Ned A. Dochtermann Department of Biological Sciences North Dakota State University <u>ned.dochtermann@gmail.com</u> <u>https://www.neddochtermann.com</u>



PROFESSIONAL APPOINTMENTS

Associate Professor. (2018-ongoing) Biological Sciences, North Dakota State University.

Assistant Professor. (2012-2018) Biological Sciences, North Dakota State University.

Postdoctoral Researcher. (2009-2012) University of Nevada, Reno. (Adviser: M.M. Peacock)

Ph.D. (2009) University of Nevada, Reno. (Adviser: S.H. Jenkins)

M.Sc. (2005) University of California, Davis. (Adviser: T.P. Salmon)

B.Sc. (1999) University of California, Davis.

PROFESSIONAL AWARDS

Excellence in Research Award (2017); **College of Science & Mathematics**, North Dakota State University (college-wide competitive award)

Outstanding New Investigator Award (2016); Animal Behavior Society

Frank A. Pitelka Award for Excellence in Research (2014); International Society for Behavioral Ecology

National Academies Education Fellow in the Life Sciences (2013); National Academy of Sciences

COMPETITIVELY AWARDED RESEARCH FUNDING (~\$1,150,000 Awarded)

National Science Foundation (IOS). *Mid-Career Advancement: Estimating quantitative genetic parameters via SNP based relatedness*. 2022-2025. Total funded: \$250,214 (PI)

Established Program to Stimulate Competitive Research (EPSCoR)—North Dakota University System. *CricketWatch: High-throughput behavioral phenotyping*. 2019-2021. Total funded: \$29,000 (PI)

National Science Foundation (IOS). *Behavioral syndromes as evolutionary constraints: The role of genetic architecture*. 2016-2021. Total funded: \$590,000 (PI)

National Science Foundation (IOS). *Workshop: Integrating molecular mechanisms and quantitative genetics in order to understand consistent individual differences in behavior.* 2016. Total funded: \$19,000 (co-Organizer)

United States Fish and Wildlife Service. *Density-dependent population dynamics and effective population size estimation in Lahontan cutthroat trout (Oncorhynchus clarkii henshawi)*. 2011-2012; Total funded \$79,900 (co-PI)

United States Fish and Wildlife Service. *Population dynamics and population genetics of Lahontan cutthroat trout (Oncorhynchus clarkii henshawi)*. 2010-2011; Total funded \$64,440 (co-PI)

United States Fish and Wildlife Service. *Population viability analysis in Lahontan cutthroat trout (Oncorhynchus clarkii henshawi)*. 2009-2010; Total funded \$62,040 (co-PI)

Graduate Student Association & Ecology, Evolution and Conservation Biology Graduate Program (University of Nevada, Reno). Total funded \$5,600

Jerry and Betty Wilson Research Scholarship (Department of Biology; University of Nevada, Reno). Total funded \$1,000

University of California, Integrated Pest Management Project. *California ground squirrel (Spermophilus beecheyi) foraging behavior: Implications for improved control.* 2001-2003; Total funded \$75,000 (coauthor and listed PI Terrell P. Salmon)

PUBLICATIONS

* indicates shared first author status; †, ‡, and p indicate, respectively, mentored undergraduate, graduate, and postdoctoral coauthors

48. Dalos, J. [‡], Royauté, R.,^P A.V. Hedrick., **N.A. Dochtermann**. 2022. Phylogenetic conservation of behavioral variation and behavioral syndromes. *Journal of Evolutionary Biology*. **doi**:10.1111/jeb.13935

47. Royauté R.^p, **N.A. Dochtermann**. 2021. Comparing ecological and evolutionary variability within datasets. *Behavioral Ecology and Sociobiology*. **doi**:10.1007/s00265-021-03068-3

46. Bucklaew, A.⁺, **N.A. Dochtermann**. 2021. The effects of exposure to predators on personality and plasticity. *Ethology*. **doi**:10.1101/2020.03.26.010413

45. Royauté, R.^P, A.V. Hedrick, **N.A. Dochtermann**. 2020. Behavioral syndromes shape evolutionary trajectories via conserved genetic architecture. *Proceedings of the Royal Society (B)*. **doi**:10.1101/61941

44. Dingemanse, N.J., I. Barber, **N.A. Dochtermann**. 2020. Non-conscumptive effects of predation: does perceived risk strengthen the genetic integration of behaviour and morphology in stickleback? *Ecology Letters*. **doi**:10.1111/ele.13413

43. Westneat, D., Y. Araya-Ajoy, H. Allegue, B. Class, N. Dingemanse, **N.A. Dochtermann**, L. Garamszegi, J. Martin, S. Nakagawa, D. Realé, H. Schielzeth. 2020. Collision between biological process and statistical analysis revealed by mean-centering. *Journal of Animal Ecology*. **doi**:10.1111/1365-2656.13360

(authors 2 – 11 contributed equally and are listed in alphabetical order, SQuID working group product)

42. Schielzeth, H., N.J. Dingemanse, S. Nakagawa, D.F. Westneat, H. Allegue, C. Teplitsky, D. Réale, **N.A. Dochtermann**, L.Z. Garamszegi, Y.G. Araya-Ajoy. 2020. Robustness of linear mixed-effects models to violations of distributional assumptions. *Methods in Ecology and Evolution*. **doi**:10.1111/2041-210X.13434 (SQuID working group product)

41. Boyer, A., H. Karevold, D. Krueger, **N.A. Dochtermman**, E.H. Gillam. 2020. Behavioral repeatability and behavioral syndromes in the Big Brown Bat, *Eptesicus fuscus. Behaviour*. **doi**:10.1163/1568539X-bja10019

40. Yoko, Z., K. Volk, N.A. Dochtermann, J. Hamilton. 2020. The importance of quantitative trait differentiation in restoration: landscape heterogeneity and functional traits inform seed transfer guidelines. *AoB Plants*. **doi**:10.1093/aobpla/plaa009

39. Downs, C.J., **N.A. Dochtermann**, R. Ball, K.C. Klasing, L.B. Martin. 2020. The effects of body mass on immune cell concentrations of terrestrial mammals. *The American Naturalist*. **doi**:10.1086/706235

38. **Dochtermann, N.A.**^c, R. Royauté ^p. 2019. The mean matters: going beyond repeatability to interpret behavioral variation. *Animal Behaviour*. **doi**:10.1016/j.anbehav.2019.05.012

37. Berdal, M.A.[‡], **N.A. Dochtermann** ^c. 2019. Adaptive alignment of plasticity with genetic variation and selection. *Journal of Heredity*. **doi**:10.1093/jhered/esz022

36. **Dochtermann, N.A.**^c, T. Schwab[†], M.A. Berdal[‡], J. Dalos[‡], R. Royauté ^p. 2019. The heritability of behaviour: a meta-analysis. *Journal of Heredity*. **doi**:10.1093/jhered/esz023

35. Royauté, R.^P, M.A. Berdal[‡], C.R. Garrison[‡], J. Dalos[‡], **N.A. Dochtermann**. 2019. Current energy state interacts with the developmental environment to influence behavioral plasticity. *Animal Behavior*. **doi**:10.1016/j.anbehav.2018.11.013

34. Royauté, R.^P, M.A. Berdal[‡], C.R. Garrison[‡], **N.A. Dochtermann**^c. 2018. Paceless life? A meta-analysis of the "pace-of-life syndrome" hypothesis. *Behavioral Ecology and Sociobiology*. **doi:**10.1007/s00265-018-2472-z

33. Gienger, C.M., **N.A. Dochtermann**, C.R. Tracy. 2018. Detecting Trends in Body Size: Empirical and Statistical Requirements for Intra-Specific Analyses. *Current Zoology*. **doi**: 10.1093/cz/zoy079

32. Royauté, R. ^p and **N.A. Dochtermann**. 2017. When the mean no longer matters: Developmental diet affects behavioral variation but not population averages in the house cricket (*Acheta domesticus*). *Behavioral Ecology*. **doi**:10.1093/beheco/arw164 31. Allegue, H., Y.G. Araya-Ajoy, N.J. Dingemanse, **N. A. Dochtermann***, L.Z. Garamszegi, S. Nakagawa, D. Réale, H. Schielzeth, D.F. Westneat. 2017. SQuID – Statistical Quantification of Individual Differences: an educational and statistical tool for understanding multi-level phenotypic data in linear mixed models. *Methods in Ecology & Evolution*. doi:10.1111/2041-210X.12659

(all authors contributed equally and are listed in alphabetical order, SQuID working group product)

30. Needham, K.B., **N.A. Dochtermann**, T.J. Greives. 2016. Consistent individual variation in day, night, and GnRH-induced testosterone concentrations in house sparrows (*Passer domesticus*). *General and Comparative Endocrinology*. **doi**:10.1016/j.ygcen.2016.12.010

29. Greives, T.J., **N.A. Dochtermann**, E.C. Stewart. 2016. Estimating heritable genetic contributions to innate immune and endocrine phenotypic correlations: A need to explore repeatability. *Hormones and Behavior*. **doi**:10.1016/j.yhbeh.2016.11.015

28. **Dochtermann, N.A.** and M. D. Matocq. 2016. Speciation along a shared evolutionary trajectory. *Current Zoology*. **doi**:10.1093/cz/zow059

27. Royauté, R.^{*,P}, K. Greenlee, M. Baldwin⁺, and **N.A. Dochtermann^{*, c}.** 2015. Behavior, metabolism, and size: phenotypic modularity or integration in *Acheta domesticus*? *Animal Behaviour.* **110**:163-169

26. Bell, A.M. and **N.A. Dochtermann**. 2015. Integrating molecular mechanisms into quantitative genetics to understand consistent individual differences in behavior. *Current Opinion in Behavioral Sciences*. **6:**111-114

25. Herath, B., **N.A. Dochtermann**, J.I. Johnson, Z. Leonard, and J.H. Bowsher. 2015. Selection on bristle length has the ability to drive the evolution of male abdominal appendages in the sepsid fly *Themira biloba*. *Journal of Evolutionary Biology*. **28**:2308-2317

24. **Dochtermann, N.A.,** A. Sih, and T. Schwab[†]. 2015. The contribution of additive genetic variance to personality: the heritability of personality. *Proceedings of the Royal Society B.* **282**:20142201

(Web of Science "Highly Cited Paper")

23. **Dochtermann, N.A.** and A.B. Nelson[‡]. 2014. Multiple behaviors or split personalities: Exploratory behavior in *Acheta domesticus*. *Ethology*. **120**:1110-1117

22. **Dochtermann, N.A.,** C.M. Gienger and S.A. Zappetini. 2014. Born to win? Maybe, but perhaps only against inferior competition. *Animal Behavior*. **96**:e1-e3

21. *Downs, C.J., and ***N.A. Dochtermann.** 2014. Testing hypotheses in ecoimmunology using mixed models: disentangling hierarchical correlations. *Integrative and Comparaitve Biology*. **54**:407-418

20. Dingemanse, N.J. and **N. A. Dochtermann.** 2014. *Individual behaviour: behavioral ecology meets quantitative genetics.* In: <u>Quantitative Genetics in the Wild</u> (Chapter 4). *Eds. Charmantier, Garant, & Kruuk.* Oxford University Press

19. **Dochtermann, N.A.** and N.J. Dingemanse. 2013. Behavioral syndromes as evolutionary constraints. *Behavioral Ecology*. **24**:806-811 ("<u>Editor's Choice</u>" selected article for *Behavioral Ecology*; Pitelka Award winner (2014))

18. Dingemanse, N.J. and **N.A. Dochtermann**. 2013. Quantifying individual variation in behaviour: mixed-effect modelling approaches. *Journal of Animal Ecology.* **82**: 39-54 (Web of Science "Highly Cited Paper")

17. **Dochtermann, N.A**. and M.M. Peacock. 2013. Inter- and intra-specific patterns of density-dependence and population size variability in Salmoniformes. *Oecologia*. **171**:153-162

Sprenger, D., N.J. Dingemanse, N.A. Dochtermann, J. Theobald, and S.P.W. Walker. 2012.
Aggressive females become aggressive males in a sex-changing reef fish. *Ecology Letters* 15:986-992
(reported on by *Nature*, 12 July 2012)

15. Dingemanse, N.J., **N.A. Dochtermann** and S. Nakagawa. 2012. Defining behavioural syndromes and the role of "syndrome" deviation in understanding their evolution. *Behavioral Ecology and Sociobiology*. **66**:1543-1548

14. **Dochtermann, N.A.**, S.H. Jenkins, M. Swartz and A.C. Hargett. 2012. The roles of competition and environmental heterogeneity in the maintenance of behavioral variation and covariation. *Ecology*. **93**:1330-1339

13. **Dochtermann, N.A.** and C.M Gienger. 2012. Individual variability in life-history traits drives population size stability. *Current Zoology*. **58**:359-363

12. *Peacock, M.M. and ***N.A. Dochtermann**. 2012. Evolutionary potential but not extinction risk of Lahontan cutthroat trout (*Oncorhynchus clarkii henshawi*) is associated with stream characteristics. *Canadian Journal of Fisheries and Aquatic Sciences*. **69**:615-626

11. **Dochtermann, N.A.** 2011. Testing Cheverud's conjecture for behavioral correlations and behavioral syndromes. *Evolution*. **65**:1814-1820

10. **Dochtermann, N.A.** and S.H. Jenkins. 2011. Multivariate methods and small sample sizes. *Ethology*. **117**:95-101

9. **Dochtermann, N.A.** and S.H. Jenkins. 2011. Developing hypotheses in behavioral ecology. *Behavioral Ecology and Sociobiology*. **65**:37-45

8. **Dochtermann, N.A.** and M.M. Peacock. 2010. Differences in population size variability among populations and species of the family Salmonidae. *Journal of Animal Ecology*. **79**:888-896

7. **Dochtermann, N.A.** 2010. Behavioral syndromes: carry-over effects, false-discovery rates and *a priori* hypotheses. *Behavioral Ecology*. **21**:437-439

6. **Dochtermann, N.A.** and D. Roff. 2010. Applying a quantitative genetics framework to behavioural syndrome research. *Philosophical Transactions of the Royal Society* B. **365**:4013-4020

5. Swartz, M., S.H. Jenkins and **N.A. Dochtermann**. 2010. Coexisting desert rodents differ in microhabitat preferences for cache placement and pilferage. *Journal of Mammalogy*. **91**:1261-1268

4. *Dingemanse, N.J., ***N. Dochtermann** and J. Wright. 2010. A method for exploring the structure of behavioural syndromes to allow formal comparison within and between datasets. *Animal Behaviour*. **79:**439-450

3. Garamszegi, L.Z., S. Calhil, **N. Dochtermann**, G. Hegyi, P.L. Hurd, C. Jorgensen, N. Kutsukake, M.J. Lajeunesse, K.A. Pollard, H. Schielzeth, M.R.E. Symonds and S.Nakagawa. 2009. Changing philosophies and tools for statistical inferences in behavioral ecology. *Behavioral Ecology*. **20**:1363-1375

2. **Dochtermann, N. A.**, and S. H. Jenkins. 2007. Behavioural syndromes in Merriam's kangaroo rats (*Dipodomys merriami*): a test of competing hypotheses. *Proceedings of the Royal Society B* **274**:2343-2349. (Featured Article on PRSB website)

1. Salmon T.P. and **N.A. Dochtermann**. 2006. Rodenticide ingredient acceptance by Norway Rats (*Rattus norvegicus*), California ground squirrels (*Spermophilus beecheyi*) and pocket gophers (*Thomomys bottae*). *Pest Management Science*. **62**:678-683

PRE-PRINT MANUSCRIPTS (only those in review or revision)

49. Garrison, C.R.[‡], R. Royauté ^P, **N.A. Dochtermann**. <u>in revision</u>. Integration of signals used in intra- and inter-sexual selection. (<u>bioRxiv</u>)

50. Garrison, C.R.[‡], S. Sakaluk, **N.A. Dochtermann.** <u>in revision</u>. Sexual signaling and alternative reproductive tactics: a test of game theoretic predictions. (<u>bioRxiv</u>)

51. Anderson Berdal, M.[‡] and **N.A. Dochtermann**. <u>in revision</u>. Misalignment of selection, plasticity, and among-individual variation: A test of theoretical predictions with *Peromyscus maniculatus*. (<u>bioRxiv</u>)

52. **Dochtermann, N.A**., <u>in revision</u>. The role of trade-offs and feedbacks in shaping integrated plasticity and behavioral correlations. (<u>bioRxiv</u>)

53. Royauté, R.^P, A.V. Hedrick., **N.A. Dochtermann**. <u>in revision</u>. Sex-specific behavioral syndromes allow the independent evolution of behavioral dimorphism. (<u>EcoEvoRXiv</u>)

54. **Dochtermann, N.A.**, B. Klock[†], R. Royauté^p, D.A. Roff. <u>in revision</u>. Drift on holey landscapes as a dominant evolutionary process. (<u>bioRxiv</u>)

TEACHING EXPERIENCE

Teaching Awards and Training

National Academies Education Fellow in the Life Sciences; National Academy of Sciences

ND-Gateways Participant: NSF funded instructional development program participant (2013-2015)

Excellence in Teaching Program, Recognition Award; UNR campus-wide competition (2007-2008)

Courses

Department of Biological Sciences; North Dakota State University

Leste des Parles	E-11 2022
Instructor: <i>Ecology</i>	Fall 2022
Instructor: Animal Behavior	Fall 2013/15/17/
	2019/21
Instructor: <i>Mammalogy</i>	Fall 2012,
	Spring 2014/15/16/17/ 19/20/22
Instructor: <i>Quantitative Biology</i> (Graduate Course)	Spring 2015/17/19, Fall 2022
Instructor: Population Dynamics (Graduate Course)	Spring 2020
Department of Biology; University of Nevada, Reno As the instructor of record:	
Instructor: <i>Mathematical Modeling in Ecology</i> (Graduate Course)	Spring 2011
Instructor: Experimental Field Ecology	Summer 2008
As a teaching assistant:	
Head Teaching Assistant and Guest Lecturer: Evolution	1/2008-5/2009
Teaching Assistant: Evolution	8/2005-12/2007
Invited Lecturer: Graduate Seminar in Evolutionary Ecology	10-12/2006
Teaching Assistant: Human Anatomy and Physiology	8/2003-5/2005
Workshops	
Statistical QUantification of Individual Differences (SQuID) Works	shop;
Held at: the Centre d'Ecologie Fonctionnelle et Evolutive	October 2022
Montpellier, France	
Instructor; multiple instructor four-day workshop (second of six funded international workshops)	
Statistical QUantification of Individual Differences (SQuID) Works	shop;
Held at: the Norwegian University of Science & Technology	April 2022
Trondheim, Norway	
Instructor; multiple instructor four-day workshop (first of six funded international workshops)	
(first of six funded international workshops)	

Centre for Ecological Research; Hungarian Academy of Sciences Instructor: <i>Study design and sampling decisions in</i> <i>mixed-effect model analyses</i> (multiple instructor workshop)	September 2019
Centre for Biodiversity Dynamics; Norwegian University of Science & Instructor: <i>Study design and sampling decisions in</i> <i>mixed-effect model analyses</i> (multiple instructor workshop)	& Technology October 2016
Max Planck International Research School Instructor: <i>Study design and sampling decisions in</i> <i>mixed-effect model analyses</i> (multiple instructor workshop)	November 2015
Centre for Biodiversity Dynamics; Norwegian University of Science & and the Max Planck International (MPI) Research School Instructor: <i>Statistical approaches to multivariate phenotypes</i> (multiple instructor workshop with instructors from NTNU, MPI, and the University of Exeter)	& Technology January 2015
Department of Biological Sciences; Universite du Quebec a Montreal Instructor: <i>Understanding and analyzing complex patterns</i> <i>of correlations</i> (also attended by graduate students and faculty from McGill University and Universite de Sherbrooke)	January 2014
Department of Behavioural Ecology and Evolutionary Genetics; Max Planck Institute for Ornithology; Seewiesen, Germany Instructor: <i>Multivariate Methods in Evolutionary Ecology</i>	February 2011

STUDENT MENTORING

Graduate Advising

MA Sekhar	(NDSU – Ph.D. Environmental & Conservation Sciences)
Monica Berdal	(NDSU – Ph.D. Zoology; Completed: May 2021)
Jeremy Dalos	(NDSU – M.Sc. Zoology; Completed: May 2020)
Courtney Garrison	(NDSU – M.Sc. Zoology; Completed: December 2017)
Jeffery Berens	(NDSU – M.Sc. Environmental and Conservation Sciences;
	ND-EPSCoR Graduate Fellowship; Completed: December 2015)
Kathryn Preston	(NDSU – M.Sc. Zoology; Completed: May 2015)

Current Graduate Committee Membership

Anuj Ghimire	(NDSU – Ph.D. Biology)
Maggie Maniago	(NDSU – M.Sc. Environmental & Conservation Sciences)
Jessica Duttenhefner	(NDSU – M.Sc. Environmental & Conservation Sciences)
Brian Springall	(NDSU – Ph.D. Biology)
Elfren Celestino	(NDSU – Ph.D. Animal Science)
Nyan Bhomik	(NDSU – Ph.D. Animal Science)
Anakka Clement	(NDSU – Ph.D. ECS)
Kayla Earls	(NDSU – Ph.D. Zoology)
Michael Hamel	(NDSU – M.Sc. Range Science)

Undergraduate Researchers

Mohammed Alrubaye (NDSU); Hieu Le (NDSU); Brooke Rothmare (NDSU); Brent Weston (NDSU); Alondra Neunsinger (NDSU); Kaitlyn Cannon (NDSU); Sarah Felde (NDSU); Amy Buckleaw (Canisus College); Ishan Joshi (NDSU); Hannah Lambert (NDSU); Brady Klock (NDSU); Jenna LaCoursie (NDSU); Jonathan Albers (NDSU); Tiara Teserak (NDSU); Jeremy Dalos (NDSU); Amanda Wilson (NDSU); Madisen Rick (NDSU); Lynn Holloway (VSU, Summer STEM Intern); Katie Pnewski (NDSU); Peter Keefe (NDSU); Reily Altenburg (NDSU); Tori Schwab (NDSU); Emily Boyd (NDSU); Ashley Rolfe (UNR – McNair Thesis Project); Jennifer Henderson-Reno (UNR – Honors Thesis Project); Palkin Zed (UNR); Lisa Gadsby (UC Davis); Laura Agostinelli (UC Davis)

PROFESSIONAL SERVICE

Societal

Secretary, Animal Behavior Society, July 2019 – July 2022

Member, Animal Behavior Society Journal Exploratory Committee (December 2020 – July 2022)

Graduate Student Research Grant Reviewer, Animal Behavior Society (2015/16/17)

Editorial

Associate Editor, *Behavioral Ecology and Sociobiology*, November 2016 – ongoing Associate Editor, *Journal of Mammalogy*, September 2016 – November 2021 Associate Editor, *Current Zoology*, April 2013 – March 2014

Handling Editor; ManuStat Central, Ecological/Statistical collaborative network (2011-2013)

Reviewing

(does not include federal and international grant reviews or tenure evaluations)

Reviewer for many journals, including: Evolution, American Naturalist, Journal of Evolutionary Biology, Ecology, Animal Behaviour, Behavioral Ecology, Evolutionary Ecology, Ethology, Behavioral Ecology and Sociobiology, Proceedings of the Royal Society (B), and Journal of Mammalogy

College & University

NDSU College of Science and Mathematics, Promotion and Tenure Evaluation Committee <u>co-Chair</u> (Fall 2022 – ongoing)

NDSU College of Science and Mathematics, Promotion and Tenure Evaluation Committee member (Fall 2021 – Spring 2022)

NDSU Faculty Senate Budget Committee (Fall 2017 – Spring 2020)

NDSU Institutional Animal Care and Use Committee (Fall 2017 – Spring 2020)

NDSU FORWARD "Ally" (2012); FORWARD - Focus on Resources for Women's Advancement, Recruitment/Retention, and Development

Departmental

NDSU, Department of Biological Sciences; Faculty Affairs Committee member (Fall 2012 – Spring 2014, Fall 2019 – ongoing)

NDSU, Department of Biological Sciences; Graduate Affairs Committee (Fall 2015 – Spring 2019)

NDSU, Department of Biological Sciences; Faculty Affairs Committee **Chair** (Fall 2014 – Spring 2015)

NDSU, Department of Biological Sciences; Seminar Series organizer (Spring 2013 – Spring 2015)

NDSU, Faculty Advisor: Biological Sciences Graduate Student Association (Spring 2013 – Spring 2019)

President, *Ecology, Evolution and Conservation Biology* Graduate Student Association (2007-2008)

PROFESSIONAL PRESENTATIONS

Invited Talks

Animal personality, behavioral syndromes, integrated plasticity, and alternative landscape. *North Dakota State University; Department of Psychology Colloquium Series;* February 25th, 2022

Behavioral syndromes, integrated plasticity, and alternative landscapes. *University of Maine; Wildlife, Fisheries, and Conservation Biology Seminar Series*; February 22nd, 2021

Behavioral syndromes and phenotypic plasticity: tests of critical quantitative genetic hypotheses. *University of California, Davis; Animal Behavior Graduate Group Seminar Series*; June 1st, 2018

Evolutionary consequences of trait correlations. *University of South Dakota Biology Department Seminar Series*; September 25th, 2017

Consistent individual differences within a quantitative genetics framework. UIUC/RCN/NSF Symposium: "Integrating Molecular Mechanisms and Quantitative Genetics to Understand Consistent Individual Differences in Behavior"; July 24th, 2016

An evolutionary ecological approach to "personality" and behavioral syndromes. *UC Riverside Biology Department Colloquium;* October 8th, 2015

Temporal variation produces individual variation: Understanding pseudopersonality and pseudosyndromes. *Special Symposium: "It's About Time"; 52nd Annual meeting of the Animal Behavior Society;* June 13th,2015

Evolutionary consequences of animal personalities and behavioral syndromes. *UC Davis* Animal Behavior Graduate Group Seminar Series; March 7th, 2014

Statistical approaches to uncovering ecological and evolutionary causes and consequences of behavioral and physiological differences among individuals. *Special Symposium: "Methods and Mechanisms in Ecoimmunology"; Society for Integrative and Comparative Biology;* January 7th, 2014 **(team presentation with C.J. Downs)**

Evolutionary consequences of animal personalities and behavioral syndromes. *Ecology, Evolution, and Conservation Biology Seminar Series. University of Nevada, Reno;* November 7th, 2013

The personality component of behavioral syndromes: Understanding complex patterns of correlations. *Volkswagen Stiftung Symposium: "Personality: causes and consequences of consistent behavioral variation"*; September 7th, 2013

Evolutionary ecology of behavioral variation and correlations. *Department of Biology; Minnesota State University, Moorhead*; October 22nd, 2012

Animal personalities as evolutionary constraints. *Department of Psychology; North Dakota State University*; September 21st, 2012

Ecological correlates and evolutionary implications of behavioral variation and covariance. *Max Planck Institute for Ornithology; Seewiesen, Germany*; December 5th, 2011

Behavioural syndromes as evolutionary constraints. *Max Planck Institute for Ornithology; Lindau, Germany*; February 3rd, 2011

The use of Akaike's information criterion in behavioral ecology. *Special symposium on statistical methods; organized by Drs. S. Nakagawa and L. Garamszegi. 12th International Behavioral Ecology Congress;* August 15th, 2008

Uninvited Talks

(Does **not** include presentations & posters by students or post-docs)

Berdal, M., and **N.A. Dochtermann**. Alignment of selection, plasticity, and amongindividual covariances: a test of theoretical predictions with *Peromyscus maniculatus*. 99th Annual meeting of the American Society of Mammalogists (2019)

Dochtermann, N.A., C. Garrison, S. Sakaluk. Alternative reproductive tactics and satellite males: a test of game theoretic predictions. *17th International Behavioral Ecology Congress (2018)*

Dochtermann, N.A., C. Garrison, S. Sakaluk. Alternative reproductive tactics and satellite males: a test of game theoretic predictions. *55th Annual meeting of the Animal Behavior Society (2018)*

Dochtermann, N.A., R. Royaute, A.V. Hedrick. Behavioral syndromes and quantitative genetics: reciprocal insights. *President's Symposium: American Genetics Association* (2017; held March 2018)

Dochtermann, N.A., C. Garrison, M. Berdal, and R. Royaute. The effects of the developmental environment on behavioral-morphological integration. 53rd Annual meeting of the Animal Behavior Society (2016)

Dochtermann, N.A. The evolutionary implications of behavioral syndromes: pleiotropy versus historical selection. *52nd Annual meeting of the Animal Behavior Society (2015)*

Dochtermann, N.A., R. Royaute, K. Greenlee. Behavioral-physiological correlations in crickets: among- and within-individual patterns. *51st Annual meeting of the Animal Behavior Society (2014)*

Dochtermann, N.A. and T. Schwab. The contribution of additive genetic variation to personality variation. *50th Annual meeting of the Animal Behavior Society (2013)*

Dochtermann, N.A. and N.J. Dingemanse. Behavioral syndromes as evolutionary constraints. *48th Annual Meeting of the Animal Behavior Society (2011)*

Dochtermann, N.A. and M.M. Peacock. The additive contributions of densitydependence and density-independence to the population dynamics of a threatened salmonid. 96th Annual Meeting of the Ecological Society of America (2011)

Dochtermann, N.A. and S.H. Jenkins. The maintenance of behavioral variation in natural populations of Merriam's kangaroo rat: comparing competing mechanisms. *12th International Behavioral Ecology Congress (2008)*

Dochtermann, N.A.; S.H. Jenkins and J. Henderson-Reno. Behavioral syndromes in Merriam's kangaroo rats: A test of competing hypotheses. *43rd Annual meeting of the Animal Behavior Society (2006)*

POPULAR PRESS COVERAGE

Science Friday (NPR) Interview (aired August 1, 2014); Discussed ecology, kangaroo rats, and Frank Herbert's <u>Dune</u>.

PROFESSIONAL REFERENCES

Dr. Stephen H. Jenkins Professor (Emeritus) Department of Biology; University of Nevada, Reno jenkins@unr.edu

Dr. Niels J. Dingemanse Professor Department of Biology II; Ludwig-Maximilians University, Munich DE <u>n.dingemanse@lmu.de</u>

Dr. Derek Roff Distinguished Professor (Emeritus) Department of Biology; University of California, Riverside <u>derek.roff@ucr.edu</u>