

# Jeremy M. Davis

[email: [jerdavis@uw.edu](mailto:jerdavis@uw.edu), Phone: (530) 220-2729]

## Education

University of California, Davis Ph.D., Animal Behavior, 2006  
*Dissertation title: The Influence of Natal Experience on Habitat Selection.*  
Binghamton University (SUNY) B.S., Biological Sciences, w/honors *summa cum laude*, 1998  
*Thesis title: The Ontogeny of Photoreponse in Triops longicaudatus.*

## Employment History

2021- pres	Associate Dean of Programs and Operations, SIAS	UW-Tacoma
Sum 2021	Interim Dean, School of Interdisciplinary Arts and Sciences	UW-Tacoma
2020- 2021	Associate Dean of Faculty Support and Initiatives, SIAS	UW-Tacoma
2020- pres	Associate Teaching Professor in Science and Mathematics	UW-Tacoma
2018- 2020	Vice Chair in Science and Mathematics	UW-Tacoma
2018- 2020	Senior Lecturer in Science and Mathematics	UW-Tacoma
2014- 2018	Competitive Hire Lecturer in Science and Mathematics	UW-Tacoma
2013-2014	Visiting Assistant Professor in Biology	Pacific Lutheran University
2012-2013	Visiting Assistant Professor in Biology and Psychology	Seattle University
2008-2013	Assistant Professor in Biology and Neuroscience and Behavior	Vassar College
2006-2008	NIH Postdoctoral Fellow	University of Arizona
2005-2006	Research Coordinator (NSF GK12 Fellowship)	Sacramento Science Project

## Science Education Experience

Ph.D. thesis examiner (2017)	Griffith School of Environment   Griffith University
Honors thesis advisor (9 students; 2008-pres)	Vassar, UWT

## Instructor

Animal Behavior for non-majors (writing intensive; 3 iterations)	Seattle U, UWT
Animal Behavior w/lab for biology majors (6 iterations)	PLU, Seattle U, Vassar
Animal Behavior (Online Course; 3 iterations)	UWT
Animal Structure and Diversity (General Zoology) w/lab (4 iterations)	Vassar
Biological Invasions (Online)	UWT
Comparative Vertebrate Anatomy w/lab (5 iterations)	Seattle U, UWT
Conservation Biology in Practice w/lab (4 iterations)	UWT
Ecology (4 iterations)	UWT
Applied Entomology (3 iterations; 1 online)	UWT
Environmental Research Methods	UWT
Evolution (2 iterations)	UWT
Evolution w/ lab (2 iterations)	PLU, Seattle U
Introductory Evolution and Ecology (5 iterations)	PLU, UWT
Introduction to Biological Investigation (Intro. Bio. lab) Lab (2 iterations)	Vassar
Insights from Pests and Parasites (Gen Ed) (3 iterations)	Vassar, UWT
Issues in Biological Conservation (non-majors) (3 iterations)	UWT
Marine Invertebrates	UWT
Non-majors Biology w/lab (3 iterations)	Pima Community College, UWT
Plant-Insect Interactions (Field course)	UWT
Seminar in Interdisciplinary Arts and Sciences (2 iterations)	UWT

## Co-Instructor

Biology for Science Teachers	Sacramento-area Science Project
Seminar in Neuroscience and Behavior	Vassar
Seminar in Graduate-level Teaching in Animal Behavior (2 iterations)	UC-Davis

### Laboratory Instructor

Introductory Biology (Organismal and Population Biology; 2 iterations)	UC-Davis
Laboratory in Animal Biology/Scientific Methods	UC-Davis
Forensic Entomology (student research coordinator)	UC-Davis

### Laboratory Development (for courses not listed above)

Statistical Analysis of Beetle Egg-Laying Decisions	Vassar
The Scientific Method & Cell Respiration	Sam Brannan Middle School/UC-Davis
<i>Drosophila</i> genetics for Organismal and Population biology	UC-Davis

### **Non-Administrative Leadership Positions**

Founder and Chair of South Sound Science Education Research in Practice A multi-campus community of practice	(2014-2019)
Co-Chair – Lecturer Affairs Committee (UWT)	(2017-2020)
President – Northwest Biology Instructors Organization	(2016-2017)
Chair – Interdisciplinary Arts and Science Curriculum Committee (UWT)	(2016-2017)
Lecturer at Large – Faculty Council, School of Interdisciplinary Arts and Sciences (UWT)	(2015-2017)
Co-chair – Assessment workgroup for Natural World Gen Ed Courses (UWT)	(2014-2015)
Co-chair – Science and Mathematics Professional Development Series (UWT)	(2014-2015)
Chair – Vassar Biology Curriculum Committee	(2011-2012)
Founder of Undergraduate Research Initiative (UC-Davis)	(2005-2006)
Founder- First Year Animal Behavior/Peer Mentoring-Teaching Program	(2004-2006)
Graduate Student Representative - Educational Policy Committee (UC-Davis)	(2001-2002)
Chair – Symposium on Conservation Biology and Animal Behavior	(2001)
Deputy Program Director – Animal Behavior Society Annual Conference	(1998)

### **Leadership Training**

UWT Leading for Equity, Antiracism, and Diversity (LEAD; 6 week program)	(2022)
UW Opportunities in Leadership Program (OLP; Year-long program)	(2021-2022)
Strengthening Educational Excellence through Diversity Institute Participant (UWT)	(2019)
PKAL STEM Leadership Institute (AACU; week-long intensive program)	(2018)
Northwest Biology Consortium: Vertical Transfer workshop attendee	(2018)
AACU Crossing Boundaries: Transforming STEM Education conference attendee	(2015)
Pacific Northwest Learning Consortium - Assessment Workshop	(2013)
NSF GK-12 Fellowship: Collaborative Classroom Based Inquiry	(2005-2006)
Professors for the Future Fellowship - UC-Davis	(2005)

### **University Service/Faculty Governance**

Member – UW Faculty Council on Faculty Affairs	(2019-2020)
Member – UW Faculty Senate	(2017-2019)
Member – UWT SIAS Restructuring Task Force	(2018-2019)
Member – UWT Faculty Search Committees – (11 positions in Poetry, Social Science, Math, Writing, Epidemiology & Environmental Psychology)	(2015-pres)
Member – PLU Biology Department Assessment Committee	(2013-2014)
Member – Vassar College Institutional Animal Care and Use Committee	(2011-2012)
Member – Vassar College Committee on Leaves and Privileges	(2011-2012)

## Awards:

- ESA Mercer Award - Best ecology paper by young investigators (2005)  
(2003 *American Naturalist* Article)
- Nominee - Outstanding Graduate Teaching Award - UC-Davis (2005)
- James Wilmoth Award for Excellence in Biology - Binghamton University (1998)

## Competitive Fellowships

- NIH - Postdoctoral Excellence in Research and Teaching Fellowship – U. of Arizona (2006)
- NSF - Collaborative Classroom Based Inquiry Fellowship - UC Davis (2005)
- Professors for the Future Fellowship - UC-Davis (2005)
- NSF - Graduate Research Fellowship (1999)
- Center for Animal Behavior Fellowship – UC-Davis (1999)

## Grants:

- UWT SIAS Teaching and Research Fund (\$1600) (2017)
- UWT SIAS Teaching and Research Fund (\$200) (2016)
- Frances Collins Research Fund - Vassar College (\$2500) (2011)
- CCAS Keeping Current Grant - Vassar College/HHMI (\$1500) (2011)
- Fran Ferguson Classroom Technology Fund - Vassar College (\$500) (2010, 2011)
- Animal Behavior Block Grant - UC-Davis (\$1500) (2003)
- Jastro-Shields Research Grant - UC-Davis (\$2000) (2003)
- UC-Davis Center for Population Biology Research Grant (\$1200) (2001)

## Professional Service

### Peer Reviewer

PLOSOne, OIKOS, Biology Letters, Evolution, Heredity, Animal Behavior, Behavioral Ecology, Ecological Entomology, Entomologia experimentalis et applicata, Arthropod-Plant Interactions, Journal of Crustacean Biology, Journal of Insect Behavior

Panelist – NSF GRF Program (2014-15, 2017-18)

Chair – Symposium on Conservation Biology and Animal Behavior (2001)  
(Center for Animal Behavior: UC-Davis)

Deputy Program Director – Animal Behavior Society Annual Conference (1998)

## Community Service

Judge (Psychology) - Central Sound Regional Science & Engineering Fair (CSRSEF) (2013)

Judge (Biology) - Dutchess County Regional Science Fair (2010)

Judge (Biology) - Sacramento County Regional Science Fair (2006)

## Peer Reviewed Journal Publications (\*indicates undergraduate author):

Davis JM and Papaj DR (in prep) A Silver Ovipositor: Size dependent egg-laying decisions in *Rhagoletis juglandis* and *completa*.

Davis JM, \*Coogan L and Papaj DR (2015) Big maggots dig deeper: Size dependent larval dispersal in flies. *Oecologia*. 179:55–62. [8 pages]

\*Howe M, Okello MM, and Davis JM (2013) Variation in the displacement of ungulate species from human infrastructure. *African Zoology*.48: 159-166. [8 pages]

Davis JM, Nufio CR, and Papaj DR (2011) Quality or competition: Why increase resource acceptance in the presence of conspecifics? *Behavioral Ecology*. 22:730-727. [8 pages]

\*Pasqualone A and Davis JM (2011) The use of performance information in the reproductive decisions of flies. *Animal Behavior*. 82: 281-284. [4 pages]

Davis JM (2008) Variation in the influence of natal experience on habitat choices. *Quarterly Review of Biology*. 83:363-382. [20 pages]

- Stamps JA, Davis JM, Blozis SA, and Boundy-Mills KL (2007) Genotypic variation in refractory periods and habitat selection by natal dispersers. *Animal Behaviour*. 74: 599-610. [12 pages]
- Davis JM (2007) Preference or desperation? Natal experience and variation in breeding site selection in *Drosophila melanogaster*. *Animal Behaviour*. 74: 111-119. [9 pages]
- Stamps JA and Davis JM (2006) Adaptive effects of natal experience on habitat selection by dispersers. *Animal Behaviour*. 72:1279-1289. [11 pages]
- Stamps JA, Buechner M, \*Alexander K, Davis JM, and \*Zuniga N (2005) Genotypic differences in space use and movement patterns in *Drosophila melanogaster*. *Animal Behaviour*. 70: 609-618 [10 pages]
- Davis JM and Stamps JA (2004) The effect of natal experience on habitat preferences. *Trends in Ecology and Evolution*. 19: 411-416 [6 pages]
- Bolnick DI, Svanback R, Fordyce JA, Yang LH, Davis JM, Hulsey CD, and Forister ML (2003) The ecology of individuals: Incidence and implications of individual specialization. *The American Naturalist*. 161: 1-28 [28 pages]
- Bolnick DI, Yang LH, Fordyce JA, Davis JM and Svanback R (2002) Measuring individual level trophic specialization. *Ecology*. 83: 2936-2941 [6 pages]
- Davis JM and Madison D (2000) The ontogeny of light-dark response in *Triops longicaudatus* as a response to changing selective pressures. *Crustaceana*. 73(3):283-288 [6 pages]

#### Book Chapters/Encyclopedia Entries:

- Davis, J.M. (2019; Revision). Habitat Imprinting and Natal Habitat Preference Induction. In: Choe, J.C. (Ed.), *Encyclopedia of Animal Behavior*, (2nd ed.). vol. 3, pp. 301–305. Elsevier, Academic Press.
- Davis JM (2017), Alternative Adaptive Peaks. In: Shackelford TK and Weekes-Shackelford VA (Eds.) *Encyclopedia of Evolutionary Psychological Science*. Springer International Publishing
- Davis JM (2017), Currencies and Constraints. In: Shackelford TK and Weekes-Shackelford VA (Eds.) *Encyclopedia of Evolutionary Psychological Science*. Springer International Publishing [4 pages]
- Davis JM (2017), Optimal Clutch Size. In: Shackelford TK and Weekes-Shackelford VA (Eds.) *Encyclopedia of Evolutionary Psychological Science*. Springer International Publishing [4 pages]
- Davis JM (2017) Habitat imprinting and natal habitat preference induction (substantial update). In: *Reference Module in Life Sciences*. Elsevier. [5 pages]
- Davis JM (2010) Habitat Imprinting. In: *Encyclopedia of Animal Behavior* (Ed. by D. B. Michael & M. Janice), pp. 33-37. Oxford: Academic Press. [5 pages]
- Papaj DR, Snell-Rood E and Davis JM (2008) Behavioral Ecology: Learning. IN: *Encyclopedia of Ecology*. Pp. 2154-2160. Elsevier. [7 pages]

#### **Published Teaching Materials:**

- Davis, JM and Hultgren KM (in prep) Game of Beans: A physical model of recombination and evolution.
- Davis, JM (in prep) A classroom life size model for revealing the mechanism of counter-current exchange systems
- Davis, JM (2017). Exploring the population dynamics of wintering bald eagles through long-term data. <https://qubeshub.org/publications/81/1>
- Davis, JM (2017). Investigating the footprint of climate change on phenology and ecological interactions in north-central North America. <https://qubeshub.org/publications/80/1>

#### **Teaching/Outreach Presentations:**

- Davis JM (2019) A life-sized counter-current exchange system to demonstrate structure, function AND process. Northwest Biology Instructors Organization annual meeting. Chemeketa Community College, Yamhill Valley, OR
- Davis JM and Masura J (Poster in 2018) Assessing Impacts of Freshman Core on Science Attitudes and Literacy. Teaching and Learning Symposium. University of Washington, Seattle, WA

- Davis, JM and Masura J (2017). Assessing science literacy and attitudes in 1<sup>st</sup> year “core” courses. South Sound Science Education Research in Practice symposium
- Davis, JM, Skipper H, Vincent J, Kennedy M, Quinn J, Norman S (2017) To click or not to click. UW Tacoma Teaching Forum
- Davis, JM (2016) A life-sized physical model of countercurrent exchange. South Sound Science Education Research in Practice symposium
- Davis JM (Poster in 2013) Skype-facilitated discussions on the process of behavioral biology. Teaching and Learning Symposium. University of Washington, Seattle, WA
- Davis, JM, Skipper H, Vincent J (2015) Integrating clicker and polling activities into your classroom. SAM Professional Development Series, University of Washington- Tacoma
- Davis, JM (2013) How to get the most out of your classes. Success in the Natural Sciences Workshop. Pacific Lutheran University, Tacoma, WA
- Davis JM (Poster in 2013) Skype-facilitated discussions on the process of behavioral biology. Teaching and Learning Symposium. University of Washington, Seattle, WA
- Davis JM and \*Smith, L. (Poster in 2010) Going to the source by Skype-ing with scientists. Teaching and Technology forum, Vassar College, Poughkeepsie, New York
- Davis JM (2007) Applying a teaching philosophy where the rubber meets the unpaved, winding and long road. NIH-IRACDA National Conference, San Diego, CA
- Davis JM, C. J. Hvidsten and C. Passmore (2006) Apply your knowledge: The importance of the concept application phase in model-based inquiry. National Science Teachers Association: Western Conference, Salt Lake City, UT
- Davis JM (2004) Teaching phylogenetic concepts (teaching exemplar). Instructional video for laboratory instructors at UC-Davis.

### **Book Reviews:**

- Bell AM, Davis JM, Greene CM, Lema SC, Watters JV, and Yang LH (2001) Evolutionary questions in an ecologically relevant context. *Evolution* 55:1715-1716 [2 pages]
- Bell AM, Davis JM, DeBose JL, Long SJ, Mabry KE, Stankowich T, Watters, JV and Johnson JC (2001) Greatest hits in behavioral ecology. *Trends in Ecology and Evolution*. 17:296 [1 page]

### **Research Presentations:**

#### *Invited Talks*

- Davis JM, Smith P, Gawel J, Fox-Dobbs K, Shinneman A (January 2020) Are floating logs a missing niche for aquatic insects? UWT SIAS Brown Bag Series
- Davis JM (2017) What bugs “mean” to each other. Think and Drink (General Audience)
- Davis JM (2017) Vive la difference! Within species differences and why they matter. Invited Talk at University of Washington-Tacoma.
- Davis JM (2014) The use of social information by non-social insects. Invited Talk at University of Puget Sound.
- Davis JM (2014) Silver spoons and social information: How size and social environment affect insect reproductive decisions. Invited Talk at Pacific Lutheran University.
- Davis JM (2013) Silver spoons and social information: How size and social environment affect insect reproductive decisions. Invited Talk at University of Washington-Tacoma.
- Davis JM (2011) Parents and Peers influence the Reproductive Decisions of *Rhagoletis suavis*. Invited Talk at Binghamton University, Binghamton, New York.
- Davis JM (2010) How parents & peers influence insect decisions. Invited talk at Bard College, Annandale-on-Hudson, New York.
- Davis JM (2009) Preference, time, and size: How mothers influence the habitat choices of their offspring. Invited talk at CUNY Queens College, New York.

Davis JM (2007) Why natal experience does (or does not) affect habitat choices. Symposium in honor of Judy Stamps. University of California-Davis.

Davis, JM (2006) The effect of natal experience on habitat and host use. University of Arizona, Tucson, Arizona.

*Conference Talks and Posters* (\* indicates undergraduate author):

Fox-Dobbs, K, \*Barnes A, Davis JM, Gawel J, Shinneman A (2019) The role of atmospheric nitrogen fixation by log mat biofilm in the Spirit Lake ecosystem, Mount St. Helens, WA, American Geophysical Union, Fall Meeting

\*Grysho C, \*Ouhl T, Davis JM, Gawel JE, Fox-Dobbs K, Shinneman A (Poster in 2018) The impact of floating woody debris on invertebrate communities in Spirit Lake. Washington Lake Protection Association. Portland, OR

\*Lopez EU, \*Franklin A, Yee W, Davis JM (Poster in 2016) The impact of pesticide and fruit cues on the ovarian development of the cherry pest, *Rhagoletis indifferens*. UWT Biomedical Sciences Major Inauguration

\*Christie E, \*Chase E, Davis JM (Poster in 2015) Environmental Factors Influencing Larval Behavior in *Drosophila suzukii*. University of Washington Undergraduate Research Symposium

\*Odell S and Davis JM (Poster in 2012) Morphological and behavioral plasticity in female choice due to social experience in *Drosophila hydei*. Hudson Valley Life Sciences Meeting, Poughkeepsie, NY

Davis JM and \*Pasqualone AA. (2011) Conspecific phenotypic states influence reproductive decisions in nonsocial insects. Animal Behavior Society/International Ethology Conference. Bloomington, IN

\*Liang H, \*Thomas D and Davis JM (Poster in 2011). Scarce sperm and sexually aggressive females. Animal Behavior Society/International Ethology Conference. Bloomington, IN

\*Whelan K, \*Rundell E and Davis JM (Poster in 2011). Influence of learned handling times on the hunting decisions of preying mantises. Hudson Valley Life Sciences Meeting.

\*Pasqualone AA and Davis JM (Poster in 2010) Peer Pressure in Flies. Hudson Valley Life Sciences Meeting.

\*Coogan L and Davis JM (Poster in 2009). Ecology of larval dispersal in walnut husk maggot (*Rhagoletis suavis*). Hudson Valley Life Sciences Meeting.

Davis JM & Papaj DR (Poster in 2009) A "Silver Ovipositor" effect in *Rhagoletis juglandis*. Society for Integrative and Comparative Biology. Boston.

Davis JM and Stamps JA (2007) Testing the alternative effects of early experience on habitat choice. Animal Behavior Society Meeting. Burlington, VT

Stamps JA, Davis JM, Blozis SA, Boundy-Mills KL (2007) Genotypic variation in refractory periods and habitat selection. Animal Behavior Society Meetings. Burlington, VT

Davis JM and Stamps JA (2006) Multiple adaptive mechanisms for natal experience's influence on habitat and host use. Society for the Study of Evolution, SUNY - Stonybrook

Davis JM and Stamps JA (2004) The Effect of Natal Experience on Habitat Preference. Animal Behavior Society Annual Meeting. Oaxaca, Mexico.

Davis JM, Bell AM and Sih A (2002) Genetics and Behavioral Syndromes. Center for Animal Behavior Workshop: Behavioral Syndromes. UC-Davis.

Davis JM (1999) Levels of artificial selection: Animal welfare implications. Center for Animal Behavior Workshop: Animal Welfare. UC-Davis.

Davis JM and Wilson DS (1998) Avoid the best! Why some males should prefer less desirable females. Animal Behavior Society Annual Meeting. University of Southern Illinois-Carbondale.