Fellow – NIH Class of 2024	2022-2024
Dissertation Completion Award	2021-2022
<ul style="list-style-type: none"> <li>• \$21,000 assistantship over 10 months</li> </ul>	
Collaborative Influenza Vaccine Innovation Centers (CIVIC)	
Trainee Program Awardee	June 2-21, 2022
<ul style="list-style-type: none"> <li>• \$7,430 in travel and training award funds</li> <li>• Awarded in 2020; utilized in 2022</li> </ul>	
Stanford PRISM 2020 Cohort	2020
<ul style="list-style-type: none"> <li>• Networked and interviewed with Stanford professors to develop collaborations</li> </ul>	
UGA Graduate Education Advancement Board Fellowship	2020
Roswell Chapter M Nominee for 2020 PEO International Scholar Award	2019
UGA Nominee for 2020 Lindau Nobel Laureate Meeting	2019
International Society for Vaccines Congress Trainee Award	2018
Microbiology High Achievement Award	2014

- Department of Bacteriology | University of Wisconsin

Graduated with Distinction from University of Wisconsin	2014
Dean's List of the University of Wisconsin	2010-2014
Food Research Institute Summer Research Scholar	2013
Kettle Moraine Garden Club Scholarship	2014
Phillip Lautenbach and Wilma Lautenbach Vollendorf Academic Merit Award	2013
Wisconsin Cheese Makers' Association Supplier Member Scholarship	2013
Catholic Order of Foresters' Scholarship	2010

## LEADERSHIP

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Research mentor for undergraduate students, University of Georgia	
<u>Lui Suzuki-Williams</u>	Jan – Dec 2019
Characterization of antibody binding to the swine 2015 North Carolina influenza virus (H1N2)	
Current Position: Post-Baccalaureate IRT Trainee at NIH, Bethesda, MD	
<u>Ross Lima</u>	Aug 2019 - Jan 2020
Production of tetrameric influenza neuraminidase proteins	
Current Position: Americorp member in Baltimore, MD, USA	
<u>Spencer Sumner</u>	Aug 2020 – Dec 2021
Serological assays to describe and quantify neuraminidase-specific antibodies	
Current Position: Doctor of Medicine Student at Duke University School of Medicine	
Research mentor for Malcom Bridge Middle School students. FFA Agriscience Fair	Jan – April 2018
Assisted with the design and analysis of projects including effects of pasteurization on mold inhibition of baked goods and the ability of home-made vs store-bought toothpaste to decrease canine oral bacterial populations	
Graduate Teaching Assistant	Jan - May 2018
Microbiology Introductory Lab (MIBO 3510L)	
Department of Microbiology	
University of Georgia	
Research mentor for undergraduate student, University of Wisconsin - Madison	Spring 2016
<u>Katie-Io Osterbauer</u>	
Characterization of <i>Clostridium perfringens</i> growth in uncured and cured pork product during a thermoprocess.	
Current Position: Nutritional Sciences PhD Student at University of Wisconsin -Madison	

## INDEPENDENT EDUCATIONAL OPPORTUNITIES

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CIVIC Trainee Program	June 2-21, 2022
Two-week program that taught core concepts with hands-on experience.	

- Digital Infuzion project incorporated the use of natural language processing techniques on data scraped from websites and available APIs to assist with determining which viruses were used in published manuscripts using python.
- Gryphon Scientific projects included pre-publication manuscript review for scientific rigor and impact, analysis of proprietary data using multiple linear regression in R, and analysis and evaluation of the CIVIC's data model and how best to foster communication between data management cores and experimentalists.

Hosted: Digital Infuzion (Stephan Bour, Kyle Martin, Jeremy Carson) and Gryphon Scientific (Emily Billings, Henry Wyneken)

#### 10X Genomics Symposium

Nov 20, 2019

Single-cell sequencing research day covering in depth techniques, uses, strengths and limitations of the current state of the field

Hosted: Dr. Steve Bosinger, Genomics Core, Emory University

#### Microbial Challenge Testing for Foods Workshop

May 24-25, 2015

Workshop focusing on the analysis and development of food safety challenge study protocols based on National Advisory Committee on Microbiological Criteria for Foods (NACMCF) recommendations

Sanctioned by: International Association for Food Protection (IAFP)  
Chicago, IL, USA

### PROFESSIONAL ORGANIZATIONS

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Artificial Intelligence/Machine Learning Consortium to Advance Health Equity and Researcher Diversity (AIM-AHEAD) - Member	2022
American Statistical Association - Member	2021
American Physical Society - Member	2021
American Society for Virology - Member	2019
International Society for Vaccines - Member	2018-2019, 2021
International Association for Food Protection - Member	2015

### SERVICE

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Paper Reader. 42-48th GJSHS. Reviewed and scored research papers to determine invitees to GJSHS. January 2017 - 2023. UGA Office of Academic Special Programs

Café Scientifique Presenter. Spoke to graduate level students at the UGA Physics Department about career opportunities after graduation. November 11, 2022. University of Georgia – Physics Department. Hosted by: Steven Hancock and Dr. Cassandra Hall

HeroX Dataworks! Challenge Project Judge. Volunteer subject matter expert for project submissions that showcase innovative programs that further data sharing and reuse. August 22, 2022. NIH/National Institute of Mental Health and FASEB.



- Oral Presentation Finalist Judge. 47<sup>th</sup> Georgia Junior Science and Humanities Symposium (GJSHS). Evaluated and interviewed oral presentation finalists to decide which presenters move onto Nationals. February 22, 2022. UGA Office of Academic Special Programs
- Poster Judge. 42<sup>nd</sup>, 44<sup>th</sup> and 46<sup>th</sup> GJSHS. Evaluated students' poster presentations and interview the students about their work. February 26, 2017, February 24, 2019, and February 26, 2021. UGA Office of Academic Special Programs
- Science Fair Judge. Clark County School District Science and Engineering Fair. January 6, 2018 and January 11, 2020. 1235 Baxter Street, Clarke Middle School, Athens, GA 30606
- Lesson Planner. Scientific Research and Education Network – Lesson Plan Showcase Event. February 17, 2017. Sandy Creek Nature Center, Athens GA
- Science Fair Judge. Clark County School District Elementary Young Scientist Fair. February 11, 2017. 205 Alps Road, Alps Elementary School, Athens, GA 30606
- Science Fair Judge. Clark County School District Science and Engineering Fair. January 14, 2017. 1300 Cedar Shoals Drive, Cedar Shoals High School, Athens, GA 30606

#### PEER-REVIEWED PUBLICATIONS

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##### *In Preparation/Submission (available upon request):*

19. Yang Ge, W. Zane Billings, **Amanda L. Skarlupka**, Wannan Cao, Kevin K. Dobbin, Ted M. Ross, Andreas Handel, Ye Shen. Improving Estimation of Intervention Impact on Antibody Titer Increase in the Presence of Missing Values: A Proposed Method for Addressing Limit of Detection Issues." In preparation. Preprint in MedRxiv.  
<https://doi.org/10.1101/2022.08.25.22279230>
18. Xiaojian Zhang, **Amanda L. Skarlupka**, Hua Shi, and Ted Ross. "COBRA N2 neuraminidase vaccines induce protective immune responses against influenza viral infection". In preparation.
17. **Amanda L. Skarlupka**, Zane Billings, Ted M. Ross, and Andreas Handel. "Quantification of breadth for influenza vaccines: a proposed method." In preparation.
16. Yang Ge, **Amanda L. Skarlupka**, Zane Billings, Ye Shen, Justin Bahl, Paul Thomas, Ted M. Ross, and Andreas Handel. "Impact of seasonal influenza vaccine dose on homologous and heterologous immunity." In preparation.

##### *Accepted/Published:*

15. Wendy S. Rubinstein\*, Christos Patriotis\*, Anthony Dickherber, Paul K. J. Han, Hormuzd A. Katki, Elysee LeeVan, Paul F. Pinsky, Philip C. Prorok, **Amanda L Skarlupka**, Sarah M. Temkin, Philip E. Castle, Lori M. Minasian. (2024) "Cancer Screening with Multi-Cancer Detection Tests: A Translational Science Review". Accepted for publication at: *CA: A Cancer Journal for Clinicians*.  
\*Co-authors contributed equally

14. **Amanda L. Skarlupka\***, Xiaojian Zhang\*, Uriel Blas-Machado, Spencer F. Sumner, and Ted M. Ross. (2023) "Multi-influenza HA subtype protection of ferrets vaccinated with an N1 COBRA-based neuraminidase." *Viruses*, 15 (1), 184. DOI: 10.3390/v15010184.  
\*Co-authors contributed equally
13. Ying Huang, **Amanda L. Skarlupka**, Hyesun Jang, Uriel Blas-Machado, Nathan Holladay, R. Jeffrey Hogan, and Ted M. Ross. (2021) "SARS-CoV-2 and Influenza A virus Co-infections in Ferrets." *J Virol*. Dec 22:JV10179121. DOI: 10.1128/JVI.01791-21.
12. **Amanda L. Skarlupka**, Anne Gaelle Bebin-Blackwell, Spencer F. Sumner, and Ted M. Ross. (2021) "Universal influenza virus neuraminidase vaccine elicits protective immune responses against human seasonal and pre-pandemic strains." *J Virol*. Jun 23:JV10075921. DOI: 10.1128/JVI.00759-21
11. **Amanda L. Skarlupka** and Ted M. Ross. (2021) "Inherent serum inhibition of influenza neuraminidase." *Front. Vet. Sci.* 8:677693. DOI: 10.3389/fvets.2021.677693
10. Z. Beau Reneer, **Amanda L. Skarlupka**, Parker J. Jamieson, and Ted M. Ross. (2021) "Broadly Reactive H2 Hemagglutinin Vaccines Elicit Cross-Reactive Antibodies in Ferrets Pre-Immune to Seasonal Influenza A Viruses." *mSphere*. Mar 10;6(2):e00052-21. DOI: 10.1128/mSphere.00052-21
9. Z. Beau Reneer, Parker J. Jamieson, **Amanda L. Skarlupka**, Ying Huang, and Ted M. Ross. (2020) "Computationally Optimized Broadly Reactive H2 HA Influenza Vaccines Elicited Broadly Cross-Reactive Antibodies and Protected Mice from Viral Challenges." *J Virol*. JVI.01526-20. DOI: 10.1128/JVI.01526-20
8. Jeffrey W. Ecker, Greg A. Kirchenbaum, Spencer R. Pierce, **Amanda L. Skarlupka**, Rodrigo B. Abreu, R. Ethan Cooper, Dawn Taylor-Mulneix, Ted M. Ross, and Giuseppe A. Sautto. (2020) "High-yield expression and purification of recombinant influenza virus proteins from stably-transfected mammalian cell lines." *Vaccines (Basel)*. 8(3):E462. DOI:10.3390/vaccines8030462
7. **Amanda L. Skarlupka**, Andreas Handel, and Ted M. Ross. (2020) "Dataset of antigenic distance measures, hemagglutination inhibition, viral lung titers, and weight loss in mice and ferrets when exposed to HA-based vaccination or sub-lethal A(H1) influenza infection." *Data in Brief*. 32:106118. DOI:10.1016/j.dib.2020.106118
6. **Amanda L. Skarlupka**, Andreas Handel, and Ted M. Ross. (2020) "Influenza hemagglutinin antigenic distance measures capture trends in HAI differences and infection outcomes, but are not suitable predictive tools." *Vaccine*. 38(36):5822-5830. DOI:10.1016/j.vaccine.2020.06.042
5. **Amanda L. Skarlupka** and Ted M. Ross. (2020) "Immune Imprinting in the Influenza Ferret Model." *Vaccines (Basel)*. 8(2):E173. Review. DOI: 10.3390/vaccines8020173

4. **Amanda L. Skarlupka**, Zachary B. Reneer, Rodrigo B. Abreu, Ted M. Ross, and Giuseppe A. Sautto. (2020) "An influenza HA Computationally Optimized Broadly Reactive Antigen elicits antibodies endowed with group-1 heterosubtypic breadth against swine influenza viruses." *Journal of Virology* Mar 2020, 94 (8) e02061-19; DOI: 10.1128/JVI.02061-19
3. **Amanda L. Skarlupka**, Simon O. Owino, Lui P. Suzuki-Williams, Corey J. Crevar, Donald M. Carter, and Ted M. Ross. (2019) "A computationally optimized broadly reactive vaccine based upon swine H1N1 influenza hemagglutinin sequences protects against both swine and human isolated viruses." *Human Vaccines & Immunotherapeutics*, 15:9, 2013-2029, DOI: 10.1080/21645515.2019.1653743
2. Kalyan K. Dewan, Dawn L. Taylor-Mulneix, Laura L. Campos, **Amanda L. Skarlupka**, Shannon M. Wagner, Valerie E. Ryman, Monica C. Gestal, Uriel Blas-Machado, Brian T. Faddis, Eric T. Harvill. (2019) "A model of chronic, transmissible Otitis media in mice." *PLoS Pathogen* 15(4):e1007696
1. Kalyan K. Dewan, **Amanda L. Skarlupka**, Israel Rivera, Laura E. Cuff, Monica Gestal, Dawn L. Taylor-Mulneix, Shannon M. Wagner, Valerie E. Ryman, Coralys Rodriguez, Hamidou Illiassou Soumana, Bruce Levin, Eric T. Harvill. (2018). "Development of macrolide resistance in *Bordetella bronchiseptica* is associated with the loss of virulence." *Journal of Antimicrobial Chemotherapy*. 73(10):2797-2805. DOI: 10.1093/jac/dky264

## OTHER PUBLICATIONS

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1. **Amanda L. Skarlupka**, Bodo Linz, Jennifer Maynard, and Eric T. Harvill. (2018) Basics of pertussis pathogenesis. *Pertussis: Epidemiology, Immunology, and Evolution*. P. Rohani and S. Scarpino, Oxford University Press.

## EDITORIAL EXPERIENCE

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"The Immune System and Infectious Disease"

Edited and critiqued pre-publication versions

Author: Dr. David P. Adams; Point University

2019-2020

Provided thorough review, fact-checking, and critique of book chapters for immunology and SARS-CoV-2.

## PRESENTATIONS

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21. "Accessibility and Inclusion"  
Oral Presentation  
NIH PMF Program Monthly Meeting  
September 20, 2023
20. "Confident Communication with Management"  
Oral Presentation  
NIH PMF Program Monthly Meeting  
March 22, 2023

19. "NIH's Data Management and Sharing Plan for Fellows"  
Oral Presentation  
Cancer Prevention Fellowship Program Fellows Research Meeting Series  
NCI  
December 12, 2022
18. "Breadth Quantification of the Human Antibody Response to Influenza Vaccination"  
Oral Presentation  
DIVERSity Flu Bio-monthly Science Meeting  
November 21, 2022
17. "EDRN External Data Sharing and Reuse Policy"  
Oral Presentation  
Bi-annual EDRN Steering Committee Meeting  
Renaissance Seattle Hotel, 515 Madison St, Seattle, WA 98104  
November 8, 2022
16. "Breadth Quantification of the Human Antibody Response to Influenza Vaccination"  
Oral Presentation  
**M.S. Thesis Defense**  
Department of Epidemiology and Biostatistics  
College of Public Health, University of Georgia  
April 7, 2022
15. "Broadly-Protective Influenza N1 Neuraminidase Vaccine Development and Characterization"  
Oral Presentation  
**Ph.D. Dissertation Defense**  
Infectious Disease Department, University of Georgia  
December 2, 2021
14. "Antigenic cartography and landscapes of influenza strains with preimmune human sera."  
Poster Presentation  
5<sup>th</sup> Annual Workshop on Viral Dynamics  
October 4-6, 2021
13. "Broadly protective computationally designed influenza neuraminidase vaccine in the ferret animal model"  
Poster Presentation  
International Society for Vaccines Annual Congress 2021  
September 13-15, 2021
12. "N1 COBRA neuraminidase vaccines in the ferret animal model"  
Oral Presentation  
CIVIC – NIH/NIAID Annual Meeting  
August 7-11, 2021
11. "N1 COBRA Neuraminidase Broadly Inhibits Viruses with Divergent N1 NA proteins"  
Oral Presentation  
CIVR-HRP Virtual Annual Meeting 2021

April 26, 2021

10. "Development of Swine Influenza H1 Vaccine using the Computationally Optimized Broadly Reactive Antigen Methodology"  
Oral Presentation  
American Society for Virology 38<sup>th</sup> Annual Meeting 2019  
University of Minnesota, Minneapolis  
July 22, 2019
9. "Sequence data and Antigenicity: Optimized Selection of Vaccine Candidates"  
Poster Presentation  
Joint Symposia on Inflammation, Infection, and Immunity  
Georgia State University, 55 Gilmer St, Atlanta, GA  
June 12, 2019
8. "Zoonotic Transmission of Influenza: Preventing the Next Pandemic"  
**Invited Departmental Seminar** – Hosted by Dr. Janice Crook-Hill  
Department of Biology  
University of North Georgia – Dahlonega  
Health and Natural Sciences Building, 159 Sunset Drive, Dahlonega, GA, 30533  
April 10, 2019
7. "Broadly Reactive Hemagglutinin-based Vaccine Designed for Swine Protects Against All Human and Swine H1N1 Influenza Viruses"  
Poster Presentation  
International Society for Vaccines Annual Congress 2018  
Atlanta Marriott Marquis, 265 Peachtree Center Ave, Atlanta, GA 30303  
Oct 30, 2018
6. "Swine-based Broadly Reactive Hemagglutinin Vaccine Protects Against Both Human and Swine H1 Influenza Viruses"  
Poster Presentation  
Department of Infectious Diseases Annual Retreat 2018  
Special Collections Library, 300 South Hull Street, Athens, GA 30605  
Oct 19, 2018
5. "A Novel Otitis Media Mouse Model"  
Oral Presentation  
Georgia Bordetella Symposium  
College of Veterinary Medicine, 501 D. W. Brooks Drive, Athens, GA  
Oct 30, 2017
4. "*The Aftermath of Genome Mining: Discovery of Pertussis-like Toxin in Bordetella pseudohinzii*"  
Poster Presentation  
Department of Microbiology Recruitment 2017  
Paul D. Coverdell Center, Athens, GA 30605  
Feb 4, 2017
3. "*Effect of Thermal Adaptation on Thermal Inactivation Rates of Salmonella in Roast Beef at Low Cook Temperatures*"

Poster Presentation  
Annual Meeting for International Association for Food Protection  
Oregon Convention Center, 777 Northeast Martin Luther King Junior Boulevard, Portland, OR  
July 25-28, 2015

2. *"Thermal Adaptation and Validation of Salmonella Inactivation in Roast Beef at 130°F"*  
Poster Presentation  
Annual Meeting for Food Research Institute  
Pyle Center, University of Wisconsin-Madison, 702 Langdon Street, Madison, WI  
May 20, 2015
1. *"The Effect of CYP Gene Deletion in Aspergillus fumigatus on PAH Metabolism"*  
Oral and Poster Presentation  
Food Research Summer Research Scholar Presentations  
Microbial Sciences Building, University of Wisconsin, 1550 Linden Drive, Madison, WI  
August 6, 2013

## GRANT SUBMISSIONS

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### *Unfunded:*

2. Discovery Grant – Peer Reviewed Medical Research Program - Department of Defense – Aug 2017
1. "Identifying Novel Factors Involved in the Transmission of Respiratory Pathogens". Graduate Research Fellowship Program – National Science Foundation – Oct 2016

## PATENTS

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PCT/US2021/012695 (patent application; WO/2021/142256 and US20230055468)

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