

# CURRICULUM VITAE

for William R. Rice

(March 2012)

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## **EDUCATION SUMMARY:**

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Degree	Date	Institution	Department	Advisor
Ph.D.	8/80	Oregon State University	Zoology	John A. Wiens Bruce A. Menge
M.S.	8/76	Ohio State University	Zoology	John D. Harder
B.S.	8/73	Cleveland State University	Biology	Allan A. Ramm

## **ACADEMIC APPOINTMENTS:**

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1999- Professor, Univ. of California at Santa Barbara, Dep. Ecology, Evolution & Marine Biology  
1998-99 Associate Chair of Organismal & Population Biology Section of Biology Department  
1995-99 Professor, University of California at Santa Cruz, Biology Department  
1991-95 Associate Professor, University of California at Santa Cruz, Biology Department  
1989-91 Assistant Professor, University of California at Santa Cruz, Biology Department  
1984-89 Assistant Professor, University of New Mexico, Biology Department  
1980-84 Visiting Assistant Professor, University of California at Davis, Zoology Department

## **TEACHING EXPERIENCE:**

I have taught graduate/undergraduate courses in:

Genetics	General Biology	General Ecology
Population Genetics	Evolution	Statistics (Grad. & Under. levels)
Advanced Evolutionary Genetics	Computer Modeling	Graduate-Core Course
Molecular Evolution	Ecology Seminars	
Conservation Genetics	Evolution Seminars	

## **PROFESSIONAL AWARDS:**

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I presented the **HILGENDORF LECTURE** jointly sponsored by Tuebingen University and the Max Plank Institute for Developmental Biology (Tuebingen, Germany, January 2012).

I was awarded the 2010 **SEWALL WRIGHT AWARD** from the *American Society of Naturalists*.

I was the **INAUGURAL KEYNOTE SPEAKER** at the launch of a new scientific society (*Organization for the Study of Sex Differences*, Washington, D.C, May 2007).

I was a **CHANCELLOR'S DISTINGUISHED LECTURER** at Louisiana State University and awarded a **University Medal** (November 2002) and a **KEYNOTE SPEAKER** at international meetings entitled "Evolutionary Ecology of Sex" (Heron, the Netherlands, 2000).

I was a **DISTINGUISHED SPEAKER** at Michigan State University (April 1998).

I was a **DISTINGUISHED SPEAKER** at the University of Texas at Austin (April 1999).

I was a **RESIDENT SCHOLAR** at the University of Chicago, Department of Ecology & Evolution (November of 1995).

I was awarded a **PRESIDENTIAL ENDOWED LECTURESHIP** at the University of New Mexico (1988-1990). The award carried a \$5,000 stipend and is awarded for combined excellence in research and teaching.

I was awarded a competitive **POSTDOCTORAL TEACHING FELLOWSHIP** in the Dept. of Zoology at the University of California, Davis on two separate occasions (with nation-wide searches for each & \$6000 in research funds).

I was a **PLENARY SPEAKER** at a succession of international meetings:

International Workshop on Sex determination (La Sage, Switzerland, 2009);  
International Workshop on Evolutionary Genomics (Villars, Switzerland, 2008);  
Association for the Study of Animal Behaviour (Manchester, United Kingdom, 2006);  
European Evolution Society Meetings (Krakow, Poland, 2006),  
Royal Society Discussion Meeting "Sexual conflict: a new paradigm?" (London, UK 2005);  
International Workshop on Experimental Evolution (Freiberg, Switzerland, 2004);  
Evolutionary Consequences of Life without sex" (Amsterdam, The Netherlands, 2003);  
Biology of Spermatozoa Meetings (Castleton, United Kingdom, 2001);  
8th Congress of the International Society for Behavioral Ecology (Zurich, Switzerland, 2000);  
Animal Behaviour, Millennium Winter Meeting (London, United Kingdom, 2000);  
Sex and asex from microbes to multicells (London, United Kingdom, 2000);  
Human Behavior & Evolution Society Meetings (Salt Lake City. USA, 1999)  
Population Genetics Group Meetings (Exeter, England, 1995).

**GRANTS:**

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2009-2010	\$ 6,163.00	<u>Wenner-Gren Foundation</u> sabbatical collaboration grant to visit Uppsala University and Umeå Universities (Sweden)
2008-13	\$1,437,820.00	<u>National Institutes of Health</u> <i>Drosophila</i> Seminal Fluid: Proteomic Discovery & Functional Variation Analyses (W. Swanton & M. MacCoss at UW Co-PIs; \$678,606 to WRR)
2002-08	\$ 600,000.00	<u>National Science Foundation</u> Gender-specific fitness and intersexual developmental conflict in a <i>Drosophila</i> model system --- <u>NSF</u> Undergraduate Research Trainee-ship supplement
2007-08	\$ 5,000.00	
2001-07	\$2,279,000.00	<u>National Science Foundation</u> The origin of barriers to fertilization & their role in speciation; populations to proteins. (Multi-University Collaborative grant; \$406,593.00 to WRR)
1998-02	\$ 288,000.00	<u>National Science Foundation</u> New model system to study the adaptive significance of genetic recombination
1995-98	\$ 220,000.00	<u>National Science Foundation</u> . Experimental/theoretical study of the adaptive significance of sexual recombination.
1996-98	\$ 9,000.00	<u>National Science Foundation</u> . Doctoral Dissertation improvement grant with my student Brett Holland.
1993-96	\$ 160,000.00	<u>National Science Foundation</u> . Experimental/theoretical study of sexually antagonistic genes.
1992-93	\$ 40,000.00	<u>National Science Foundation</u> . Experimental/theoretical study of the evolution of sex chromosomes.
1989-92	\$ 166,000.00	<u>National Science Foundation</u> . Sex chromosome evolution
	\$ 4,000.00	-- <u>NSF</u> Undergraduate Research Trainee-ship supplement
1984-87	\$ 115,000.00	<u>National Science Foundation</u> . Experimental/theoretical study of sympatric speciation (G. W. Salt co-PI)
1977-80	\$ 5,000.00	<u>National Science Foundation</u> & <u>American Museum</u> Study of passive sonar in the marsh hawk ( <i>Circus cyaneus</i> ). (Dissertation Improvement Grant)

**Postdoctoral-support grants (co-written with the specified postdoctoral associate): Note:** These are proposals in which I played a major role in developing of the original ideas, experimental design, and writing the proposals.

2007-08	\$ 50,000.00	<u>Karp Discovery Grant</u> Experimental evolution of the capacity for symbolic logic – Tristan Long.
2007-09	\$ 80,000.00	<u>Natural Sciences &amp; Engineering Council of Canada</u> Evolution of symbolic reasoning in insects – Tristan Long.
2007-09	\$ 151,000.00	<u>Fulbright Postdoctoral Scholar</u> & <u>Wenner-Gren Foundation</u> Evolution of recombination rate – Urban Friberg
2005-08	\$ 180,000.00	<u>National Science Foundation</u> <u>Minority Postdoctoral Research Fellowship</u> Sex chromosome evolution – Paige Miller.

## **PUBLICATIONS:**

- 2012a Pischedda, A. and W. R. Rice. Partitioning sexual selection into its mating success and fertilization success components Proc. Nat. Acad. Sci. USA 109:2049-2053.
- 2012b Rice W. R. The evolution of an enigmatic human trait: false beliefs due to pseudo-solution traps. The American Naturalist In Press
- 2011a Friberg, U., P. M. Miller, A. D. Stewart and W. R. Rice. Mechanisms promoting the long-term persistence of a *Wolbachia* infection in a laboratory-adapted population of *Drosophila melanogaster*. PLoS ONE 6(1): e16448. doi:10.1371/journal.pone.0016448
- 2011b Turner, T. A. D. Stewart, A. T. Fields, W. R. Rice, and A. M. Tarone. Population-Based Resequencing of Experimentally Evolved Populations Reveals the Genetic Basis of Body Size Variation in *Drosophila melanogaster*. PLoS Genetics 7(3): e1001336. doi: 10.1371/journal.pgen.1001336
- 2011c Bachtrog, D., Kirkpatrick, M, Mank, J. E., McDaniel, S. F., Pires, J. C., Rice, W. R., and Valenzuela N. Are all sex chromosomes created equal? Trends in Genetics 27: 350-357.
- 2011d Friberg, U, A. D. Stewart, and W. R. Rice. Empirical evidence for son-killing X chromosomes and the operation of SA-zygotic drive. PLoS ONE 6(8): e23508. doi:10.1371/journal.pone.0023508
- 2011e Friberg, U, A. D. Stewart, and W. R. Rice. X and Y chromosome linked paternal effects on a life history trait. Biology Letters Published online before print August 10, 2011, doi: 10.1098/rsbl.2011.0608
- 2010a Long, T A. F., A. Pischedda, R. V. Nichols, W. R. Rice. The timing of mating influences reproductive success in *Drosophila melanogaster*: implications for sexual conflict. J. Evol. Biology 23(5):1024-32.
- 2010b Long, T A. F., A. Pischedda, W. R. Rice. Remating in *Drosophila melanogaster*: Are indirect benefits condition-dependent? Evolution 64: 2767-2774.
- 2010c Stewart, A. D., A. Pischedda, and W. R. Rice. Resolving Intralocus Sexual Conflict: Genetic Mechanisms and Time Frame. Journal of Heredity 101: S94-S99.
- 2010d Rice, W. R., U. Friberg, and S. Gavrillets. The evolution of sex-specific grandparental harm. Proc. Royal Soc.-Biol. 277: 2727-35.
- 2010e Pischedda, A., A. D. Stewart, M. K. Little & W.R. Rice. 2010. Male genotype influences female reproductive investment in *Drosophila melanogaster*. Proc. Roy. Soc.–Biology 278(1715):2165-72.
- 2009a Long, T. A. F., P. M. Miller, A. D. Stewart & W. R. Rice. Estimating the heritability of adult female fecundity in a locally-adapted *Drosophila melanogaster* population. J. Evol. Biol. 22: 837-843.
- 2009b Rice, W. R., & U. Friberg. A Graphical Approach to Lineage Selection Between Clonals and Sexualls. Chapter 5 *In: Lost Sex: The Evolutionary Biology of Parthenogenesis*. (K. Martens, I. Schön P. Van Dijk, , Schoen eds), Springer Press (24 pp).
- 2009c Rice, W. R., U. Friberg, and S. Gavrillets. Sexually Antagonistic Chromosomal Cuckoos. Biology Letters 5:686-688; doi:10.1098/rsbl.2009.0061.
- 2009d Long, T A. F., A. Pischedda, A. D. Stewart, W. R. Rice. A Cost of Sexual Attractiveness to High-Fitness Females. PLoS Biology 7(12): e1000254. doi:10.1371/ journal.pbio.1000254: 1-10.
- 2008a Rice, W. R. and U. Friberg. Functionally degenerate – Y not so? Science 319: 51-52.

- 2008b Byrne, P. G., G. R. Rice, and W. R. Rice. Effect of a refuge from persistent male courtship in the *Drosophila* laboratory environment. Integrative and Comparative Biology 48: E1-E7 (doi:10.1093/icb/icn001).
- 2008c Morrow, E. H., A. D. Stewart, and W. R. Rice. Assessing the extent of genome-wide intralocus sexual conflict via experimentally enforced gender-limited selection. J. Evol. Biol. 21:1046–1054.
- 2008d Friberg, U., and W. R. Rice. Cut thy Neighbor: Cyclic Birth and Death of Recombination Hotspots via Genetic Conflict. Genetics 179:2229-2238.
- 2008e Stewart, A. D., A. M. Hannedy, A. Mirzayani & W. R. Rice. Sexual conflict is not counterbalanced by good genes in the laboratory *Drosophila melanogaster* model system. J. Evol. Biol. 21:1808-1813.
- 2008f Rice, W. R., S. Gavrilets, and U. Friberg. Sexually Antagonistic “Zygotic Drive” of the Sex Chromosomes. PLoS-Genetics 4(12): e1000313. doi:10.1371/ journal.pgen.1000313.
- 2007a Stewart, A. D., A. M. Hannedy, and W. R. Rice. An assessment of sperm survival in *Drosophila melanogaster*. Evolution 61:636-639.
- 2007b Sax, D. F., J. J. Stachowicz, J. H. Brown, J. F. Bruno, M. N Dawson, S. D. Gaines, R. K. Grosberg, A. Hastings, R. D. Holt, M. M. Mayfield, M. I. O’Connor and W. R. Rice. Ecological and evolutionary insights from species invasions. Trends in Ecology and Evolution 22: 465-471.
- 2007c Long, T. A. F. and W. R. Rice. Adult locomotory activity mediates intralocus sexual conflict in a lab-adapted population of *Drosophila melanogaster*. Proc. Royal Soc.-Biol. 274:3105-3112.
- 2007d Rice, W. R. and U. Friberg. Genomic clues to an ancient asexual scandal. Genome Biology 8: 232-235.
- 2006a Rice, W. R., A. D. Stewart, E. H. Morrow, J. E. Linder, N. Orteiza, and P. G. Byrne. Assessing sexual conflict in the *Drosophila melanogaster* laboratory model system. Phil. Trans. Roy. Soc.-Biol. 361:287-299.
- 2006b Byrne, P. G., and W. R. Rice. Evidence for adaptive male mate choice in the fruit fly *Drosophila melanogaster*. Proc. Royal Soc.-Biol. 273:917-922.
- 2006c Lew, T. A., Morrow, E. H., and Rice, W. R. Standing genetic variance for female resistance to harm from males and its relationship to intralocus sexual conflict. Evolution 60: 97-105.
- 2006d Miller, P. P., S. Gavrilets, W. R. Rice. Sexual conflict via maternal-effect genes in ZW species. Science: 312:73.
- 2006e Kuijper, B., A. D. Stewart, & W. R. Rice. The cost of mating rises nonlinearly with copulation frequency in a laboratory population of *Drosophila melanogaster*. J. Evol. Biol. 19:1795-1802.
- 2006f Gavrilets, S., & W. R. Rice. Genetic models of homosexuality: generating testable predictions. Proc. Royal Soc.-Biol. 273:3031-3038.
- 2005a Rice, W. R. J. E. Linder, U. Friberg, T. A. Lew, E. H. Morrow, and A. Stewart. Inter-locus antagonistic coevolution as an engine of speciation: Assessment with hemiclinal analysis. Proc. Nat. Acad. Sci. USA 102: 6527-6534.
- 2005b Rice, W. R. and B. Holland. Experimentally enforced monogamy: inadvertent selection, inbreeding, or evidence for sexually antagonistic coevolution? Evolution 59: 682-685.
- 2005c Linder, J. E. & W. R. Rice. Natural selection and genetic variation for female resistance to harm from males. J. Evol. Biol. 18: 568-575.
- 2005d Lew, T. A. and W. R. Rice. Natural selection favors harmful male *Drosophila melanogaster* that reduce the survival of females. Evolutionary Ecology Research 7:633-641.

- 2005e Orteiza, N., J. E. Linder, and W. R. Rice. Sexy sons from remating do not recoup the direct costs of harmful male interacting in the *D. melanogaster* laboratory model system. J. Evol. Biol. 18: 1315-1323.
- 2005f Byrne, P. G., and W. R. Rice. Remating in *Drosophila melanogaster*: an examination of the trading-up and intrinsic male-quality hypotheses. J. Evol. Biol. 18:1321-1331.
- 2005g Rice, W. R. and D. Sax. Testing fundamental evolutionary questions at large spatial and demographic scales: Species invasions as an underappreciated tool. Pages 291-308 in, Sax, D.F., Stachowicz, J.J., and Gaines, S.D., editors. *Species Invasions: Insights into Ecology, Evolution and Biogeography*. Sinauer Associates, Sunderland, MA.
- 2005h Stewart, A. D., E. H. Morrow, & W. R. Rice. Assessing putative interlocus sexual conflict in *Drosophila melanogaster* using experimental evolution. Proc. Royal Soc.-Biol. 272: 2029-2035.
- 2005i Friberg, U., T. A. Lew, P. G. Byrne, and W. R. Rice. Assessing the potential for an ongoing arms race within and between the sexes: selection and heritable variation. Evolution 59:1540-1551.
- 2005j Morrow, E. H., A. D. Stewart, and W. R. Rice, W. R., Patterns of sperm precedence are not affected by female mating history in *Drosophila melanogaster*. Evolution 59:2608-2615.
- 2002a Gibson, J. R., Chippindale, A. K. & Rice, W. R. The X is a hot spot for sexually antagonistic fitness variation. Proceedings Royal Society (Biology) 269: 499-404.
- 2002b Rice W. R. Experimental Tests of the Adaptive Significance of Sexual Recombination Nature Reviews Genetics 3: 241-251.
- 2002c Rice W. R. & A. K. Chippindale. The evolution of hybrid infertility: Perpetual coevolution between gender-specific and sexually antagonistic genes. Genetica (special issue on speciation) 116:179–188.  
- a special issue of invited papers on speciation research  
Also published as a book chapter: Chapter 2, In: *Genetics of Mate Choice: From Sexual Selection to Sexual Isolation* (R.C. Woodruff & M. A. F. Noor, eds.). Kluwer Academic Press, Boston.
- 2001a Rice, W. R., & A. K. Chippindale. Sexual recombination and the power of natural selection. Science 294: 555-559.
- 2001b Rice, W. R. & A. K. Chippindale. Intersexual ontogenetic conflict. Journal of Evolutionary Biology 14: 685-693.
- 2001c Chippindale, A. K. & Rice, W. R. Y chromosome polymorphism is a strong determinant of male fitness in *Drosophila melanogaster*. Proceedings National Academy of Sciences (USA) 98: 5677-5682. (track-II)
- 2001d Chippindale, A. K., Gibson, J. R., & Rice, W. R. Negative genetic correlation for adult fitness between sexes reveals ontogenetic conflict in *Drosophila*. Proceedings National Academy of Sciences (USA) 98: 1671-1675. (track-II)
- 2000 Rice, W. R. Dangerous Liaisons. Proceedings National Academy of Sciences (USA) 97: 12953-12955. (invited review)
- 1999a Holland, B. & Rice, W. R. Experimental removal of sexual selection reverses inter-sexual antagonistic coevolution and removes a reproductive load. Proceedings National Academy of Sciences (USA):96:5083-5088.
- 1999b Rice, W. R. & Holland, B. Reply to Comments on the Chase-Away Model of Sexual Selection. Evolution 53: 302–306.
- 1999c Rice, W. R. Genetic Polarization: Unifying theories for the adaptive significance of recombination. Journal of Evolutionary Biology 12: 1047-1049.

- 1998a Rice, W. R. Male fitness increases when females eliminated from gene pool: Implications for the Y chromosome. Proceedings National Academy of Sciences (USA):95:6217-6221.
- 1998b Rice, W. R. Intergenomic conflict, interlocus antagonistic coevolution, and the evolution of reproductive isolation. pp. 261-270 In: Howard, D. J., & Berlocher, S. H. (Eds.) Endless Forms: Species and Speciation. Oxford University Press.
- 1998c Rice, W. R. Requisite load, pathway epistasis, and deterministic mutation accumulation in sexual versus asexual populations. Genetica 102/103:71-81.  
- *a special issue of invited papers on mutation research*  
Also published as a book chapter: pp. 71-81 In: *Mutation & Evolution* (R.C. Woodruff & J. N. Thompson Jr., eds.). Kluwer Academic Press, Boston.
- 1998d Holland, B. & Rice, W. R. Chase-away sexual selection: antagonistic seduction versus resistance. Evolution 52:1-7.
- 1997a Rice, W. R. and B. Holland. The enemies within: Intergenomic conflict, Interlocus contest evolution (ICE), and the intraspecific Red Queen. Behavioral Ecology and Sociobiology. 41:1-10.
- 1997b Holland, W. R. Rice. Cryptic sexual selection -- More control issues. Evolution 51:321-324.
- 1996a Rice, W. R. Sexually antagonistic male adaptation triggered by experimental arrest of female evolution. Nature 381:232-234.
- 1996b. Rice, W. R. Evolution of the Y sex chromosome in animals. BioScience 46:331-343.
- 1994a Rice, W. R. Degeneration of a non-recombining chromosome. Science 263:230-232.
- 1994b Rice, W. R. and S. D. Gaines. Extending non-directional heterogeneity tests to evaluate simply ordered alternative hypotheses. Proceedings of the National Academy of Sciences (USA) 91:225-226.
- 1994c Rice, W. R. and S. D. Gaines. Ordered-heterogeneity family of test. Biometrics:50:1-7
- 1994d Rice, W. R. and S. D. Gaines. "Heads I win, tails you lose:" Testing directional alternative hypotheses in ecology and evolution. Trends in Ecology and Evolution 9:235-37.
- 1993a Rice, W. R. and S. D. Gaines. Calculating P-values for ANOVA with unequal variances. Journal of Statistical Computation and Simulation 46:19-22.
- 1993b Rice, W. R., and E. E. Hostert. Laboratory studies on speciation: What have we learned in 40 years. Evolution 47:1637-53.
- 1992 Rice, W. R. Sexually antagonistic genes: Experimental evidence. Science 256:1436-1439.
- 1991a Bull, J.J., and W. R. Rice. Distinguishing mechanisms for the evolution of cooperation. Journal of Theoretical Biology. 149:63-74..
- 1991b Bull, J.J., I. J. Molineux, and W. R. Rice. Selection of benevolence in a host-parasite system. Evolution 45:875-882
- 1990a Rice, W. R., & G. W. Salt. The evolution of reproductive isolation as a correlated character under sympatric conditions: experimental evidence. Evolution.44: 1140-1152.
- 1990b Gaines, S. D., and W. R. Rice. Analysis of biological data when there are ordered expectations. American Naturalist 135: 310-317.
- 1990c Rice, W. R. A consensus combined *P*-value test and the family-wide significance of component tests. Biometrics. 46: 303-308.
- 1990d Rice, W. R. Alternatives to Fisher's "exact test" for analyzing 2x2 tables with small cell sizes; Author's reply. Biometrics 46: 268-269.
- 1989a Rice, W. R. Analyzing tables of statistical tests. Evolution 43: 223-225.
- 1989b Rice, W. R., and S. D. Gaines. One-way analysis of variance with unequal variances. Proceedings of the National Academy of Sciences (USA).86:8183-8184

- 1988a Rice, W. R., and G. W. Salt. Speciation via disruptive selection on habitat preference: experimental evidence. American Naturalist. 129: 911-917.
- 1988b Rice, W. R. Heritable variation in fitness as a prerequisite for adaptive female choice: The effect of mutation-selection balance. Evolution 42: 817-820.
- 1988c Rice, W. R. The effect of sex chromosomes on the rate of evolution. Trends in Ecology and Evolution. 3: 2-3.
- 1988d Rice, W. R. A new probability model for determining exact *P*-values for 2x2 contingency tables when comparing binomial proportions. Biometrics 44: 1-14.
- 1988e Rice, W. R. A reply to comments on the CBET procedure. Biometrics 14: 18-22.
- 1987a Rice, W. R. The accumulation of sexually antagonistic genes as a selective agent promoting the evolution of reduced recombination between primitive sex chromosomes. Evolution 41: 911-914.
- 1987b Rice, W. R. Genetic hitch-hiking and the evolution of reduced genetic activity of the *Y* sex chromosome. Genetics 116: 161-167.
- 1987c Rice, W. R. Speciation via habitat specialization: the evolution of reproductive isolation as a correlated character. Evolutionary Ecology. 1: 301-314.
- 1986 Rice, W. R. On the instability of polygenic sex determination: the effect of sex-specific selection. Evolution 40: 633-639.
- 1985a Rice, W. R. Disruptive selection on habitat preference and the evolution of reproductive isolation: an exploratory experiment. Evolution 39: 645-656.
- 1985b Grossberg, R. K., W. R. Rice, S. R. Palumbi. Graft compatibility and clonal identity in invertebrates. Science 229: 487-489.
- 1984a Rice, W. R. Disruptive selection on habitat preference and the evolution of reproductive isolation: a simulation study. Evolution 38: 1251-1260.
- 1984b Rice, W. R. Sex chromosomes and the evolution of sexual dimorphism. Evolution 38: 735-742.
- 1983a Rice, W. R. Sexual reproduction: an adaptation reducing parent-offspring contagion. Evolution 37: 1317-1320.
- 1983b Rice, W. R. Parent-offspring pathogen transmission: a selective agent promoting sexual recombination. American Naturalist 121: 187-203.
- 1983c Rice, W. R. Sensory modality: an example of its effect on optimal foraging behavior. Ecology 64: 403-406.
- 1982 Rice, W. R. Sonic prey detection by the marsh hawk: adaptation to concealed prey. The Auk 99: 403-413.
- 1977 Rice, W. R. and J. D. Harder. Application of multiple aerial sampling to mark-recapture census of white-tailed deer. J. Wildlife Management 41: 197-206.
- 1976 Ramm, A. A. and W. R. Rice. An investigation of species interaction. AIBS Ed Rev 5: 6-10.

### **Graduate Student/Postdoctoral Publications:**

Whenever possible, I do not place my name on my graduate students' nor postdocs' papers, but I list them here to indicate my lab group's productivity.

Holland B. 2002. Sexual selection fails to promote adaptation to a new environment.

Evolution 56: 721-730.

Burt, A. 1995. The evolution of fitness. Evolution 49: 1-8.

Gessler, D. D. G. 1995. The constraints of finite size in asexual populations and the rate of the ratchet.

Genetical Research 66: 241-253.

Gessler, D. D. G. & S. Xu 1999. On the evolution of recombination and meiosis. Genetic Research

73:119-131.

- de Saint Phalle, B., and W. Sullivan. (1996). Incomplete sister chromatid separation is the mechanism of programmed chromosome elimination during early *Sciara coprophila* embryogenesis. *Development* 122:3775-3784.
- Fogarty, P., Campbell, S. D., Abu-Shumays, R., de Saint Phalle, B., Yu, K. R., Uy, G. L., Goldberg, M. L. and W. Sullivan. 1997. The *Drosophila* grapes gene is related to checkpoint gene *chk1/rad27* and is required for late syncytial division fidelity. *Current Biology*. 7:418-426.
- de Saint Phalle, B. and W. Sullivan. 1998. Spindle assembly and mitosis without centrosomes in parthenogenetic *Sciara* embryos. *Journal of Cell Biology*. 141(6):1383-1391.
- Hostert, E. 1997. Reinforcement: A new perspective on an old controversy. *Evolution* 51:697-702.

**SEMINARS, PAPER PRESENTATIONS / SYMPOSIA / PLENARY ADDRESSES etc.:**

*NOTE: I only list presentation I have made myself and I do not list those presented by my postdocs & graduate students.*

**2012 Invited Seminars / Symposiums / Plenary Addresses:**

HILGENDORF LECTURE “A New Form of Intragenomic Conflict Between Sex Chromosomes” A Universities-wide lecture jointly sponsored by Tuebingen University and the Max Plank Institute for Developmental Biology (Tuebingen, Germany, January 2012)

**DEPARTMENTAL SEMINARS**

Evolution of Homosexuality. Presented at:

Fred Hutchenson Cancer research Institute

Sexually Antagonistic Zygotic drive of the sex chromosomes. Presented at:

Fred Hutchenson Cancer research Institute

**2011 Invited Seminars / Symposiums / Plenary Addresses:**

**WORKSHOP SEMINAR**

Intragenomic conflict between the sexes s Presented at the workshop entitle *Everything You Wanted to Know About Sex* at the 52<sup>nd</sup> Annual *Drosophila* Research Conference, San Diego, CA (May)

**DEPARTMENTAL SEMINARS**

Sexually Antagonistic Zygotic drive of the sex chromosomes. Presented at:

University of California, Davis, CA

**2010 Invited Seminars / Symposiums / Plenary Addresses:**

**DEPARTMENTAL SEMINARS**

Sexually Antagonistic Zygotic drive of the sex chromosomes. Presented at:

University of Southern California

Indiana University, Bloomington, Indiana

Uppsala University, Uppsala, Sweden

Umea University, Umea, Sweden

University of California, Santa Barbara (Faculty Symposium)

Sexually Antagonistic Zygotic drive of the sex chromosomes. Presented at the *National Evolutionary Synthesis Center (NESCent)/ Catalysis Group on Emergence of Gender and Sex Chromosomes*, Durham, North Carolina.

Workshop: Evolution of Human Homosexuality. *National Institute for Mathematical and Biological Synthesis (NIMBioS)/ Working Group on Intragenomic Conflict*, Knoxville, Tennessee.

## MEETINGSS

Empirical evidence for Sexually Antagonistic-zygotic drive: an X-linked selfish son-killer  
*Evolution 2010 Meetings*, Portland Oregon

### **2009** Invited Seminars / Symposiums / Plenary Addresses:

Sexually Antagonistic Zygotic drive of the sex chromosomes. Presented at the *National Institute for Mathematical and Biological Synthesis (NIMBioS)/ Working Group on Intragenomic Conflict*, Knoxville, Tennessee.

### SYMPOSIUM ADDRESSES:

Sexually Antagonistic Zygotic Drive of the Sex Chromosomes: Theory.

-presented at the conference entitled “*Evolution of sex-determination mechanisms*” in La Sage, Switzerland.

Sexually Antagonistic Zygotic Drive of the Sex Chromosomes: Experiments and Assays.

-presented at the conference entitled “*Evolution of sex-determination mechanisms*” in La Sage, Switzerland.

### DEPARTMENTAL SEMINARS

Sexually antagonistic zygotic drive of the sex chromosomes. University of Texas at Arlington

Chromosomal Cuckoos, presented at the EEMB Faculty Symposium

### **2008** Invited Seminars / Symposiums / Plenary Addresses:

### SYMPOSIUM ADDRESSES:

“Two new forms of sexual genomic conflict”

-Presented at the conference entitled “*Genomics of Speciation*” in Seattle, Washington.

### DEPARTMENTAL SEMINARS

Sexually antagonistic selection and alleles. University of Oregon

Two new forms of sexual genomic conflict University California, Santa Barbara

### **2007** Invited Seminars / Symposiums / Plenary Addresses:

### SYMPOSIUM ADDRESSES:

“The consequences of the evolution of sex differences: sexually antagonistic alleles”

-Presented at the conference entitled “*Genes, Genomes, and Evolution*” in Villars, Switzerland.

“Measuring the cost and benefits of receiving sperm in *Drosophila melanogaster*”

–presented at a symposium entitled, "Evolutionary and Functional Genomics of Sperm, Sperm Storage and Fertilization" at the Society for Integrative and Comparative Biology meetings in Phoenix, AZ.

### KEYNOTE ADDRESSES:

“Sexual Conflict and the Evolution of Sex Differences: Sexually Antagonistic Alleles”  
Presented as the inaugural Keynote address at the launch of a new scientific society:  
the *Organization for the Study of Sex Differences*, in Washington, DC.

DEPARTMENTAL SEMINARS

Sexually antagonistic selection and alleles. University of Toronto

**2006 DEPARTMENTAL SEMINARS**

“Reproductive interactions between the sexes : arms race or mutualistic coevolution?”  
Kavli Institute for Theoretical Physics  
University of California at Irvine

“Coevolution between the sexes : Evolutionary Island Analysis & Surrogate  
Variation Analysis”  
University of Tennessee  
University of Michigan

**2005 Invited Seminars / Symposiums / Plenary Addresses:**

SYMPOSIUM ADDRESSES:

“Intersexual conflict: What is it? What to measure? Where to measure it? and What  
we found?” International discussion meeting of the Royal Society entitled: *Sexual  
Conflict: a new paradigm?* (London, United Kingdom).

PLENARY ADDRESSES:

“Reproductive interactions between the sexes : Arms race or mutualistic coevolution?  
International meetings of the *Association for the Study of Animal Behaviour (ASAB)*  
entitled "Behavioural Interactions - Visions of the Future"(Manchester, United  
Kingdom).

“Coevolution between the sexes : the good, the bad, and the ugly?” International  
meetings of the *European Society for Evolutionary Biology* (Krakow, Poland)

DEPARTMENTAL SEMINARS

“Reproductive interactions between the sexes : arms race or mutualistic coevolution?”  
Cal Tech  
University of California at Los Angeles  
University of California at Santa Cruz  
University of California at Santa Barbara  
“Sexual conflict in ZW species: experimental analysis”  
Cal Tech

MEETINGS:

Experiments testing for sexual genetic conflict (meetings of the sexual conflict and  
speciation inter-university working group, Cornell University, Ithaca, NY)

**2004 Invited Seminars / Symposiums / Plenary Addresses:**

MEETINGS:

"Using introduced species as tools to test evolutionary Theory: Large spatial and demographic scales" National Center for Ecological Analysis and Synthesis, (Santa Barbara, CA).

"Coevolution between the sexes" (meetings of the sexual conflict and speciation inter-university working group, New Mexico State University, Las Cruces, NM)

#### SYMPOSIUM ADDRESSES:

“Experimental assessment of the costs and benefits of interactions between the sexes: an arms-race or mutualistic coevolution?” International workshop on experimental evolution (Freiberg, Switzerland).

“Hemiclonal analysis of Inter-sexual conflict" National Academy of Sciences meetings on *Systematics and the Origin of Species: On Ernst Mayr's 100th Anniversary* (Irvine, CA).

#### 2003 Invited Seminars / Symposiums / Plenary Addresses:

#### MEETINGS:

"Male-female coevolution" (meetings of the sexual conflict and speciation inter-university working group, University of Washington ,Seattle, WA).

#### SYMPOSIUM ADDRESSES:

“The rapid evolution of characters associated with reproduction” International meetings of the Society for the Study of Evolution (Chico, CA).

“Hemiclonal analysis of genome-wide fitness variation: Application to the rapid evolution of reproductive proteins” (Harvard University, Cambridge, MA)

“The costs and benefits of clonal Reproduction” International workshop on the asexual reproduction: Asexuality and time-scales (Wageningen, The Netherlands).

“Assessing the costs and benefits of sexual reproduction” Symposium on Evolutionary Consequences of Life without sex (Amsterdam, The Netherlands).

#### 2002 Invited Seminars / Symposiums / Plenary Addresses:

#### MEETINGS

"Coevolution between the sexes" (UC-Riverside, CA)

#### DEPARTMENTAL SEMINARS

“Conflict between the sexes: what genetics can tell us”  
University of South Carolina

"Intersexual Evolutionary Conflict: Theory and Experiments"  
Stanford University  
Institute for Theoretical Physics (UCSB)

“Theory and experiments on the adaptive significance of recombination”  
Louisiana State University

#### SYMPOSIUM ADDRESSES:

UCSB mini-symposium –Groundbreaking for new Life-sciences Technology Building “The rapid evolution of reproductive proteins”

Evolution, Mind, and Behavior Conference at UCSB "Intersexual Conflict: Theory and Experiments"

Germ Cells Meetings (Cold Spring Harbor, New York) "The rapid evolution of reproductive proteins"

CHANCELLOR'S DISTINGUISHED LECTURESHIP (Louisiana State University) "Conflict between the sexes: what genetics can tell us"

**2001 Invited Seminars / Symposiums / Plenary Addresses:**

**DEPARTMENTAL SEMINARS**

"Intersexual Conflict: Theory and Experiments"

UC-Davis

UC-Riverside

Univ. Massachusetts at Amherst

UC-Santa Barbara (EEMB)

"Theory and experiments on the adaptive significance of recombination"

UC-Davis

**SYMPOSIUM ADDRESSES:**

Society for Molecular and Evolutionary Biology meetings (Athens, GA) "Intersexual Developmental Conflict"

**PLENARY ADDRESSES:** Biology of Spermatozoa Meetings (Castleton, Great Britain) "Genomics of Gender-specific Fitness Variation in *Drosophila melanogaster*"

**2000 Invited Seminars / Symposiums / Plenary Addresses**

**DEPARTMENTAL SEMINARS:**

Intersexual developmental conflict: Theory and experiments

University of Lund, Sweden

University of Sussex, Great Britain

University of Umea, Sweden

University of Arizona, Tucson, AZ

A unified theory for the adaptive significance of recombination: Theory and experiments

University of Lund, Sweden

University of Sussex, Great Britain

University of Umea, Sweden

University of Arizona, Tucson, AZ

**PLENARY ADDRESSES:**

8th Congress of the International Society for Behavioral Ecology (Zurich, Switzerland, August)  
"Intersexual Conflict and Coevolution"

Meetings entitled "Evolutionary Ecology of Sex" (Heron, the Netherlands, September) "Antagonistic coevolution between the sexes, Interlocus Contest Evolution (ICE), and the evolution of reproductive isolation"

Meetings entitled, "Sex and asex from microbes to multicells" (London, Great Britain, November) "A unified theory for the adaptive significance of recombination: Theory and experiments"

Association for the Study of Animal Behaviour, Millennium Winter Meeting (London, Great Britain, December) "Intersexual Developmental Conflict: Theory and Experiments"

**1998-1999 Invited Seminars / Symposiums / Plenary Addresses**

**DEPARTMENTAL SEMINARS:**

Antagonistic coevolution between the sexes, Interlocus Contest Evolution (ICE), and the evolution of reproductive isolation.

University of Texas (Austin)

University of Utah (Salt Lake City)

Emory University

Indiana University

A unified approach to the adaptive significance of sexual recombination: theory & experiments.

University of Texas (Austin)

Estimating the distribution of net fitness: viability vs. fertility within and between the sexes

University of Texas (Austin)

University of Utah (Salt Lake City)

A new model system to study the adaptive significance of sexual recombination

University of Texas (Austin)

**PLENARY ADDRESS:**

Human Behavior & Evolution Society Meetings (Salt Lake City -June)

"Adaptation and Coevolution of the Sexes: Gender-specific Fitness, Interlocus Contest Evolution (ICE), and Sexually Antagonistic Genes."

**MEETINGS:**

"A unified approach to the adaptive significance of sexual recombination" presented at California Population and Evolutionary Genetics Meetings, Bodega Bay, CA.

**1997-1998 Invited Seminars / Symposiums / Plenary Addresses**

**DEPARTMENTAL SEMINARS:**

Male-female antagonistic coevolution: implications for speciation and the evolution of the Y sex chromosome.

Duke University (Program in Genetics; 1997 Mini-symposium on Chromosomes)

Cornell University

Princeton University

Massachusetts Institute of Technology (Whitehead Institute)

Stanford University (Hopkins Marine Lab)

University of British Columbia

University California-Berkeley

University California-San Diego

University California-Santa Barbara  
University of Montana  
University of Maryland  
University of Georgia (Genetics Department)  
University of Nebraska  
Michigan State University  
University of Oregon (Program in Evolutionary Genetics; 1998 Mini-symposium on Speciation)  
University California-Santa Cruz  
Frankenfly: A new model system to measure the adaptive significance of recombination  
Michigan State University  
Interlocus Contest Evolution (ICE)  
University of British Columbia  
University of Maryland  
Cornell University  
University of Georgia (Genetics Department)

#### SYMPOSIA:

“Intergenomic conflict between the sexes” Invited symposium seminar at the Meetings of the Society for the Study of Evolution, Vancouver, British Columbia, Canada  
“The decay of the Y sex chromosome” Invited symposium seminar: The Y-chromosomes in disease & Evolution, Cold Spring Harbor (Banbury Center), New York

1997-98 Invited Seminars / Symposiums (continued)

#### CONTRIBUTED PAPERS

Interlocus Contest Evolution (ICE) and the evolution of reproductive isolation. Society for the Study of Evolution 1997 Annual Meeting at Boulder Colorado.

I was also invited but declined to be a symposium speaker at:

- 1) *Animal Behavior Meeting* : Sperm Competition Symposium at College Park, Maryland
- 2) *Genetic Influences on Fertility-related Process* Conference at Tucson, Arizona

1996 Invited Seminars / Symposiums

Sexually antagonistic coevolution and constraint.

University of Houston.

Intergenomic conflict, interlocus antagonistic coevolution, and the evolution of reproductive isolation. Symposium Speaker at *Endless Forms and Speciation: A Conference in honor of Guy Bush / Asilomar, CA*

I was also invited but declined to be a symposium speaker at:

- 1) *Fifth International Congress of Systematic & Evolutionary Biology*, Budapest, Hungary
- 2) *JRDC symposium (ERATO) on Experimental Evolution* at Tokyo, Japan

#### Contributed Papers

Interlocus Contest Evolution (ICE) and the evolution of reproductive isolation.  
CALPEG-96, UC-Berkeley.

1995 Invited Seminars / Symposiums

The Y sex Chromosome: a model system for studying the adaptive significance of recombination.

Plenary speaker at *Population Genetics Group Meetings*; Exeter, England  
Sexually antagonistic genes and coevolution.  
University of Chicago  
New experiments on the adaptive significance of sexual recombination  
University of Chicago

1994 Invited Seminars / Symposiums

The Y sex Chromosome: sex vs. asex; male vs. female.  
Washington University, St. Louis, MO  
UC-Santa Cruz  
UC-Davis

A new model system to experimentally manipulate recombination rate.  
UC-Davis

Organized the Sixth Annual California Population and Ecological Genetics Conference  
(CALPEG) December 1994

1993 Invited Seminars / Symposiums

The evolution of dimorphic sex chromosomes: Theory and experimentation.  
Oregon State University  
University of Washington  
University of Oregon  
University of California at Santa Cruz  
University of California at Berkeley

40 years of laboratory experiment on speciation: What have we learned?  
University of California at Berkeley  
University of California at Irvine

Jacques Monod Conference on Mechanisms of Speciation; Modane, France

17th International Genetics Congress, Birmingham, England: Speciation Sympos.

Cascading F, ANOVA -unequal variances, CBET, & Ordered heterogeneity tests.  
University of Washington

1992 Invited Seminars

The evolution of dimorphic sex chromosomes: The role of sexually antagonistic genes.  
University of California at Santa Barbara  
Duke University  
-- also contributed paper at the Society for the Study of Evolution Mtgs.

1992 Invited Seminars

40 years of laboratory experiments on speciation: What have we learned?  
University of California, Santa Barbara.  
Duke University

Symposium addresses: The role of geography in speciation. 158th National Meeting of the  
American Association for the Advancement of Science (AAAS\*92), Chicago, IL.

1991 Sexually antagonistic genes: Experimental evidence in the context of sex chromosome  
evolution. Invited Seminar at Arizona State University, Tempe.

Panel discussion leader: Symposium on Emerging Areas in Fertilization Research. Hopkins  
Marine Station of Stanford University, (David Epel, organizer).

Sympatric speciation via habitat specialization. Invited Seminar at University of Nevada, Reno

Two new statistical tests that maximizing power for data sets with low signal to noise ratios.  
Invited Seminar at University of Nevada, Reno.

- 1990 Sympatric speciation via habitat specialization. Invited Seminar at Univ. of California, Riverside  
 Drift and decay of the fitness of finite sexual populations. Invited Symposium Address at the Symposium for Conservation Genetics, University of California, Santa Cruz.  
 Sexual Selection and the Evolution of Sexual Recombination.. Invited Symposium Address at the 5<sup>th</sup> International Congress of Ecology. Yokohama, Japan.  
 The evolution of dimorphic sex chromosomes. Invited Seminar at Brown University
- 1989 Speciation without allopatry. Invited Seminar at:  
 1) University of California, Santa Cruz. 2) University of Colorado, Boulder.  
 The evolution of dimorphic sex chromosomes. Invited Symposium Address at the Internat. Conf. on Sex Determination and Dosage Compensation, Bangalore, India.  
 Mutational load under the joint influence of mutation, selection, and sampling drift. Presented at the 3<sup>rd</sup> Annual Meeting of the California Population Genetics Group, Berkeley, CA.
- 1988 Speciation without allopatry. Invited Keynote Address at the 14<sup>th</sup> Annual Meeting of the Guild of Rocky Mountain Population Biologists, Ghost Ranch, New Mexico.  
 Long-term minimum viable population size. Invited Symposium Address at Darwin Research Station, Galapagos Islands, Ecuador.  
 Chairman's report of the population genetics workshop. Invited Symposium Address at Darwin Research Station, Galapagos Islands, Ecuador.  
 Speciation without allopatry. Invited Seminar at the University of Chicago, Chicago, Illinois.  
 Sympatric speciation via habitat specialization. Invited Seminar at the University of Utah, Salt Lake City, Utah.  
 Introns and other spacer DNA: A model for their evolution as modifiers of recombination rate. Invited Seminar at the University of Utah, Salt Lake City, Utah.  
 Why are rare species doomed to extinction? Ecology Seminar, University of New Mexico, Albuquerque, New Mexico.
- 1987 The evolution of dimorphic sex chromosomes. Invited Seminar at Simon Frasier University, British Columbia, Canada.  
 Sympatric speciation as a consequence of habitat specialization. Invited Seminar at Simon Frasier University, British Columbia, Canada.  
 Sympatric speciation via habitat specialization. Invited Seminar at University of California, San Diego.  
 Speciation via habitat specialization. Joint Meetings of the American Society of Naturalists and the Society for the Study of Evolution. Bozeman, Montana
- 1986 Speciation via habitat specialization. Invited Symposium Address at the ASZ meetings, Knoxville, TN.  
 -- also Invited Seminar at University of Oregon, Eugene, OR.  
 The evolution of sex chromosomes. Invited Seminar at the University of Northern Arizona, Flagstaff, AZ.  
 -- also Invited Seminar at University of Oregon, Eugene, OR.  
 A new probability model for analyzing 2x2 contingency tables when column marginals are unconstrained. The Animal Behavior Society Meetings, Tucson, AZ.  
 Two new statistics for increasing the power of tests with small data sets: the conditional binomial exact test (CBET) and the analysis of *P*-values (ANPVA).  
Invited Seminar at University of Northern Arizona, Flagstaff, AZ.
- 1988 Speciation without allopatry. Invited Keynote Address at the 14<sup>th</sup> Annual Meeting of the Guild of Rocky Mountain Population Biologists, Ghost Ranch, New Mexico.

- Long-term minimum viable population size. Invited Symposium Address at Darwin Research Station, Galapagos Islands, Ecuador.
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- Speciation without allopatry. Invited Seminar at the University of Chicago, Chicago, Illinois.
- Sympatric speciation via habitat specialization. Invited Seminar at the University of Utah, Salt Lake City, Utah.
- Introns and other spacer DNA: A model for their evolution as modifiers of recombination rate. Invited Seminar at the University of Utah, Salt Lake City, Utah.
- Why are rare species doomed to extinction? Ecology Seminar, University of New Mexico, Albuquerque, New Mexico.
- 1987 The evolution of dimorphic sex chromosomes. Invited Seminar at Simon Frasier University, British Columbia, Canada.
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- Sympatric speciation via habitat specialization. Invited Seminar at University of California, San Diego.
- Speciation via habitat specialization. Joint Meetings of the American Society of Naturalists and the Society for the Study of Evolution. Bozeman, Montana
- 1986 Speciation via habitat specialization. Invited Symposium Address at the ASZ meetings, Knoxville, TN.
- also Invited Seminar at University of Oregon, Eugene, OR.
- The evolution of sex chromosomes. Invited Seminar at the University of Northern Arizona, Flagstaff, AZ.
- also Invited Seminar at University of Oregon, Eugene, OR.
- A new probability model for analyzing 2x2 contingency tables when column marginals are unconstrained. The Animal Behavior Society Meetings, Tucson, AZ.
- Two new statistics for increasing the power of tests with small data sets: the conditional binomial exact test (CBET) and the analysis of *P*-values (ANPVA).  
Invited Seminar at University of Northern Arizona, Flagstaff, AZ.
- 1985 Natural selection for null alleles and the breakdown in the biochemical activity of the Y sex chromosome. Presentation at Meetings of the American Society of Naturalists and the Society for the Study of Evolution, Chicago, Illinois.
- 1984 Disruptive selection on habitat preference and the evolution of reproductive isolation. Invited seminar, State University of New York, Binghamton, New York.
- 1984 Disruptive selection on habitat preference and the evolution of reproductive isolation. Invited seminar, University of New Mexico, Albuquerque, New Mexico
- 1984 The evolution of dimorphic sex chromosomes. Invited seminar, State University of New York, Binghamton, New York.
- 1983 Disruptive selection on habitat preference and the evolution of reproductive isolation. Invited seminar, Hopkins Marine Station of Stanford University, Pacific Grove, California.
- 1983 Sexual dimorphism, sexual antagonism, and the evolution of dimorphic sex chromosomes. Invited seminar, University of California, Santa Barbara, California.

- 1982 Coevolution between a bacteria and its plasmids. Invited seminar, University of California, Davis, California.
- 1982 Rapid development of reproductive isolation without allopatry. Invited seminar, University of California, Davis, California.
- 1981 Sonic prey location by the diurnal Marsh Hawk. Invited seminar, University of California, Davis, California.
- 1981 Sonic prey location by the diurnal Marsh Hawk. Invited seminar, Bodega Marine Laboratory, Bodega Bay, California.
- 1980 The pathogen ratchet: a selective agent promoting sexual recombination. Conference attendance, Pacific Ecology Conference, Coos Bay, Oregon.
- 1979 Pathogen transmission between parent and offspring: A selective agent promoting sexual recombination. Contributed paper presented at, American Society of Naturalists and the Society for the Study of Evolution, Tucson, Arizona.
- 1976 A graphical technique for relating the inverse hypergeometric distribution to the planning of a multiple sample mark-recapture census. Invited seminar, Ohio State University, Columbus, Ohio.
- 1975 A modified mark-recapture method yielding precise estimates of deer density. Contributed paper presented at, 37th Midwest Fish and Wildlife Conference, Toronto, Canada.

### **PROFESSIONAL SOCIETIES & ACTIVITIES (since 1990):**

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Academic Editor: PLoS Biology (2010-present)

NSF Panel Member: Population Biology (1994,1996,2000)

Associate Editor: American Naturalist (1992-1994)

Associate Editor: Society for the Study of Evolution (1994-97)

Genetics Society of America (Member & Reviewer)

Psychological Bulletin (Rev. statistical papers)

Ecological Society of America (Reviewer)

Biometric Society (Reviewer)

Royal Society -series B (Reviewer)

Trends in Genetics (Reviewer)

Molecular Biology & Evolution (Reviewer)

PLoS Biology (Reviewer)

Proc. Royal Society-Biology (Reviewer)

Nature (Reviewer)

Science (Reviewer, member AAAS)

PNAS (Reviewer)

Genetical Research (Reviewer)

J. Statistical Comp. & Simul. (Reviewer)

Trends in Ecology & Evolution (Reviewer)

Theoretical Population Biology (Reviewer)

Evolution & Human Behavior (Reviewer)

Animal Behavior (Reviewer)

Genetica (Reviewer)

PLoS Genetics (reviewer)

### **POSTDOCTORAL RESEARCHERS:**

Austin Burt	(Now Professor, Imperial College)
Vassiliki Koufopanou	(Now Researcher Associate, Imperial College)
Adam Chippindale	(Now Associate Professor, Queens University)
Laurie Dries	(Now a researcher in a State laboratory in Texas)
Phillip Byrne	(Now Research Fellow, Monash University)
Edward Morrow	(Now Assistant Professor, Uppsala University)
Emma Cunningham	(Now Assistant Professor, Edinburgh University)
Tristan Long	(Now Assistant Professor, Wilfrid Laurier University)
Urban Friberg	(Now Assistant Professor, Uppsala University)
Andrew Stewart	(currently in my laboratory)
Paige Miller	(currently in my laboratory)

### **GRADUATE STUDENTS:**

Dianna Oliveras	(Ph.D.)	1990	(co-advisor)
Ellen Hostert	(Ph.D.)	1995	
Damian Gessler	(Ph.D.)	1995	
Bridgette de Saint Phalle	(Ph.D.)	1997	(co-advisor)
Maria Kretzman	(Ph.D.)	1998	(co-advisor)
Danial Templin	(M.S.)	1997	
Brett Holland	(Ph.D.)	1999	
Jonathan Gibson	(M.S.)	2000	
Timothy Lew	(M.S.)	2004	
Urban Friberg	(graduate student visited from Sweden {Univ. Umea})		
Bram Kuijper	(graduate student visited from The Netherlands)		
Allison Pischedda	(Ph.D.)	2010	
Jenna Castle	(M.S.)		

**Undergraduate Student Researchers (since 1990):**

			<b><u>Graduated</u></b>
Alex Jones	Undergraduate laboratory researcher	Advisor	1991
Steve Lane	Undergraduate thesis	Advisor	1992
Stephen Proulx	Undergraduate theory researcher	Advisor	1993
Joseph Romo	Undergraduate laboratory researcher	Advisor	1994
Sanja Tuggle	Undergraduate thesis	Advisor	1995
Richard Aragon	Undergraduate thesis	Advisor	1996
David Hamm	Undergraduate independent research	Advisor	1996
Marina Ramon	Undergraduate laboratory researcher	Advisor	1996
William Parks	Undergraduate laboratory researcher	Advisor	1996
Virginia James	Undergraduate laboratory researcher	Advisor	1996
Robin Carlson	Undergraduate thesis	Advisor	1997
Danna Viaggi	Undergraduate laboratory researcher	Advisor	1997
Meghan Sullivan	Undergraduate independent research	Advisor	1998
Sharon Rynolds	Undergraduate thesis	Advisor	1998
Rita Graves	Undergraduate thesis	Advisor	1998
Robert Goldberg	Undergraduate thesis	Advisor	1998
Ellen Oliviera	Undergraduate laboratory researcher	Advisor	1998
Rhiannon Cunningham	Undergraduate laboratory researcher	Advisor	2000
Nobu Matsumoto	Undergraduate independent research	Advisor	2001
Amir Sharifi	Undergraduate independent research	Advisor	2001
Saul Priceman	Undergraduate independent research	Advisor	2001
Amoret E Pritchard	Undergraduate independent research	Advisor	2002
Timothy A Lew	Undergraduate independent research	Advisor	2002
Brian E Wallace	Undergraduate independent research	Advisor	2004
Jodie Linder	Undergraduate independent research	Advisor	2004
Nicole Orteiza	Undergraduate laboratory researcher	Advisor	2004
Shine Ling	Undergraduate laboratory researcher	Advisor	2004
Joshua Mclean	Undergraduate laboratory researcher	Advisor	2005
Sara Mekjian	Undergraduate laboratory researcher	Advisor	2004
Tamara Kermani	Undergraduate laboratory researcher	Advisor	2005
Artashes Mirzatoryun	Undergraduate laboratory researcher	Advisor	2005
Anne Hannes	Undergraduate laboratory researcher	Advisor	2006
Vincent Peteque	Undergraduate independent research	Advisor	2002
Ryan Metcalf	Undergraduate laboratory researcher	Advisor	2003
Nina Shinday	Undergraduate laboratory researcher	Advisor	2002
Amber Kaplan	Undergraduate laboratory researcher	Advisor	2004
Gregory Campbell	Undergraduate laboratory researcher	Advisor	2003
Jacob Isborn	Undergraduate laboratory researcher	Advisor	2006
Kathleen McLaughlin	Undergraduate laboratory researcher	Advisor	2005
Krista Ruggiero	Undergraduate laboratory researcher	Advisor	2006
Sean Spitzer	Undergraduate laboratory researcher	Advisor	2006
Rachel Downs	Undergraduate laboratory researcher	Advisor	2006
Heather Stone	Undergraduate laboratory researcher	Advisor	2006
Ryan Christensen	Undergraduate laboratory researcher	Advisor	2006
Tiana Egloff	Undergraduate laboratory researcher	Advisor	2007
Jamie Creason	Undergraduate laboratory researcher	Advisor	2007

Yale Paulson	Undergraduate laboratory researcher	Advisor	2008
Ruth Nichols	Undergraduate laboratory researcher	Advisor	2009
Jennifer Williams	Undergraduate laboratory researcher	Advisor	2009
Daniel Benjamin	Undergraduate laboratory researcher	Advisor	2007
Joel Benjamin	Undergraduate laboratory researcher	Advisor	2010
Gregory Norton	Undergraduate laboratory researcher	Advisor	2010
Jenna Castle	Undergraduate laboratory researcher	Advisor	2010
Stephanie Roy	Undergraduate laboratory researcher	Advisor	2010
Hunter McCrea	Undergraduate laboratory researcher	Advisor	2011
Yana Blokhin	Undergraduate laboratory researcher	Advisor	2011
Daniele Laufer	Undergraduate laboratory researcher	Advisor	2011
Monica Little	Undergraduate laboratory researcher	Advisor	2011
Dana Mulder	Undergraduate laboratory researcher	Advisor	
Nicholas Arthur	Undergraduate laboratory researcher	Advisor	
Emily Xiao	Undergraduate laboratory researcher	Advisor	
Teri Hreha	Undergraduate laboratory researcher	Advisor	