William A. Keilsohn

EDUCATION:

Master of Science, Villanova University, Villanova PA	Expected May 2019
Biology	GPA: 3.29/4.00
Bachelor of Science, University of Delaware, Newark, DE	May 2017
Honor's Double Major: Marine Science; Entomology	GPA: 3.75/4.00

HONORS AND AWARDS:

2012 Friend of HOC	2012
National Engaged Leader Award	April 2015
Allen Family Fellowship	May 2015
General Honors Award, University of Delaware	November 2015
Dean's List, University of Delaware	Fall 2013 – Spring 2017

RESEARCH:

BIOLOGY GRADUATE RESERCH Dr. Vikram Iyengar's Lab, Department of Biology; August 2017 – Present Villanova University

- Investigate the spread of *Anisolabis maritima* internationally using molecular techniques such as;
 - Perform both destructive and non-destructive genetic sampling techniques to obtain molecular data.
 - Develop new molecular sampling techniques for in order to obtain DNA from dried specimens.
 - Run modern laboratory techniques for amplifying and examining both nuclear and mitochondrial genes.
 - Sequence amplified samples via a 3130X Genetic Analyzer and analyze resulting data using current software and analytical techniques.
 - Collaborate with multiple museums and international scientists to obtain a robust sampling pool.

MARINE SCIENCE UNDERGRADUATE RESEARCHER

Dr. Jonathan Cohen's Lab, Department of Marine Biosciences;

University of Delaware

August 2016 – December 2016

- Worked closely with graduate level researchers on the development of the University's new ZooScan plankton identification system.
- Completed daily samplings of crab megalopa using passive hogs' hair collectors.
- Properly preserved and identified common species of phytoplankton and zooplankton.
- Participated in, and will receive credit for, the Undergraduate Research experience in Marine Science (MAST 468) course.

UNIVERSITY OF DELAWARE SUMMER SCHOLAR / SENIOR THESIS CANIDATE

Dr. Douglas Tallamy's Lab, Department of Entomology and Wildlife Ecology;

University of Delaware

June 2015 – May 2017

- Presented Summer findings as a poster at the UD Undergraduate Research & Service Scholar Symposium in August 2016.
 - Lead a small team to investigate the effects of roadside barriers on insect traffic mortality.
 - Worked with Longwood Gardens in PA to design and execute methods for sampling.
 - Used the program R to organize data, generate graphs and plots.
- Presented Fall findings as a poster at the Northeastern Plant, Pest, and Soils Convention in January 2016 and the UD College of Agriculture and Natural Resources Research Symposium in May 2016.
 - Worked closely with graduate level researchers to build statistical models of the data.
- Presented Summer findings as a poster at the UD Undergraduate Research & Service Scholar Symposium in August 2015.
 - Led a research team investigating the effects of roadside habitat on insect traffic mortality.
 - Heavily involved in the collection of specimens in the field and care of live specimens in the lab.
 - Primarily responsible for collecting and storing the team's data.
 - Often acted as team leader in the professor's absence and set goals and schedules for the project.
 - Identified specimens collected in the field to lowest taxonomic level, often family.

PROFESSIONAL EXPERIENCE:

MOLLUSK AND INSECT COLLECTIONS INTERN

Collections and Research, Mollusk Department;

Delaware Museum of Natural History

- Cataloged approximately 1000 shells across 200 genera using Specify[™] software.
- Organized over 1000 native shells as part of updating and maintain the museum's need to maintain accordance with phylogenetic standings.
- Organized and prepared an insect collection of over 500 research quality specimens.

May 2018 – July 2018

August 2017 – Present

- Identified over 500 insect specimens to the family level and over 400 shell specimens to the species level.
- Participated in the recovery and curation of humpback whale bones.
- Assisted in the curation of specimens already in the collection.

BIOLOGY TA

Biology Department, Villanova University

- Taught two lab sections of General Biology (I & II) to undergraduate students.
- Graded a variety of assignments in a timely and professional manner.
- Proctored examinations and quizzes for undergraduate students.

TUTOR

Office of Academic Enrichment

September 2015 – May 2017

- Tutored students in Calculus (MATH 241, 221) and Entomology (ENWC 205).
 - Explained difficult concepts and assisted students in their preparations for midterm exams.

LAB TECHNICIAN

Dr. Douglas Tallamy, Department of Entomology and Wildlife Ecology;

University of Delaware

June 2015– August 2016

- Worked with a select team of students to develop an electronic tool for the National Wildlife Federation.
- Constructed a database containing the locality and range of native plants across the United States.
- Analyzed and organized data relative to over 2000 genera of plants in over 12 states.
- Demonstrated effective communication skills by speaking on behalf of the team to the National Wildlife Federation representative.
- Assisted a graduate student in collecting data from the Cornell University's ebird site as part of a project assessing the importance and taxonomic diversity of insects in bird diets.

ELECTION JUDGE

Montgomery County, Board of Elections, Olney, Maryland April 2012 & November 2012

- Issued voter access cards via electronic polling books for over 500 voters.
- Assured voting process integrity by checking the equipment, access cards, and ballots, including absentee ballots.
- Facilitated the voting process by escorting voters to the polls, explaining the operation of the voting machine, and checking voter documents.

SKILLS:

Microsoft Office

• Word, PowerPoint, Excel, and Publisher	
R	Advanced Knowledge
Sigma Plot	Basic Knowledge
Dr. Racket	Advanced Knowledge
Python	Proficient Knowledge
Wolfram Mathematica	Basic Knowledge
JMP	Basic Knowledge
Specify	Proficient Knowledge
Geneious	Proficient Knowledge
Non-destructive Genetic Sampling	Advanced Knowledge
Insect Identification	Advance Knowledge

VOLUNTEER EXPERIENCE:

VOLUNTEER MENTOR

Enviro-Mentor

Spring 2014 – May 2017

College of Earth, Ocean, and Environment; University of Delaware, Newark, Delaware

- Provided mentoring and leadership to all incoming students.
- Assisted 4 students and other undergraduates requesting help throughout each academic year.
- Presented information at university-wide events about the College of Earth Ocean and Environment to about 150 perspective students.

VOLUNTEER TUTOR

Montgomery Co. Tutor

September 2011 – November 2012

Montgomery County, Housing Opportunities Commission, Olney, Maryland

- Tutored 25 students in Math, Reading, Science, History, and English. Included instruction on completion of assigned projects, helping 4 students achieve a B, required for a passing grade.
- Secured recognition by the program managers as a positive influence by clarifying difficult concepts and methods to students.

PUBLICATIONS:

Roadside Habitat Impacts Insect Traffic Mortality

Journal of Insect Conservation

February 2018

William Keilsohn, Desireé L. Narango, & Douglas W. Tallamy https://doi.org/10.1007/s10841-018-0051-2

SCHOLARLY & PROFESSIONAL AFFILIATIONS:

The American Entomological Society	November 2017 – Present
The National Society of Leadership and Success	April 2017 – Present
Alpha Zeta	November 2014 – Present

Professional Honorary Agricultural Fraternity

- Participated in multiple philanthropist activities as well as AG Day.
- Attended multiple presentations on communication and professional skills.
- Regularly represented the fraternity at social events such as Meet the Greeks night in September.
- 2016 Spring Chapter Assessment Program Chair
 - Served on the Delaware Chapter of Alpha Zeta's Executive Board.
 - Maintained and was responsible for the chapter's records and biannual report regarding Academic Achievement, Chapter Management, Membership Development, and Community Involvement in accordance with the program.
 - Scheduled and informed the brethren of program events.