

## Curriculum Vitae

### Lynn Bloxom (Marty) Martin II

#### Current position

Associate Professor  
Department of Integrative Biology  
University of South Florida  
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#### Education and training

1992 - 1996 B.S. Biology, Virginia Commonwealth University  
Supervisor: Dr. Charles Blem (emeritus)  
1997 - 1999 M.S. Biology, Virginia Commonwealth University  
Supervisor: Dr. Charles Blem (emeritus)  
1999 - 2001 M.A. Ecology and Evolutionary Biology, Princeton University  
Supervisor: Dr. Martin Wikelski  
2001 - 2004 Ph.D. Ecology and Evolutionary Biology, Princeton University  
Supervisor: Dr. Martin Wikelski  
2004 - 2007 Post-doctoral, Psychology/Neuroscience, Ohio State University  
Supervisor: Dr. Randy J. Nelson

#### Honors and awards

2012 Early tenure, promotion to Associate Professor, University of South Florida  
2010 University of South Florida, University Outstanding Research Award  
2009 George A. Bartholomew Young Investigator Award, Society for Integrative and Comparative Biology  
2009 Elective Member, American Ornithologist's Union  
2007 Ned K. Johnson Young Investigator Award, American Ornithologists Union  
2007 Young Investigator Award, Society for Behavioral Neuroendocrinology

#### PUBLICATIONS (h-index: 23, as of 7/31/13)

##### Books

1. **LB Martin**, CK Ghalambor, and HK Woods (editors). *Integrative Organismal Biology*, Wiley Press.

##### Peer-reviewed articles (\*undergraduate collaborator; \*\*graduate collaborator):

##### In review or revision:

87. \*\*Coon, CAC, \*\*AJ Brace, SR McWilliams, MD McCue, and **LB Martin**. Introduced and native congeners use different resource strategies to maintain performance during infections.
86. \*\*Liebl, AL and **LB Martin**. Individual behavioural flexibility tracks a range expansion of Kenyan house sparrows.
85. **Martin, LB**, and \*\*AL Liebl. Individual physiological plasticity in an avian range expansion.
84. Rivers, JW, \*\*AL Liebl, **LB Martin**, and MG Betts. Corticosterone in Swainson's Thrushes varies relative to forest age but not vegetative cover.
82. \*\*Sears, BF, \*PW Snyder, **LB Martin**, and JR Rohr. Host life history predicts behavioural resistance and tolerance to parasites in a tadpole-trematode system.

### In press

82. \*\*Coon, CAC and **LB Martin**. Patterns of haemosporidian prevalence along a range expansion in introduced Kenyan House Sparrows (*Passer domesticus*). *Journal of Avian Biology*, in press.
81. Ghalambor, CK, **LB Martin**, and HA Woods. The conceptual links between organismal biology and evolutionary ecology: plasticity, integration and a theory of the individual. In *Integrative Organismal Biology*. **LB Martin**, CK Ghalambor, and HA Woods, eds, in press.
80. **Martin, LB** and AA Cohen. Physiological regulatory networks: the orchestra of life? In *Integrative Organismal Biology*, **LB Martin**, CK Ghalambor, and HA Woods, editors, in press.
79. **Martin, LB**, \*\*CAC Coon, AW Schrey, and \*\*AL Liebl. Surveillance for microbes and range expansion in house sparrows. *Proceedings of the Royal Society of London B: Biological Sciences*, in press.
78. **Martin, LB** and \*\*M Boruta. The impacts of urbanization on avian disease transmission and emergence. In *Avian Urban Ecology*. D Gil and H Brumm, editors. In press.
77. Rohr, JR, TR Raffel, \*\*NT Halstead, S Johnson, \*\*TA McMahon, and **LB Martin**. Early-life exposure to an herbicide increases disease-induced mortality later in life. *Proceedings of the Royal Society of London B: Biological Sciences*, in press.
76. Schrey, AW, \*\*AL Liebl, CL Richards, and **LB Martin**. Genetic evidence for human-facilitation of range expansion in Kenyan house sparrows (*Passer domesticus*). *Journal of Heredity*, in press.

### 2013

75. Ledon-Retting, CC, CL Richards, and **LB Martin**. 2013. A place for behaviour in ecological epigenetics. *Behavioral Ecology* 24: 329-330.
74. Ledon-Retting, C, CL Richards, and **LB Martin**. 2013. Behavioural epigenetics for ecologists. *Behavioral Ecology* 24: 311-324.
73. \*\*Liebl, AL and **LB Martin**. 2013. Stress hormone receptors change as range expansion progresses in house sparrows. *Biology Letters* 9 (3) 20130181.
72. \*\*Liebl, AL, T Shimizu, and **LB Martin**. 2013. Covariation among glucocorticoid regulatory elements varies seasonally in house sparrows (*Passer domesticus*). *General and Comparative Endocrinology* 183: 32-37.
71. \*\*Liebl, AL, AW Schrey, CL Richards, and **LB Martin**. 2013. Epigenetic variation: a mechanism to overcome reduced diversity in novel environments? *Integrative and Comparative Biology* 53: 351-358.
70. Parker, JD, ME Torchin, RA Hufbauer, NP Lemoine, C Alba, DM Blumenthal, O Bossdorf, JE Byers, AM Dunn, RW Heckman, H Hedja, V Jarošík, AR Kanarek, **LB Martin**, SE Perkins, P Pyšek, K Schierenbeck, C Schlöder, R van Klineken, KJ Vaughn, W Williams, and LM Wolfe. 2013. World's worst plant and animal invaders perform better abroad than at home. *Ecology* 94: 985-994.
69. Schrey, AW, \*\*M Alvarez, \*\*C Foust, \*\*H Kilvitis, \*\*AL Liebl, **LB Martin**, CL Richards, and \*\*M Robertson. 2013. Ecological epigenetics: beyond MS-AFLP. *Integrative and Comparative Biology* 53: 340-350.

### 2012

68. Cohen, AA, **LB Martin**, JC Wingfield, SR McWilliams, and JA Dunne. 2012. Physiological regulatory networks: ecological roles and evolutionary constraints. *Trends in Ecology and Evolution* 27: 428-435.

67. \*\*Liebl, AL and **LB Martin**. 2012. Exploratory behaviour and stressor hyper-responsiveness facilitate range expansion of an introduced songbird. *Proceedings of the Royal Society of London B: Biological Sciences* 1746: 4375-4381.
66. \*\*Lima, MR, RH Macedo, T Martins, AW Schrey, **LB Martin**, and S Bensch. 2012. Genetic and morphometric divergence of an invasive bird: the introduced house sparrow (*Passer domesticus*) in Brazil. *PLOS One* 7 (12) e53332.
65. **Martin, LB**, \*\*AJ Brace, \*A Urban, \*\*CAC Coon, and \*\*AL Liebl. 2012. Does immune suppression to stressors occur to promote physical performance? *Journal of Experimental Biology* 215: 4097-4103.
64. **Martin, LB**, and \*\*CAC Coon. 2012. Photoperiod-driven variation in an allergic response is independent of allergen exposure. *Canadian Journal of Zoology* 90: 1086-1093.
63. Owen, JC, \*\*A. Nakamura, \*\*CAC Coon, and **LB Martin**. 2012. The effect of exogenous corticosterone on West Nile virus infection in Northern Cardinals (*Cardinalis cardinalis*). *Veterinary Research* 43: 34-40.
62. Previtali, MA, RS Ostfeld, F Keesing, AE Jolles, \*\*R Hanselmann, and **LB Martin**. 2012. Relationship between pace of life and immune response in wild rodents. *Oikos* 121: 1483-1492.
61. Rivers, JW, \*\*AL Liebl, JC Owen, **LB Martin**, and MG Betts. 2012. Baseline corticosterone in nestlings predicts juvenile survival in a migrant songbird. *Functional Ecology* 26: 1127-1134.
60. Rohr, JR and **LB Martin**. 2012. Type I error is unlikely to hinder review recycling: a response to Montesino. *Trends in Ecology and Evolution* 27: 312-313.
59. Rohr, JR and **LB Martin**. 2012. Reduce, reuse, recycle scientific reviews. *Trends in Ecology and Evolution* 27: 192-193.
58. Schrey, AW, \*\*CAC Coon, \*MT Grispo, \*M Awad, T Imboma, ED McCoy, CL Richards, HR Mushinsky, and **LB Martin**. 2012. Epigenetic variation may compensate for decreased genetic variation with introductions: a case study using house sparrows (*Passer domesticus*) on two continents. *Genetic Research International*, Article ID 979751.

## 2011

57. \*\*Coon, CA, RW Warne, and **LB Martin**. Acute phase responses vary with pathogen identity in house sparrows. *American Journal of Physiology: Regulatory, Integrative, and Comparative Physiology* 300: R1418-R1425.
56. **Martin, LB**, \*L Kidd, \*\*AL Liebl, and \*\*CAC Coon. 2011. Captivity induces hyperinflammation in house sparrows. *Journal of Experimental Biology* 214: 2579-2585.
55. **Martin, LB**, DM Hawley, and DR Ardia. 2011. An introduction to ecoimmunology. *Functional Ecology* 25: 1-4.
54. **Martin, LB**, \*\*AL Liebl, \*\*JH Trotter, CL Richards, K McCoy, and MW McCoy. 2011. Integrator networks: illuminating the black box linking genotype and phenotype. *Integrative and Comparative Biology* 51: 514-527.
53. **Martin, LB**, \*E Andreassi, \*W Watson, \*\*CAC Coon. Stress and animal health: physiological mechanisms and ecological consequences. *Nature Education Knowledge* 2:11.
52. Marzal, A, RE Ricklefs, G Valkiūnas, T Albayrak, E Arriero, C Bonneaud, GA Czirják, J Ewen, O Hellgren, TA Iezhova, H Jensen, A Križanauskienė, MR Lima, F de Lope, E Magnussen, **LB Martin**, AP Møller, P Munclinger, V Palinauskas, PL Pap, J Pérez-Tris, R Sehgal, M Soler, E Szöllösi, H Westerdahl, P Zetindjiev, and S Bensch. 2011. Diversity, loss and gain of malarial parasites in a globally invasive bird. *PLOS One* 6

(7) e21905.

51. \*\*McMahon, T, \*\*N Halstead, S Johnson, TR Raffel, JM Romansic, PW Crumrine, RK Boughton, **LB Martin**, and JR Rohr. 2011. The fungicide chlorothalonil is nonlinearly associated with corticosterone levels, immunity and mortality in amphibians. *Environmental Health Perspectives* 119: 1098-1103.
50. Rivers, JW, **LB Martin**, \*\*AL Liebl, and MG Betts. Parental alarm calls of the white-crowned sparrow fail to stimulate corticosterone production in their nest-bound offspring. *Ethology* 117: 374-384.
49. Schrey, AW, \*M Grispo, \*M Awad, \*MB Cook, ED McCoy, HR Mushinsky, T Albayrak, S Bensch, L Butler, HB Fokidis, H Jensen, T Imboma, MM Kessler-Rios, A Marzal, IRK Stewart, H Westerdahl, DF Westneat, P Zehindjiev, and **LB Martin**. Broad scale latitudinal patterns of genetic diversity among native European and introduced house sparrow (*Passer domesticus*) populations. *Molecular Ecology* 20: 1133-1143.
48. \*\*Sears, BF, JR Rohr, JE Allen, and **LB Martin**. 2011. The economy of inflammation: when is less more? *Trends in Parasitology* 27: 382-387.
47. \*\*Trotter, JH, \*\*AL Liebl, and ED Weeber, **LB Martin**. 2011. Linking ecological immunology and evolutionary medicine: the case for apolipoprotein E. *Functional Ecology* 25: 40-47.

## 2010

46. \*\*Adelman, JS and **LB Martin**. 2010. Behavioral Endocrinology: immune systems and sickness behaviour. *Encyclopedia of Animal Behavior*. Chapter 263, Elsevier. (invited)
45. \*\*Adelman, JS, GE Bentley, JC Wingfield, **LB Martin**, and M Hau. 2010. Population differences in fever and sickness behavior in a wild vertebrate: a role for cytokines. *Journal of Experimental Biology* 213: 4099-4109.
44. Cox, RM, EU Parker, DM Cheney, \*\*AL Liebl, **LB Martin**, and R Calsbeek. 2010. Experimental evidence for physiological costs underlying the trade-off between reproduction and survival. *Functional Ecology* 24: 1262-1269.
43. \*\*Kuhlman, JR, and **LB Martin**. 2010. Captivity affects immune redistribution to skin in a wild bird. *Functional Ecology* 24: 830-837.
42. **Martin, LB**, \*JL Alam, T Imboma, and \*\*AL Liebl. 2010. Variation in inflammation as a mediator of range expansion in Kenyan house sparrows. *Oecologia* 164:339-347.
41. **Martin, LB**, WA Hopkins, LD Mydlarz, and JR Rohr. 2010. The effects of anthropogenic global changes on immune functions and disease resistance. *Annals of the New York Academy of Sciences. The Year in Ecology and Conservation Biology* 1195: 129-148.
40. **Martin, LB** and CAC Coon. 2010. Infection protection and natural selection. *Science* 330: 602-603

## 2009

39. \*\*Adelman, JS and **LB Martin**. 2009. Vertebrate sickness behavior: an adaptive and integrated neuroendocrine immune response. *Integrative and Comparative Biology* 49: 202-214. (invited)
38. \*\*Liebl, AL and **LB Martin**. 2009. Simple quantification of antimicrobial capacity of blood using spectrophotometry. *Functional Ecology* 23: 1091-1096.
37. **Martin, LB**. 2009. Stress and immunity in wild vertebrates: timing is everything. *General and Comparative Endocrinology* 163: 70-76. (invited)
36. \*\*Workman, JL, \*E Johnson, **LB Martin**, and RJ Nelson. 2009. Butyric acid suppresses palatable food consumption in Siberian hamsters (*Phodopus sungorus*) housed in

winter-, but not summer-like, conditions. *Canadian Journal of Zoology* 86: 749-754.

## 2008

35. **Martin, LB**, KJ Navara, MT Bailey, \*CR Hutch, ND Powell, JF Sheridan, and RJ Nelson. 2008. Food restriction compromises immune memory in deer mice (*Peromyscus maniculatus*) by decreasing antibody-secreting splenic B-cells. *Physiological and Biochemical Zoology* 81: 366-372.
34. **Martin, LB**, \*\*ZM Weil, SL Bowers, and RJ Nelson. 2008. Sex-specific effects of glucose deprivation on cell-mediated immunity and reproduction in Siberian hamsters (*Phodopus sungorus*). *Journal of Comparative Physiology B* 178: 623-628.
33. **Martin, LB**, and DR Rubenstein. 2008. Stress hormones in tropical birds: patterns and predictions, *Ornithologia Neotropical* 19: 207-218. (invited)
32. **Martin, LB**, \*\*ZM Weil, and RJ Nelson. 2008. Fever and sickness behavior vary among congeneric rodents. *Functional Ecology* 22: 68-77.
31. **Martin, LB**, \*\*ZM Weil, and RJ Nelson. 2008. Seasonal changes in vertebrate immune activity: mediation by physiological trade-offs. *Philosophical Transactions of the Royal Society of London B: Biological Sciences* 363: 321-339. (invited)
30. **Martin, LB**, \*EM Johnson, \*CR Hutch, and RJ Nelson. 2008. 6MBOA affects reproductive tissue, but not cutaneous immune activity, in white-footed mice (*Peromyscus leucopus*). *Comparative Biochemistry and Physiology A* 149: 181-187
29. Raffel, TR, **LB Martin**, and JR Rohr. 2008. Parasites as predators: unifying natural enemy ecology. *Trends in Ecology and Evolution* 23: 610-618. (invited)
28. Rubenstein, DR, AF Parlow, \*CR Hutch, and **LB Martin**. 2008. Environmental and hormonal correlates of immune activity in a cooperatively breeding tropical bird. *General and Comparative Endocrinology* 159: 10-15.
27. Wikelski, M, **LB Martin**, \*MT Robinson, \*ND Robinson, A Scheuerlein, M Hau, and E Gwinner. 2008. Avian circannual clocks: adaptive significance and possible proximate control by energy turnover. *Philosophical Transactions of the Royal Society of London B: Biological Sciences* 363: 411-423. (invited)

## 2007

26. **Martin, LB**, \*\*ZM Weil, and RJ Nelson. 2007. Immune defense and reproductive pace of life in *Peromyscus* mice. *Ecology* 88: 2516-2528.
25. **Martin, LB**, KJ Navara, \*\*ZM Weil, and RJ Nelson. 2007. Immunological memory is compromised by food restriction in deer mice, *Peromyscus maniculatus*. *American Journal of Physiology: Regulatory, Integrative, and Comparative Physiology* 292: R316-320.
24. **Martin, LB**, \*MI Pless, and M Wikelski. 2007. Greater seasonal variation in blood and ectoparasite infections in a temperate than a tropical population of House Sparrows in North America. *Ibis* 149: 419-423.
23. **Martin, LB**, BC Trainor, \*MS Finy, and RJ Nelson. 2007. HPA activity and neotic and anxiety-like behavior vary among *Peromyscus* species. *General and Comparative Endocrinology* 141: 342-350.
22. Nelson, RJ and **LB Martin**. 2007. Seasonal changes in stress responses. In: *Encyclopedia of Stress*. Vol.3 Edited by George Fink. Academic Press: New York. (invited)

## 2006

21. \*\*Lee, KA, **LB Martin**, D Hasselquist, RE Ricklefs, and M Wikelski. 2006. Contrasting adaptive immune defenses and blood parasite prevalence in closely related *Passer* sparrows. *Oecologia* 150: 383-392.
20. **Martin, LB**, \*P Han, \*J Kwong, and M. Hau. 2006. Cutaneous immune activity varies

- with physiological state in female house sparrows (*Passer domesticus*). *Physiological and Biochemical Zoology* 79: 775-783.
19. **Martin, LB**, \*\*ZM Weil, \*JR Kuhlman, and RJ Nelson. 2006. Trade-offs within the immune system of female white-footed mice (*Peromyscus leucopus*). *Functional Ecology* 20: 630-636.
  18. **Martin, LB**, \*P Han, \*J Lewittes, \*JR Kuhlman, KC Klasing, and M Wikelski. 2006. Phytohemagglutinin (PHA) induced skin swelling in birds: histological support for a classic immunoeological technique. *Functional Ecology* 20: 290-300.
  17. **Martin, LB**, \*\*ER Glasper, RJ Nelson, and AC DeVries. 2006. Prolonged separation delays wound healing in monogamous California mice, *Peromyscus californicus*, but not in polygynous white-footed mice, *P. leucopus*. *Physiology and Behavior*. 87: 836-841.
  16. **Martin, LB**, D Hasselquist, and M Wikelski. 2006. Investment in immune defense is linked to pace of life in house sparrows. *Oecologia* 147: 565-575.
  15. **Martin, LB**, \*\*ZM Weil, and RJ Nelson. 2006. Refining approaches and diversifying directions in ecoimmunology. *Integrative and Comparative Biology* 46: 1030-1039. (invited)
  14. Trainor, BC, **LB Martin**, \*KM Greiwe, \*JR Kuhlman, and RJ Nelson. 2006. Social and photoperiod effects on reproduction in 5 *Peromyscus* species. *General and Comparative Endocrinology* 148: 252-259.
  13. \*\*Weil, ZM, \*\*LM Pyter, **LB Martin**, and RJ Nelson. 2006. Perinatal photoperiod organizes adult immune responses in Siberian hamsters (*Phodopus sungorus*). *American Journal of Physiology: Regulatory, Integrative and Comparative Physiology* 290: R1714-1719.
  12. \*\*Weil, ZM, **LB Martin**, and RJ Nelson. 2006. Photoperiod differentially affects immune function and reproduction in collared lemmings (*Dicrostonyx groenlandicus*). *Journal of Biological Rhythms* 21: 384-393.
  11. \*\*Weil, ZM, **LB Martin**, \*\*JL Workman, and RJ Nelson. 2006. Immune challenge retards seasonal reproductive regression: evidence for terminal investment. *Biology Letters* 2: 393-396.
  10. \*\*Weil, ZM, **LB Martin**, and RJ Nelson. 2006. Interactions among immune, endocrine, and brain in response to infection. In: *Macroparasites and Micromammals: from Evolutionary Ecology to Management*. Edited by Serge Morand, Boris Krasnov, and Robert Poulin. Springer-Verlag: New York. (invited)

## 2005

9. \*\*Berger, S, **LB Martin**, M Wikelski, LM Romero, EKV Kalko, \*\*MN Vitousek, and T. Rödl. 2005. Corticosterone, but not testosterone, suppresses immune activity in territorial Galápagos marine iguanas. *Hormones and Behavior* 47: 419-429.
8. \*Greenman, CG, **LB Martin**, and M Hau. 2005. Reproductive state but not testosterone reduces immune function in male house sparrows (*Passer domesticus*). *Physiological and Biochemical Zoology* 78: 60-68.
7. \*\*Lee, KA, **LB Martin**, and M. Wikelski. 2005. Responding to inflammatory challenges is less costly for a successful avian invader, the house sparrow (*Passer domesticus*), than its less invasive congener. *Oecologia* 145: 244-251.
6. **Martin, LB**. 2005. Trade-offs between molt and immune activity in two populations of house sparrows (*Passer domesticus*). *Canadian Journal of Zoology* 83: 780-787.
5. **Martin, LB**, and \*L. Fitzgerald. 2005. A taste for novelty in invading house sparrows. *Behavioral Ecology* 16: 702-707.
4. **Martin, LB**, \*J Gilliam, \*P Han, \*\*KA Lee, and M Wikelski. 2005. Corticosterone suppresses immune function in temperate but not tropical house sparrows (*Passer domesticus*). *General and Comparative Endocrinology* 140: 126-135.

## 2004

3. **Martin, LB**, \*MI Pless, \*J Svoboda, and M Wikelski. 2004. Immune activity in temperate and tropical house sparrows: a common garden experiment. *Ecology* 85: 2323-2331.

## 2003

2. **Martin, LB**, A Scheuerlein, and M Wikelski. 2003. Immune activity elevates energy expenditure of House Sparrows: a link between direct and indirect costs. *Proceedings of the Royal Society of London B Biological Sciences* 270: 153-158.
1. Hayden, TJ, RH Melton, B Willis, **LB Martin**, and T Beaty. 2003. Assessment of maneuver training activities on Red-Cockaded Woodpecker populations on Fort Stewart, GA. Construction Engineering Research Laboratory, ERDC/CERL TR-02-17.

## Invited book reviews

1. **Martin, LB**. 2007. Invited review of *Biology of the Ubiquitous House Sparrow: from Genes to Populations* by Ted R. Anderson. *Journal of Field Ornithology* 78: 225-226.

## GRANTS

### Awarded

- |           |   |
|-----------|---|
| 2014-2017 | Agencia Nacional de Promocion Cientifica y Tecnologica (Argentina; Pablo Beldomenico, PI; ~\$183,000; external consultant)<br><i>Stress, host susceptibility and infection dynamics in wild rodents: unpacking the immune system.</i>                                       |
| 2013-2017 | NSF-Integrative Organismal Systems (Tom Unnasch, co-PI; \$604,000)<br><i>Stress hormone effects on disease resistance, tolerance and transmission</i>   |
| 2012      | NSF-DDIG, 1209747 (Andrea Liebl, co-PI; \$14,923)<br><i>Adaptive physiological and behavioral changes among populations undergoing range expansions</i>   |
| 2011      | USF-CAS seed grant (\$3,150)  |
| 2010-2015 | NSF, Research Coordination Network, 0947177 (\$493,341)<br><i>Redefining and diversifying ecological immunology</i>   |
| 2009-2013 | NSF, Integrative Organismal Systems, 0920475 (\$434,059)<br><i>Physiological mediation of vertebrate invasions</i>  |
| 2008      | NSF, Integrative Organismal Systems (\$23,340)<br><i>Psychoneuroimmunology meets Integrative Biology, symposium</i><br>Scott's Company, <i>Project Blackbird</i> (\$2,000)<br>Scott's company, <i>Project Blackbird II</i> (\$10,000)<br>USF New Researcher Grant (\$3,120) |
| 2002      | Program in Latin American Studies, Princeton University (\$1000)  |
| 2001      | Animal Behavior Society (\$1000)<br>American Ornithologist's Union (\$900)<br>American Museum of Natural History (Frank Chapman grant; \$1500)<br>Sigma Xi Society (Grant-in-Aid of Research; \$1200)   |

### Invited full proposal

- |      |   |
|------|---|
| 2012 | NSF-IOS, BSF Bi-national Integrative Organismal Systems pre-proposal<br><i>Invasiveness via phenotypic plasticity in house sparrows</i><br>NSF-IOS, pre-proposal<br><i>Stress hormone effects on resistance, tolerance, and competency</i><br>NSF-DEB, pre-proposal |
|------|---|

*Effects of past population fragmentation on genetic diversity and disease resistance in the Aegean lizard, Podarcis erhadii*

Submitted

2013

Christine Stevens Wildlife Award

*Effects of bird feeders on avian health and disease*

American Asthma Foundation (PI: Ben Nephew, Tufts U.)

*Chronic social stress during development and impacts on asthma*

NSF-DEB, pre-proposal

*Host immune-mediated parasite interactions in an arbovirus system: helminthes, West Nile virus and avian hosts*

NSF-IOS, pre-proposal

*Stress hormone effects on resistance, tolerance, and competency*

NSF-IOS (ICOB), full proposal

*Invasiveness via phenotypic plasticity in house sparrows*

2012

NSF-Ecology of Emerging and Infectious Disease

*Trait-based disease ecology*

NSF-IOS, EAGER

*Costs of vertebrate immunity: do big animals pay more?*

NSF-IOS, BSF Bi-national Integrative Organismal Systems pre-proposal

*Invasiveness via phenotypic plasticity in house sparrows*

NSF- Integrative Organismal Systems

*Stress hormone effects on resistance, tolerance, and competency*

NSF- Integrative Organismal Systems, pre-proposal

*Stress hormone effects on resistance, tolerance, and competency*

Christine Stevens Wildlife Award

*Effects of bird feeders on avian health and disease*

NESCent Catalysis meeting

*A cross-species, evolution-based system for characterizing disease*

Agencia Nacional de Promocion Cientifica y Tecnologica

*Stress, host susceptibility and infection dynamics in wild rodents*

2011

NSF-Ecology of Infectious Disease

*Trait-based disease ecology*

NSF, Integrative Organismal Systems (resubmission)

CAREER: *Stress-immune interactions in wild songbirds*

NESCent Working Group

*Development of an Integrated Curriculum for Evolutionary Medicine*

NSF-IOS, ROA supplement, with Sara O'Brien, Marian University

*Physiological mediation of vertebrate invasions*

NESCent Catalysis Meeting

*Physiological Regulatory Networks*

2010

NSF-Ecology of Infectious Disease

*The mechanistic basis of the dilution effect*

Morris Animal Foundation, Established Researcher

*Captivity effects on wild animal immunity*

NSF, Integrative Organismal Systems (resubmission)

CAREER: *Stress-immune interactions in wild songbirds*

NIH, R01: National Institute of Environmental Health Sciences

*Do pesticides permanently reduce infectious disease resistance?*

2009

NIH, Challenge grant, National Institute of Environmental Health Sciences

*Do pesticides permanently reduce infectious disease resistance?*



NIH, R15: National Institute of Environmental Health Sciences  
*Do pesticides permanently reduce infectious disease resistance?*  
NSF, Integrative Organismal Systems  
CAREER: *Stress-immune interactions in wild songbirds*  
NSF, Research Collaborative Networks program (resubmission)  
*Redefining and diversifying ecological immunology*  
Oregon State University (co-PI)  
*How does increased temperature variability impact breeding birds  
and their offspring?*  
USF Interdisciplinary Research Grant  
*Development of novel immune assays for wild birds*  
National Geographic Explorer's Program (co-PI)  
*Population genetics of introduced house sparrows in Brazil*

2008 Beckman Young Investigator's Program  
*Urbanization and West Nile virus in house sparrows*  
NSF, Research Collaborative Networks program  
*Redefining and diversifying ecological immunology*  
NSF, Integrative Organismal Systems  
*The physiological basis of invasiveness in the House Sparrow*  
National Geographic Explorer's Program (co-PI)  
*Stress endocrinology of African songbirds*  
American Association of Veterinarians Small Grants program

2007 National Geographic Explorer's Program  
*The physiological basis of invasiveness in the House Sparrow*  
USF Internal: New Researcher Award  
*The physiological basis of invasiveness in the House Sparrow*

#### **Fellowships**

2004 – 2001 Pew Charitable Trusts, Training Program in Biocomplexity  
2004 – 2001 US Environmental Protection Agency, Science to Achieve Results (STAR)

#### **Travel awards**

2012 USF International Faculty Travel Grant  
2007 University of South Florida, Patel Center  
Society of Behavioral Neuroendocrinology  
2004 Society of Integrative and Comparative Biology  
2001 Princeton Association of Graduate Alumni  
2000 Ecology and Evolutionary Biology, University of Illinois  
Graduate College Conference, University of Illinois  
Association of Field Ornithologists  
1999 Virginia Society of Ornithology

#### **Other awards**

2000 Top 5% of Teaching Assistants university-wide, University of Illinois  
Inductee, Alpha Phi Alpha Honor Society  
Biology Graduate Student of the Year, VCU  
Best Talk in Evolution, University of Illinois Graduate Student Symposium  
1997 Governor's Fellowship, Office of Governor George Allen, Virginia

#### **PRESS COVERAGE**

2012 [Phys Org](#). Behavioral epigenetics in ecology

- 2011 [Phys Org](#). Stress hormones and behavior in Kenyan sparrows.  
*Frontiers in Ecology and the Environment* article on ecoimmunology
- 2010 *Faculty of 1000, Biology* [review](#) of article in *Functional Ecology*  
 The Scientist magazine, <http://www.the-scientist.com/news/display/57921/>
- 2008 "Biologist Saves Sparrows for Study," Tampa Bay's News 10, 4/2/2008  
*Physiological and Biochemical Zoology* article (Vol. 81, pp. 366-372)  
[AMP](#), [AOL](#), [Bio-medicine.org](#), [Biology News Net](#), [CBS 2](#), [Daily India](#), [Dr. Koop.com](#), [EurekAlert](#), [Florida Today](#), [Forbes](#), [GenNews](#), [Grand Junction Daily Sentinel](#), [Health Day News](#), [Health Central](#), [Health Scout](#), [Hulia](#), [IBNLive](#), [Innovations Report](#), [KAIT](#), [KATC](#), [KCAU](#), [KFVS-12](#), [KHNL](#), [KLFY](#), [KLKN](#), [KLTV](#), [KMPH Fox 26](#), [KNVA](#), [KOTA](#), [KPLC](#), [KRDO](#), [KRIS](#), [KRON4](#), [KTRV](#), [KVBC](#), [KVOA](#), [KXAN](#), [KXLY](#), [Labspaces.net](#), [LEX18](#), [Medical News Today](#), [MedicineNet.com](#), [MSN.com](#), [New Kerala](#), [NetIndia 123](#), [News-Medical-Net](#), [Phys Org](#), [Poughkeepsie Journal](#), [Red Orbit](#), [Salt Institute](#), [Scott and White](#), [Science Centric](#), [Science Daily](#), [Science Ticker](#), [Scientist Live](#), [Springfield News Sun](#), [SurfWax](#), [The Naked Scientists](#), [Times of India](#), [US News and World Report](#), [WAAY](#), [WALB](#), [WALD](#), [WAND](#), [WANE](#), [Washington Post](#), [WATE](#), [WAVE](#), [WECT](#), [WHBF](#), [WFIE](#), [WFLX](#), [WLFI](#), [WIS](#), [WKRN](#), [WMC](#), [WOI](#), [Women's Health.gov](#), [WRIC](#), [WTEN News](#), [Yahoo News](#)
- 2007 *Functional Ecology* article (Vol. 22, pp. 68-77)  
[Nature Reviews Microbiology](#), [The Post Chronicle](#), [Spektrumdirekt](#), [Medi-Lexicon](#), [Innovations Report](#), [Medical News Today](#), [EurekAlert](#), [United Press International](#), [Earth Times](#), [News-Medical.Net](#), [Science Daily](#), [Science Now](#), [VetsCite.Org](#)
- Functional Ecology* article (Vol. 20, pp. 290-300)  
[Thomson Essential Science Indicators "hot-paper" in Ecology](#)
- 2006 *Research focus paper in Trends in Ecology and Evolution for Functional Ecology* article (Vol. 20, pp. 290-300). Kennedy, MW, and RG Nager. 2006. The perils and prospects of using phytohemagglutinin in evolutionary ecology. *TREE* 21, pp. 653-655
- 2005 *Faculty of 1000, Biology* [review](#) of article in *General and Comparative Endocrinology* (Vol. 140, pp. 126-135)  
*Faculty of 1000, Biology* [review](#) of article in *Physiological and Biochemical Zoology* (Vol. 78, pp. 60-68)
- 2004 [Spotlight on Science at the Smithsonian](#) for article in *Ecology* (Vol. 85, pp. 2323-2331)
- 2003 Lead article for home page of *Proc Roy Soc Lond B* (Vol. 270, Issue 1511)

#### TEXTBOOK HIGHLIGHTS OF RESEARCH

- 2009 [Avian Invasions](#). Blackburn, Lockwood, and Cassey, eds. Highlight of Martin and Fitzgerald, 2005, *Behavioral Ecology*.
- 2008 [Avian immunology](#), Davison, Kaspers, and Schat, eds. Highlight of Martin et al., 2004, *Ecology*

## INVITED SEMINARS

- 2015 Society for Integrative and Comparative Biology, *Cognition in a changing world* symposium
- 2013 Duke University, Univ. Prog. in Ecology (Graduate Student invited speaker)  
The Wildlife Society, 'Urbanization' symposium, Milwaukee, WI  
University of South Florida, Global Health  
Western Michigan University, Biological Sciences (endowed lecture series)  
University of Virginia, Biology
- 2012 National Museums of Kenya, Nairobi, Kenya  
Bucknell University, Biology (Darwin Day speaker)  
International Society for Avian Endocrinology, Gifu, Japan  
University of Florida, Animal Molecular and Cellular Biology Program
- 2011 University of Tartu (Estonia)  
University of Georgia, Ecology  
Oregon State University, Veterinary Science  
Penn State University, Center for Infectious Disease Dynamics
- 2010 University of Edinburgh (Scotland)  
Tufts University (Graduate Student invited speaker)  
University of North Carolina (Graduate Student invited speaker)  
Wake Forest University
- 2009 Archbold Biological Station, Venus, FL  
George A. Bartholomew Award lecture, Society for Integrative and Comparative Biology, Boston MA  
University of Kentucky, Department of Biology
- 2008 Cary Institute for Ecosystems Studies, Millbrook NY  
University of Central Florida, Department of Biology  
NSF Research Collaborative Network: Integrating the Ecology and Evolution of Invasions, Prague, Czech Republic  
University of South Florida, Department of Psychology  
University of Tampa, Department of Biology
- 2007 Auburn University, Department of Biological Sciences  
Society for Behavioral Neuroendocrinology, Pacific Grove, CA  
VIII Neotropical Ornithological Conference, Maturín, Venezuela  
UNC Wilmington, Department of Biology and Marine Biology  
Oklahoma State University, Department of Zoology  
Boise State University, Department of Biology  
University of South Florida, Department of Biology  
University at Albany, Department of Biological Sciences  
University of South Carolina, Department of Biological Sciences  
Kansas State University, Division of Biology
- 2006 University of Buffalo, Department of Biological Sciences  
North American Ornithological Congress, Veracruz, Mexico  
*Constraints of the Evolutionary Diversification of the Life Histories of Temperate and Tropical Birds* symposium  
College of Wooster, Department of Biology  
Society of Integrative and Comparative Biology, Orlando, FL.  
*Ecological Immunology: Recent Advances and Applications for Conservation and Public Health* symposium
- 2005 University of Montana, Division of Biological Sciences  
Eastern Michigan University, Department of Biology  
Ohio State University, Behavioral Neuroscience Program

2003 121<sup>st</sup> meeting of the American Ornithologist's Union, Champaign, IL  
*S. Charles Kendeigh*, Symposium

### **SYMPOSIA ORGANIZED**

2014 American Physiological Society, San Diego, CA; Ecology and evolution of homeostasis (with Art Woods)  
2013 RCN Ecoimmunology, Berlin, Germany  
2011 RCN Ecoimmunology, Edinburgh, Scotland  
2010 RCN Ecoimmunology, Tampa, FL  
2009 Society for Integrative and Comparative Biology, Boston, MA.  
Psychoneuroimmunology Meets Integrative Biology.  
2008 American Ornithologist's Union, Young Investigator Symposium  
2006 XXIV International Ornithological Congress, Hamburg, Germany.  
Comparative avian immunology: from poultry to passerine (with Dennis Hasselquist)

### **CONFERENCE PRESENTATIONS**

2014

- 1) Boruta, M, HJ Kilvitis, S Kelp, B Everett, and **LB Martin**. Impacts of different developmental stressors on adult traits in zebra finches. 2014 Society of Integrative and Comparative Biology, Austin, TX.
- 2) Brace, AJ, S Sheikali, and **LB Martin**. Infection and temperature affect resource allocation in an introduced ectotherm. 2014 Society of Integrative and Comparative Biology, Austin, TX.
- 3) Kilvitis, HJ, AL Liebl and **LB Martin**. Stress-immune interactions in a range-expanding bird: covariation in stress hormone and Toll-like receptor expression. 2014 Society of Integrative and Comparative Biology, Austin, TX.
- 4) Liebl, AL and **LB Martin**. Plasticity in response to novelty: changes throughout a range expansion. 2014 Society of Integrative and Comparative Biology, Austin, TX.
- 5) **Martin, LB** and AL Liebl. Plasticity in physiological plasticity in an avian range expansion. 2014 Society of Integrative and Comparative Biology, Austin, TX.

2013

- 6) Brace, AJ, CAC Coon, MD McCue, SR McWilliams, and **LB Martin**. Resource allocation and range expansion in the Kenyan house sparrow. 2013 Society of Integrative and Comparative Biology, San Francisco, CA.
- 7) Coon, CAC, AJ Brace, and **LB Martin**. Resistance and tolerance in invasive and native songbirds: evidence of parasite spillback? 2013 Society of Integrative and Comparative Biology, San Francisco, CA.
- 8) Kilvitis, HJ, M Boruta, CL Richards, and **LB Martin**. Does early-life exposure to bacteria have enduring effects on the immune system of zebra finches? 2013 Society of Integrative and Comparative Biology, San Francisco, CA.
- 9) Liebl, AL, JH Trotter, SL Kellogg, T Fiorelli, and **LB Martin**. Variation in hippocampal-dependent behaviors and neurogenesis during a range expansion. 2013 Society of Integrative and Comparative Biology, San Francisco, CA.
- 10) Liebl, AL, AW Schrey, CL Richards, and **LB Martin**. Epigenetic variation: a mechanism to overcome reduced genetic diversity in novel environments? 2013 Society of Integrative and Comparative Biology, San Francisco, CA. (invited).
- 11) **Martin, LB**. Physiological mechanisms of range expansion. 2013. The Wildlife Society, Milwaukee, WI.
- 12) **Martin, LB**, DR Ardia, and DM Hawley. A Research Coordination Network in Ecological Immunology. 15th International Congress of Immunology, Milan, Italy.

- 13) **Martin, LB** and AL Liebl. Plasticity in physiological plasticity in an avian range expansion. Ecological Society of America, Minneapolis, MN.
- 14) Richards, CL, M Boruta, O Bossdorf, CAC Coon, C Foust, R Hughes, H Kilvitis, AL Liebl, **LB Martin**, A Nicotra, M Robertson, and AW Schrey. Epigenetic mechanisms of phenotypic plasticity. 2013 Society of Integrative and Comparative Biology, San Francisco, CA. (invited)
- 15) Schrey, AW, M Alvarez, C Faust, H Kilvitis, AL Liebl, **LB Martin**, CL Richards, and M Robertson. Ecological epigenetics: beyond MS-AFLP. 2013 Society of Integrative and Comparative Biology, San Francisco, CA. (invited)

2012

- 16) Boruta, M, and **LB Martin**. 2012. Does variation in host physiology occur in urban-rural habitat types? Society for Integrative and Comparative Biology, Charleston, SC.
- 17) Brace, AJ, M Boruta, AL Liebl and **LB Martin**. 2012. The effects of captivity on immune function and physical performance in house sparrows. Society for Integrative and Comparative Biology, Charleston, SC.
- 18) Coon, CAC and **LB Martin**. 2012. Are invasive house sparrows released from avian malaria over small spatiotemporal scales? Ecology and Evolution of Infectious Disease Annual Meeting. Ann Arbor, MI.
- 19) Coon, CAC and **LB Martin**. 2012. Are invasive house sparrows released from avian malaria over small spatiotemporal scales? Research Coordination Network workshop in Ecological Immunology. Ann Arbor, MI.
- 20) Coon, CAC and **LB Martin**. 2012. Do changes in parasite prevalence facilitate range expansion of Kenyan house sparrows (*Passer domesticus*)? Society for Integrative and Comparative Biology, Charleston, SC.
- 21) Liebl, AL, A Garringer, AS Sierra, D Wiley, and **LB Martin**. Variation in glucocorticoid stress response and behavior along a gradient of invasive house sparrows (*Passer domesticus*). Society for Integrative and Comparative Biology, Charleston, SC.
- 22) Liebl, AL, and **LB Martin**. Seasonal variation in glucocorticoid regulation in house sparrows (*Passer domesticus*). Society for Integrative and Comparative Biology, Charleston, SC.
- 23) **Martin, LB**, DR Ardia, and DM Hawley. A Research Coordination Network in Ecological Immunology. Society for Integrative and Comparative Biology, Charleston, SC.
- 24) **Martin, LB**, CAC Coon, AW Schrey, CL Richards, and AL Liebl. Physiological mechanisms of range expansion in the house sparrow. International society of avian Endocrinology, Gifu, Japan (invited symposium talk).
- 25) Schrey, AW, AL Liebl, CL Richards, and **LB Martin**. The relative significance of genetic and epigenetic diversity for house sparrow colonization of Kenya. Society for Integrative and Comparative Biology, Charleston, SC.

2011

- 26) Coon, CAC, C Caruana, E Andreassi, S McLaughlin, AL Liebl, T Imboma, and **LB Martin**. Preliminary examination of parasites in invasive Kenyan house sparrow. 9<sup>th</sup> annual Ecology and evolution of infectious disease meeting, Santa Barbara, CA.
- 27) Coon, CAC, C Caruana, E Andreassi, S McLaughlin, AL Liebl, T Imboma, and **LB Martin**. Preliminary examination of parasites in invasive Kenyan house sparrow. MalariaRCN workshop, Shepherdstown, WV.
- 28) Kidd, L, CAC Coon, and **LB Martin**. Captivity affects acute phase responses in house sparrows. Society for Integrative and Comparative Biology, Salt Lake City, UT.

- 29) Liebl, AL, CAC Coon, CC Ledon-Rettig, and **LB Martin**. Variation in glucocorticoid regulation among invasive Kenyan house sparrows (*Passer domesticus*). North American Society of Comparative Endocrinology, Ann Arbor, MI.
- 30) **Martin, LB**, CAC Coon, A Brace, and AL Liebl. Variation in the regulation of inflammation along a house sparrow range expansion. North American Society of Comparative Endocrinology, Ann Arbor, MI.
- 31) **Martin, LB**, AL Liebl, CAC Coon, CL Richards, and AW Schrey. Physiological mechanisms of range expansion in Kenyan house sparrows. Society for Integrative and Comparative Biology, Salt Lake City, UT.
- 32) Rohr, JR, RK Boughton, NT Halstead, SA Johnson, TR Raffel, T McMahon, and **LB Martin**. Pesticide exposure during development increases mortality to infections in adulthood. Society for Integrative and Comparative Biology, Salt Lake City, UT.
- 33) Rohr, JR, T McMahon, **LB Martin**, S Johnson, and TR Raffel. Amphibian and reptile ecotoxicology: interactions among contaminants and other stressors. 32<sup>nd</sup> annual SETAC meeting, Boston, MA.
- 34) Rohr, JR, T McMahon, N Halstead, **LB Martin**, TR Raffel, JM Romansic, RK Boughton, PW Crumrine, and S Johnson. Fungicide-induced declines of freshwater biodiversity modify ecosystem functions and services. 32<sup>nd</sup> annual SETAC meeting, Boston, MA.
- 35) Sears, BF, JR Rohr, and **LB Martin**. The contribution of anti-parasite behavior to resistance and tolerance of trematode infections in larval anurans. Society for Integrative and Comparative Biology, Salt Lake City, UT.
- 36) Sears, BF, JR Rohr, and **LB Martin**. Resistance to trematode parasites carries a developmental cost in anuran tadpoles. American Society of Parasitologists, Anchorage, AK.
- 37) Urban, AM, CAC Coon, AL Liebl, and **LB Martin**. Does immune suppression occur to free resources for other physiological processes? Society for Integrative and Comparative Biology, Salt Lake City, UT.

2010

- 38) Liebl, AL, E Schmidt, and **LB Martin**. Physiological correlates of neophobic behavior: Is regulation of the hypothalamic-pituitary-adrenal axis correlated to responses to novelty? Society for Integrative and Comparative Biology, Seattle, WA.
- 39) Liebl, AL, and **LB Martin**. Hypothalamic-pituitary-adrenal regulation and neophilia in captive house sparrows. International Ornithological Congress, Campo de Jordao, Brazil.
- 40) **Martin, LB**, AL Liebl, JL Alam, LK Butler, B Faivre, T Imboma, JR Kuhlman, LM Romero, I Stewart, G Sorci, DF Westneat, and KA Lee. Altered inflammatory responses as facilitators of introductions in the house sparrow. Society for Integrative and Comparative Biology, Seattle, WA.
- 41) **Martin, LB**, AL Liebl, JL Alam, LK Butler, B Faivre, T Imboma, JR Kuhlman, LM Romero, I Stewart, G Sorci, DF Westneat, and KA Lee. Global variation in house sparrow immune functions. International Ornithological Congress, Campo de Jordao, Brazil.
- 42) Owen, JC, A Nakamura, CA Coon, and **LB Martin**. The effect of corticosterone on resistance to West Nile virus in an avian reservoir. International Ornithological Congress, Campo de Jordao, Brazil.
- 43) Previtali, A, R Hanselmann, RS Ostfeld, F Keesing, AE Jolles, **LB Martin**. Does variation in host immune function explain differences in reservoir competence among small mammals? Ecological Society of America, Pittsburgh, PA.

- 44) Rivers, JW, MG Betts, AL Liebl, JC Owen, and **LB Martin**. Assessing whether the corticosterone stress response predicts post-fledging survival in a temperate passerine. 128<sup>th</sup> American Ornithologists Union, San Deigo, CA.

2009

- 45) Schrey, AW, M Grispo, M Awad, ED McCoy, HR Mushinsky, T Albayrak, S Bensch, H Jensen, A Reynolds, H Westerdahl, P Zehtindjiev, and **LB Martin**. Microsatellite analysis of population structure in the house sparrow. 127<sup>th</sup> American Ornithologists Union, Philadelphia, PA.
- 46) Schrey, AW, CAC Coon, ED McCoy, HR Mushinsky, and **LB Martin**. Epigenetic variation in two populations of house sparrows. 127<sup>th</sup> American Ornithologists Union, Philadelphia, PA.
- 47) Rivers, JW, **LB Martin**, AL Liebl, and MG Betts. 2009. Alarm calls of white-crowned sparrow parents fail to stimulate corticosterone production in their offspring. 127<sup>th</sup> American Ornithologists Union, Philadelphia, PA.
- 48) Owen, JC, **LB Martin**, and A Nakamura. 2009. Reservoir competence of Northern Cardinals for West Nile Virus: the role of stress hormones. Michigan State University Veterinary Medicine conference, East Lansing, MI.
- 49) Coon, CA, RW Warne, and **LB Martin**. 2009. Unconventional sickness behaviors after immune activation in a wild passerine. Society for Behavioral Neuroendocrinology, East Lansing, MI.
- 50) Liebl, AL, N Tu, CAC Coon, and **LB Martin**. 2009. Development of quantitative real-time PCR tools for ecological immunologists: surmounting technological limitations in the field. Society for Behavioral Neuroendocrinology, East Lansing, MI.
- 51) Alam, JL, AL Leibl, H. Bobby Fokidis, and **LB Martin**. 2009. Are the immune systems of tropical birds glucocorticoid resistant? Society for Integrative and Comparative Biology, Boston, MA.
- 52) Kuhlman, JR and **LB Martin**. 2009. Stress effects on immunity in house sparrows. Society for Integrative and Comparative Biology, Boston, MA.
- 53) Leibl, AL, JL Alam, and **LB Martin**. 2009. Rapid quantification of bactericidal capacity of avian plasma. Society for Integrative and Comparative Biology, Boston, MA.
- 54) Coon, C, JS Adelman, and **LB Martin**. 2009. Development of a simple assay to measure an integral pro-inflammatory cytokine in songbird blood. Society for Integrative and Comparative Biology, Boston, MA.

2008

- 55) Kuhlman, JR and **LB Martin**. Acute stress effects on immunity in the house sparrow. 2008. 126<sup>th</sup> American Ornithologists Union, Portland, OR.
- 56) Kuhlman, JR and **LB Martin**. Acute stress effects on immunity in the house sparrow. 2008. International Society of Avian Endocrinology, Leuven, Belgium.
- 57) **Martin, LB**, ZM Weil, and RJ Nelson. 2008. Fever and sickness behavior vary among congeneric rodents. Psychoneuroimmunology Research Society, Madison, WI.
- 58) **Martin, LB**, ZM Weil, KJ Navara, CR Hutch, C Tuthill, I Zucker, and RJ Nelson. 2008. Melatonin organizes the immune system of Siberian hamsters. Society for Integrative and Comparative Biology, San Antonio, TX (poster).
- 59) **Martin, LB**, ZM Weil, and RJ Nelson. 2008. Fever and sickness behavior vary among congeneric rodents. Society for Integrative and Comparative Biology, San Antonio, TX.

2007

- 60) **Martin, LB**, J Gilliam, P Han, KA Lee, and M Wikelski. 2007. Corticosterone suppresses immune activity in temperate, but not tropical, house sparrows. Neotropical Ornithological Congress, Maturín, Venezuela.
- 61) **Martin, LB**, M Wikelski, and RJ Nelson. 2007. Geographic variation in glucocorticoids: influences on immunity and behavior. Society for Behavioral Neuroendocrinology, Young Investigator Symposium, Pacific Grove, CA.
- 62) Lee, KA, KC Klasing, **LB Martin**, L. Fusani, G. Sorci, B. Faivre, and M Wikelski. 2007. Immune defense strategies differ between invasive New World House Sparrows and their Old World ancestors. Evolutionary change in human altered environments: an international summit, UCLA.
- 63) Lee, KA, KC Klasing, WD Robinson, **LB Martin**, and M Wikelski. 2007. Ecological and life history correlates of immune defenses in tropical birds. Ecological Society of America, Symposium 21: Epidemics, Ecological Immunology, and Environmental Change: Insights from Theory and Field Systems, San Jose, CA.
- 64) Navara, KJ, **LB Martin**, ZM Weil, and RJ Nelson. 2007. Immunological memory is compromised by food restriction in male deer mice, *Peromyscus maniculatus*. Society of Integrative and Comparative Biology, Phoenix AZ (poster).

2006

- 65) **Martin, LB** and M Wikelski. 2006. Life history and immune activity in house sparrows. North American Ornithological Congress, Veracruz, Mexico.
- 66) **Martin, LB** and M Wikelski. 2006. Life history and immune activity in house sparrows. XXIV International Ornithological Congress, Hamburg, Germany.
- 67) **Martin LB** and RJ Nelson. 2006. Fever and sickness behavior in fast- and slow-living *Peromyscus*. Society of Behavioral Neuroendocrinology, Pittsburgh, PA. (poster).
- 68) **Martin, LB**, ZM Weil, and RJ Nelson. 2006. The immune defenses of wild rodents: model systems for bridging conservation, medicine, and ecophysiology. Society of Integrative and Comparative Biology, Orlando, FL.

2005

- 69) Lee, KA, **LB Martin**, and M Wikelski. 2005. Do immune defense strategies differ between invasive New World populations of the House Sparrow and their Old World ancestors? Society of Integrative and Comparative Biology, San Diego, CA.
- 70) **Martin, LB**, AK Hotchkiss, ZM Weil, and RJ Nelson. 2005. Fitness costs of induced immune activity in Siberian hamsters. Society of Integrative and Comparative Biology, San Diego, CA.
- 71) **Martin, LB**, BC Trainor, K Greiwe, JR Kuhlman, and RJ Nelson. 2005. Social and photoperiod effects on reproduction in species of *Peromyscus*. Society for Neuroscience, Washington, DC. (poster).
- 72) **Martin, LB**, LM Pyter, K Tsutsui, K Ukena, RJ Nelson, and GE Bentley. 2005. Effects of GnIH on immunity in Siberian hamsters. Society of Behavioral Neuroendocrinology, Austin TX. (poster).

2004

- 73) Berger, S, **LB Martin**, M Wikelski, EKV Kalko, and T Rödl. 2003. Immune function, steroid hormones, and male reproductive strategies in the Galápagos marine iguana, *Amblyrynchus cristatus*. Animal Behavior Society Meeting, Boise, ID. (poster).
- 74) Lee, KA, **LB Martin**, and M Wikelski. 2004. Sex influences immune responses differently in the House Sparrow and a monomorphic congener, the Eurasian Tree Sparrow. Society of Integrative and Comparative Biology, New Orleans, LA.



- 75) **Martin, LB**, and M Wikelski. 2004. Tropical house sparrows use more costly immune defenses than their temperate counterparts. Society of Integrative and Comparative Biology, New Orleans, LA.
- 76) **Martin, LB**, J Lewittes, KC Klasing, and M Wikelski. 2004. Neotropical house sparrows use more costly immune defenses than their North-temperate counterparts. Society of Integrative and Comparative Biology, New Orleans, LA. (poster).

2003

- 77) Hayden, TJ, RH Melton, B Willis, **LB Martin**, and T Beaty. 2003. Effects of maneuver training activities on the Red-cockaded Woodpecker population on Fort Stewart, GA. 121<sup>st</sup> Meeting of the American Ornithologists Union, Champaign, IL.
- 78) Lee, KA, **LB Martin**, and M Wikelski. 2003. A role for the immune system in biological invasions? 121<sup>st</sup> Meeting of the American Ornithologists Union, Champaign, IL.
- 79) **Martin, LB**, MI Pless, J Svoboda, and M Wikelski. 2003. Climatic seasonality influences life history traits and immune function in tropical and temperate House Sparrows: a common garden experiment. 121<sup>st</sup> Meeting of the American Ornithologists Union, Champaign, IL.
- 80) **Martin, LB**. Trade-offs between molt and immune activity in North-temperate and Neotropical House Sparrows (*Passer domesticus*). 2003. 121<sup>st</sup> Meeting of the American Ornithologists Union, Champaign, IL. (poster).
- 81) Pless, MI, **LB Martin**, and M Wikelski. 2003. Parasite load in House Sparrows from two latitudes. 121<sup>st</sup> Meeting of the American Ornithologists Union, Champaign, IL (poster).

2002 and earlier

- 82) **Martin, LB**, and M Wikelski. 2002. Do long-lived passerines have greater immunological competence? Cell-mediated immune activity in tropical and temperate House Sparrows (*Passer domesticus*). XXIII International Ornithological Conference, Beijing, China.
- 83) **Martin, LB**, A Raim, L Pater, and M Wikelski. 2002. Examining foraging behavior of Bicolored Antbirds using microphone-assisted telemetry. 119<sup>th</sup> Meeting of the American Ornithologists Union, Seattle, WA. (poster).
- 84) **Martin, LB**, and M Wikelski. 2000. Effects of testosterone on interaction between immunocompetence and basal metabolic rate in the House Sparrow, *Passer domesticus*. VIII International Conference on Behavioral Ecology, Zurich, Switzerland.
- 85) **Martin, LB**. 2000. Woodpecker abundance and distribution in a managed hardwood forest. Combined Meeting of the Wilson Society and Association of Field Ornithologists, Galveston, TX.
- 86) **Martin, LB**. 1998. Snags preferred for foraging and excavating by eastern North American woodpeckers. Annual Meeting of the Virginia Society of Ornithology, Reston, VA.

## TEACHING and MENTORING

- 2013            University of South Florida, Physiological Ecology (BSC 4933)  
                   University of South Florida, Evolutionary Medicine (BSC 4933)
- 2012            University of South Florida, Ecoimmunology (BSC 4933)  
                   University of South Florida, Introduction to Biodiversity (BSC 2011)  
                   University of South Florida, Evolutionary Medicine (BSC 4933)
- 2011            University of South Florida, Lectures in Contemporary Bio (BSC 4933)  
                   University of South Florida, Lectures in Contemporary Bio (BSC 4933)

	University of South Florida, Introduction to Biodiversity (BSC 2011)
	University of South Florida, The Extended Synthesis (BSC 4933)
	University of South Florida, Physiological Ecology (BSC 4933)
2010	University of South Florida, Ecoimmunology (BSC 4933)
	University of South Florida, Evolutionary Medicine (BSC 4933)
2009	University of South Florida, Immunology in Context (BSC 4933)
	University of South Florida, Introduction to Biodiversity (BSC 2011)
	University of South Florida, Evolutionary Medicine (BSC 4933)
2008	University of South Florida, Advanced Vertebrate Ecophysiology (2x)
	University of South Florida, Physiological Ecology (BSC 4933/6932)
	University of South Florida, Evolutionary Medicine (BSC 4933)
2003	Princeton University, Guest lecturer, Comparative Physiology
2002	Princeton University, Teaching Assistant, Introductory Biology
2001	Princeton University, Teaching Assistant, Tropical Ecology
1999	University of Illinois, Teaching Assistant, Introductory Biology
1997 – 1999	Virginia Commonwealth University, Teaching Assistant, Intro. Biology

### **Graduate advisees**

#### *Complete*

Andrea Liebl, PhD, Summer 2013; post-doc with Andy Russell, University of Exeter  
 Joshua Kuhlman, MS, May 2010

#### *In progress*

Martyna Boruta, MS expected May 2014  
 Amber Brace, PhD expected May 2016  
 Courtney Coon, PhD expected December 2013  
 Sarah Huber, MS expected May 2016  
 Holly Kilvitis, PhD expected May 2017

### **Undergraduate honors theses**

2013	Chloe Josefson
2012	Allesandra Araujo, Brittany Leigh, Desirae Wiley
2011	Alexandra Urban
2010	Laura Kidd, Jaymin Patel
2009	Sean Argo, Nerlyne Desravines, Elaine Rindfuss, Nhan Tu

### **Undergraduate honors thesis committee**

2009	Andrea Schlunk
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### **Undergraduate advisees**

2013	Travis Bautista, Bo Everett, Ryan Holbrook, Chloe Josefson, Sarah Kelp, Nicole Perez, Lisette Mole, Steffanie Munguia, Shreenath Rajendran, Amanda Rigney, Sam Sheikali
2012	Allesandra Araujo, Travis Bautista, Yuya Burkhart, Bo Everett, Ryan Holbrook, Chloe Josefson, Sarah Kelp, Brittany Leigh, Cristina Ruiz Lorenzo, Sara McLaughlin, Steffanie Munguia, Ahn-My Nguyen, Sasha Sierra, Victoria Simenson, Desirae Wiley
2011	Allesandra Araujo, Amber Brace, Chris Caruana, Celina Diego, Ashley Garringer, Melinda Fang, Brittany Leigh, Cristina Ruiz Lorenzo, Holly Kilvitis, Sara McLaughlin, Ahn-My Nguyen, Jennie Nwokoye, Staci Reed, Roanak Shah, Sasha Sierra, Victoria Simenson, Alex Urban, Desirae Wiley

- 2010 Elizabeth Andreassi, Amber Brace, Chris Caruana, Melinda Fang, Ashley Garringer, Laura Kidd, Brittany Leigh, Sara McLaughlin, David Nicholson, Jaymin Patel, Evelyn Schmidt, Roanak Shah, Alexandra Urban, Will Watson
- 2009 Jen Alam, Said Awad, Mohammed Awad, Patrick Blackburn, Matthew Cook, Nerlyne Desravines, Ashley Garringer, Laura Kidd, Brittany Leigh, Neel Nabar, David Nicholson, Jaymin Patel, Chad Ponce, Evelyn Schmidt, Justin Trotter, Alexandra Urban, Will Watson
- 2008 Ohio State: Eric Johnson, Brandon Pollak  
USF: Jen Alam, Sean Argo, Said Awad, Mohammed Awad, Patrick Blackburn, Jonathan Dawson, Laura Kidd, Max Miller, Tri Nguyen, Trina Patel, Shauna Pittman, Elaine Rindfuss, Ed Thrombley, Nahn Tu
- 2005 – 2007 Ohio State: Mike Hamway, Chelsea Hutch, Josh Kuhlman, Eric Johnson, Brandon Pollak
- 2002 – 2003 Princeton: Jessica Gilliam, Chris Greenman, Peggy Han, Jason Lewittes, Monica Pless, Julia Svoboda

#### **Graduate thesis committee membership**

- 2013 Blaire O'neal (Env Sci Policy)
- 2012 Ahmet Kerim Uysal (Psychology)
- 2011 Anna Rivara (Anthropology)
- 2010 Christina Kobasa
- 2007 – 2011 Chris Anderson, Lance Arvidson, Kerry Bohl, Jayne Gardiner, Taeghan McMahon, Nick Osman

#### **Post-doctoral fellowship application sponsorships**

- 2012 Roi Dor, Marie Curie Career Re-integration Grant (Israel, U Tel Aviv)  
Leone Brown, NIH Ruth Kirchstein Fellowship
- 2011 Leone Brown, Life Sciences Research Foundation
- 2009 Cris Ledon-Rettig, NSF Minority Post-doctoral Fellowship (awarded)  
Peter Pap, Marie Curie Fellowship application
- 2008 Jim Rivers, Smith Fellowship, Society for Conservation Biology
- 2008 Dustin Rubenstein, eBIRD travel grant awardee (NSF-RCN, awarded)
- 2007 Jim Rivers, Co-PI for NSF International Post-doctoral Fellowship

#### **External PhD thesis examiner:**

- 2011 University of Tartu (Estonia), Elin Sild (Peeter Horak lab)

#### **SERVICE**

##### **Editorial service**

- 2010 – 2015 Editorial Board, *Functional Ecology*
- 2010 – 2012 Editorial Board, *Proceedings of the Royal Society of London, B*
- 2009 - 2011 Guest Editor, Special Issue of *Functional Ecology*, *Ecological Immunology*

##### **Professional organizations**

- 2007 – 2009 Member, Psychoneuroimmunological Research Society
- 2005 – present Member, Society of Behavioral Neuroendocrinology
- 2004 – 2006 Member, Ecological Society of America
- 2001 – present Member, Society for Integrative and Comparative Biology
- 2001 – present Full member, Sigma Xi Scientific Honor Society
- 2000 – 2007 Member, Alpha Phi Alpha Honor Society
- 1999 – present Member, American Ornithologists Union
- 1996 – 1997 President, Graduate Organization of Biology Students, VCU

**Professional committees**

2013 - 20xx	George Bartholomew Award committee, SICB-DCPB
2011 – 2012	Student Award Committee, American Ornithologists Union
2009 – 2010	Chair, Awards Committee, American Ornithologists Union
2007 – 2009	Awards Committee, American Ornithologists Union
2007 – 2009	Early Professional Committee, American Ornithologists Union

**University of South Florida**

2011 – 2013	Graduate Council (and Curriculum subcommittee member)
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**University of South Florida, College of Arts and Sciences**

2010-2012	Instructor Promotion Committee
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**University of South Florida, School of Natural Sciences and Mathematics**

2012-2013	Search Committee, Computational Science cluster hire
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**University of South Florida Integrative Biology service**

2012	USF-IB Visibility Committee
2011	USF-IB Internal Chair Search Committee
2013 – 2016	USF-IB Faculty Advisory Committee
2010 – 2013	USF-IB Faculty Advisory Committee
2008 – 2010	USF-IB Graduate Student Admissions Committee
2008 – 2010	USF-IB Seminar Committee
2009	USF-IB Instructor Search Committee
2009	USF-IB Disease Biologist Search Committee

**Panel service**

2013	National Science Foundation, Animal Behavior (pre-proposals)
2012	National Science Foundation, Animal Behavior (pre-proposals)
2010	National Science Foundation, Organism-Environment Interactions

**Ad hoc peer review**

*Journals:* Acta Zoologica Sinica, Aging Cell, American Journal of Physiology, American Naturalist, Animal Conservation, Auk, Behavioral Ecology, Behavioral Ecology and Sociobiology, Biology Letters, Brain, Behavior, and Immunity, Canadian Journal of Zoology, Cancer Immunology and Immunotherapy, Comparative Biochemistry and Physiology A, Current Biology, Current Medical Research and Opinion, Developmental and Comparative Immunology, General and Comparative Endocrinology, Ecography, Ecological Monographs, Ecology, Ecology Letters, Environmental Science and Technology, Ethology, Evolution, Evolutionary Ecology, Frontiers in Molecular Innate Immunity, Functional Ecology, Herpetologica, Ibis, Integrative and Comparative Biology, Journal of Avian Biology, Journal of Experimental Biology, Journal of Evolutionary Medicine, Journal of Heredity, Journal of Neuroendocrinology, Journal of Ornithology, Molecular Ecology, Oecologia, Physiological and Biochemical Zoology, PLOS One, Polar Biology, Proceedings of the Royal Society of London B: Biological Sciences, Science, Studies in Avian Biology, Trends in Ecology and Evolution, Trends in Parasitology, Wilson Journal of Ornithology

*Grantors:* The US - Israel Bi-national Agricultural Research and Development Fund (BARD); Polish Narodowe Centrum Nauki; Netherlands Organisation for Scientific Research; NSF

IOS Functional and Regulatory Systems; National Environmental Research Council;  
Wolfson College (Cambridge U.) Junior Research Fellow competition

*Book publishers:* Princeton University Press, Elsevier, Sinauer

*Journal quality control:* Nature reader panel

**PUBLIC OUTREACH**

2008 Judge, Student Presentations, Society for Integrative and Comparative  
Biology (2 divisions)  
2006 Judge, Student Presentations, North American Ornithological Congress  
Judge, Ohio Academy of Sciences, State Science Day  
2005 Judge, Denman Undergraduate Research Forum, Ohio State University  
Speaker, Career Day, Mansion Day School, Columbus OH  
Interpreter, Brain Awareness Week, COSI Science Center, Columbus OH  
2004 Contributor, National Institute of Invasive Species Science Database  
Advocate, New York Bird Monitoring, Wildlife Conservation Society

**RESEARCH NETWORK MEMBERSHIPS:**

GIN-RCN: Integrating the Ecology and Evolution of Invasions (<http://invasionsrcn.si.edu/>)

HOSPnet: a network of 23 domestic and international house sparrow researchers

MalariaRCN (<http://malariarcn.org/>)