

## CURRICULUM VITAE

**NAME** **Barnett (Barney) Alan Schlinger**

**ADDRESS** Department of Integrative Biology and Physiology  
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**PRINCIPLE RESEARCH INTERESTS:** Neuroethology and neuroendocrinology; hormonal control of behavior and neural function; steroid synthesis and metabolism; steroids as brain constitutive neuromodulators; evolution of complex behavior.

### PRESENT POSITIONS

Associate Dean of Life Science, UCLA  
Professor, Department of Integrative Biology and Physiology, UCLA  
Professor, Department of Ecology, Evolution and Behavior, UCLA  
Research Associate, Smithsonian Tropical Research Institute, Panama  
Member, Laboratory of Neuroendocrinology, Brain Research Institute, UCLA  
President, Society for Behavioral Neuroendocrinology, 2019-2021 (full term 2017-2023)

### EDUCATION

B.S., Biology, Tufts University, Medford, MA, 1977.  
M.A., Biology, Boston University, Boston, MA, 1983.  
Ph.D., Biology, Boston University, Boston, MA, 1988.  
Post-Doctoral Research Fellow, Department of Psychology, UCLA, 1988-1993.

### HONORS

Frank A. Belamarich Award for the Outstanding Doctoral Candidate in Biology at Boston University, 1988.  
NIH- NRSA. Project Title: Hormonal Basis of Brain Sex Differentiation; 1989-1991.  
Distinguished Neuroscience Fellow Lecture, Brain Research Institute, UCLA, 1992  
Frank Beach Award in Behavioral Endocrinology, Soc. for Neuroscience, 1993  
UCLA Dean's Marshall Award, Division of Life Sciences, 1998.  
Alexander von Humboldt Research Award for Senior U.S. Scientist, 2003.  
Distinguished Alumnus Special Talk, Boston University, Department of Biology, 2005  
UCLA Neuroscience Undergraduate Society 2005 "Most Concerned" Professor Award  
Kenneth Roeder Distinguished Lecture, Tufts University, 2009  
Elsevier Keynote address, Society for Behavioral Neuroendocrinology Annual meeting, 2017  
Elected President, Society for Behavioral Neuroendocrinology, 2017

### POSITIONS HELD

Research Assistant, Manomet Bird Observatory, Manomet, MA, 1979-1980.  
Research Assistant/Teaching Fellow, Dept of Biology, Boston University, 1981-1988.  
Visiting Lecturer, Experimental College, Tufts University, 1981.  
Post-Doctoral Research Fellow, Dept of Psychology, UCLA 1988 to 1991.

Assistant Research Psychologist, Dept of Psychology, UCLA; 1991 to 1993.  
Assistant Professor, Dept of Physiological Science, UCLA, 1993 to 1998.  
Visiting Scientist, Smithsonian Tropical Research Institute, Panama City, Panama 1995-2014;  
Associate Professor, Dept of Physiological Science, UCLA, 1998 to 2002.  
Professor, Dept. Physiological Science (now Integrative Biology and Physiology), UCLA, 2002  
Associate Researcher, Max Planck Institute of Ornithology, 2003 to 2008  
Secretary, Society of Behavioral Neuroendocrinology, 2007-2009  
Research Associate, Smithsonian Tropical Research Institute 2014-2020.  
Chair, Department of Integrative Biology and Physiology, UCLA July 2009 to 2018  
Acting Department Chair, Ecology and Evolutionary Biology, UCLA, March -June 2020  
Associate Dean for Academic Personnel, Division of Life Science, UCLA as of October, 2022

## **SERVICE (Selected)**

Chair, Neuroscience Chairs Committee, UCLA 2016-2018.  
Chair, Search Committee for EEB Department Chair, 2016-2017  
Chair, Nominating Committee, Society for Behavioral Neuroendocrinology, 2014/2015  
Chair, Awards Committee, Society for Behavioral Neuroendocrinology, 2009-2011  
Secretary, Society for Behavioral Neuroendocrinology, 2007-2009  
Chair, Organizing Committee, 2007 Annual Meeting, Society for Behavioral Neuroendocrinology  
Chair, Departmental Personnel Committee, 2001-2009  
Vice-Chair, Dept. of Physiological Science, UCLA, 2001 to 2009  
Chair, Integrative Physiologist Search Committee, 2003-2004  
Chair, Program Committee, Society for Behavioral Neuroendocrinology, 2003  
Chair, Life Science Building Renovation Committee, 2002-2003  
Society for Behavioral Neuroendocrinology: Elected to Advisory Board, 2003-2007; Nominating Committee, 2000; Training Grant Committee, 2001; Frank Beach Award Committee, 2002-2004; Program Committee, 2003-2005; Public Education Committee, founding Committee Chair; SBN representative to American Institute of Biological Science, AIBS  
Executive Committee, Department of Physiological Science, 2001-2009  
Curriculum Committee, Undergraduate Neuroscience Interdepartmental Program, 2000-2005  
Executive Committee, Undergraduate Neuroscience Interdepartmental Program, 2000-2003  
Executive Committee, Graduate Physiology Interdepartmental Program, 2001-2002  
UCLA College of Liberal Arts and Sciences Faculty Executive Committee, 2000-2002  
Academic Senate Council on Research, 2000-2001  
ACCESS Graduate Program Recruitment Committee, 1998-2000

## **TEACHING**

Tufts University Experimental College: “Biology of Whales and Dolphins”, 1975 (*taught while still an undergraduate*)  
Tufts University Experimental College: “Biology of Birds”, 1981 (*taught as a post-B.S. visiting lecturer*)  
Boston University Dept of Biology- “Laboratory Teaching Assistant for Animal Behavior”, “Introductory Biology and Histology and Physiology for 6-year Medical Students”.

UCLA Dept. of Physiological Science: PS 111C/111B: “Principles of Physiology: Endocrinology and Reproductive Physiology”  
UCLA Dept. of Physiological Science: PS135/235: “Comparative Endocrinology: Molecular to Behavioral”  
UCLA Graduate Interdepartmental Program in Neuroscience Journal Club: NS211C: “Oral and Written Skills in Neuroscience”.  
UCLA Dept. of Neurobiology and Physiological Science: PS227: “Cellular, Molecular and Functional Aspects of the Reproductive System”.  
UCLA Undergraduate Interdepartmental Program in Neuroscience: NS101C: “Molecules to Mind: Behavioral and Cognitive Neuroscience”  
UCLA Marine Science Program, Marine Biology Field Course (EEB163): ‘Marine Tetrapods: (Birds and Mammals)’.  
UCLA Dept. of Ecology and Evolutionary Biology, EEB200 “Advanced Animal Behavior”.  
UCLA Dept. of Integrative Biology and Physiology, PS127/227: “Neuroendocrinology of Reproduction”  
UCLA Dept. of Integrative Biology and Physiology/Anthropology, “Hormones and Behavior in Humans and other Animals”.  
UCLA Dept. of Integrative Biology and Physiology, PS177 “Neuroethology”  
UCLA Cluster Course “Sex from Biology to Gendered Society”

### **TRAINEES (and current positions in academia)**

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|-----------------------|---|
| Undergraduates        | Scores of undergraduates have performed independent and honors research in my laboratory. Many have won research fellowships and awards. Undergraduates who have authored or co-authored research papers have an <b>asterisk</b> by their name in my list of publications below (currently 26 students on 32 papers). One of these students, Zoe Donaldson, is now Assistant Professor at U. Colorado, Boulder and another Ni Feng is an Assistant Professor at Wesleyan College. |
| Masters Students      | Nathan Lane<br>Reba Bindra<br>Kristen Willameier<br>Rory Spence, now Assistant Professor, Claremont McKenna College<br>Saritha Kosarussavadi<br>Devon Comita<br>Joy Eaton<br>Lara Hovsepian<br>Jeremy Covell<br>Rehan Karmali<br>Jingyan He   |
| Doctoral Students:    | Fred Freking, Assoc. Professor, Rossier School of Education, USC<br>Doug Schultz, U.S. Patent Office<br>Scott Peterson-Manager, Global Medical Affairs at Allergan<br>Sarah London, Assoc. Professor, University of Chicago<br>Anahid Mirzatoni, Pasadena Community College<br>Julia Barske-World Wildlife Fund scientist, Germany  |
| Postdoctoral Fellows: | Dr. Colin Saldanha, now Professor, American University  |

Dr. Leonida Fusani, now Professor, Univ. Of Vienna, Austria; Director of Konrad Lorenz Institute;  
Dr. Kiran Soma, now Professor, Univ. British Columbia  
Dr. Lainy Day, now Assoc. Professor, Univ. Mississippi  
Dr. Luke Remage-Healey, now Professor, U. Massachusetts Amherst;  
Dr. Amnon Katz, now Clinical Trials Manager, Neurim Pharmaceuticals  
Dr. Lucie Salwiczek, now Max Planck Institute for Ornithology  
Dr. Matthew Fuxjager, now Assoc. Professor Brown University  
Dr. Michelle Rensel, now Assist. Adjunct Professor, Institute for Society and Genetics, UCLA  
Dr. Devaleena Pradhan, now Assist. Professor, Idaho State University

## **EDITORIAL SERVICES**

Associate Editor, Hormones and Behavior, 2011-2013  
Editorial Boards: Hormones and Behavior, Frontiers in Neuroendocrine Science  
Guest Editor, Special Issue of *Hormones and Behavior* entitled Behavioral Neuroendocrinology Evolving: Comparative and Field Studies, 2005 (Cover)  
Guest Editor, Special Issue for *Journal of Comparative Physiology A*, 2017 (Cover).  
Senior-Guest Editor, Special Issue of *Hormones and Behavior* Advances in Evolutionary Endocrinology, 2022, In Process

Reviewer for:

*Animal Behavior; Auk; Behavioral Neuroscience; Biological Psychiatry; Biology of Sex Differences; BMC Biology; Brain, Behavior and Evolution; Brain Research; Brain Research Bulletin; Comparative Biochemistry and Physiology; Current Medicinal Chemistry; Developmental Dynamics; Developmental Neurobiology; Developmental Neuroscience; eLIFE; Endocrinology; Epilepsia; European J. Neuroscience; Frontiers in Neuroendocrinology; Frontiers in Neuroendocrine Science General and Comparative Endocrinology; Hormones and Behavior; Integrative and Comparative Biology; Journal of Applied Physiology; Journal of Comparative Neurology; Journal of Comparative Physiology. A; Journal of Comparative Psychology; Journal of Experimental Biology; Journal of Experimental Zoology; Journal of Neurobiology; Journal of Neurochemistry, Journal of Neuroendocrinology; Journal of Neuroscience; Journal of Ornithology; Journal of Endocrinology; Neurochemistry International; Neuroendocrinology; Neuroscience Research, Proceedings of the National Academy of Science, USA; Proceedings of the Royal Society of London, B.; Progress in Brain Research; Psychoneuroendocrinology;*

## **RESEARCH SUPPORT**

I maintained ~30 years of near continuous (& concurrent) research support as P.I. primarily from NSF and NIH. My current significant support is as follows:

NSF- RCN (Research Coordination Network): Enabling comparative studies of the process and products of sexual selection in a genomic context; 60 months and a total of \$499,901 (Co-PI).

Smithsonian Institute Bond Fund, Co-PI: "Islands as engine of changes". \$74,648

## PUBLICATIONS (\*-denotes an undergraduate co-author)

1. Wasserman, F.E., C. Dowd, B. Schlinger, D. Byman, S.P. Battista, and T.H. Kunz. 1984. Aversion/attraction of birds exposed to microwave irradiation. *Physiology and Behavior* 33:805-807.
2. Wasserman, F.E., C. Dowd, B. Schlinger, T. Kunz, and S. Battista. 1984. The effects of microwave radiation on avian dominance behavior. *Bioelectromagnetics* 5:331-339.
3. Wasserman, F.E., C. Dowd, D. Byman, B.A. Schlinger, S.P. Battista, and T.H. Kunz. 1985. Thermoregulatory behavior of birds in response to continuous wave 2.45 GHz microwave radiation. *Physiological Zoology* 58:80-90.
4. Byman, D., F.E. Wasserman, B.A. Schlinger, S.P. Battista, and T.H Kunz. 1985. Thermoregulation of budgerigars exposed to microwaves (2.45 GHz, CW) during flight. *Physiological Zoology* 58:91-104.
5. Schlinger, B.A. 1987. Plasma androgens and aggressiveness in captive winter White-throated sparrows (*Zonotrichia albicollis*) *Hormones and Behavior* 21:203-210.
6. Schlinger, B.A. and G.V. Callard. 1987. A comparison of aromatase, 5 $\alpha$ - and 5 $\beta$ -reductase in brain and pituitary of male and female Japanese quail (*Coturnix coturnix japonica*). *J. Exp. Zool.* 242:171-180.
7. Schlinger, B.A., B. Palter\* and G.V. Callard. 1987. A method to quantify aggressiveness in Japanese quail (*Coturnix c. japonica*). *Physiol. Behav.* 40:343-348.
8. Pasmanik, M., B.A. Schlinger and G.V. Callard. 1988. In Vivo steroid regulation of aromatase and 5 $\alpha$ -reductase in Goldfish brain and pituitary. *Gen. Comp. Endocrinol.* 71:175-182.
9. Schlinger, B.A. and G.V. Callard. 1989. Aromatase in quail brain: correlations with aggressiveness. *Endocrinology* 124:437-443.
10. Schlinger, B.A. and G.V. Callard. 1989. Estrogen receptor in quail brain: A functional relationship to aromatase and aggressiveness. *Biol. Reprod.* 40:268-275.
11. Schlinger, B.A. and G.V. Callard. 1989. Localization of aromatase in synaptosomal and microsomal subfractions of quail (*Coturnix coturnix japonica*) brain. *Neuroendocrinology* 49:434-441.
12. Schlinger, B.A., A. Fivizzani, and G.V. Callard. 1989. Aromatase, 5 $\alpha$ - and 5 $\beta$ -reductase in brain, pituitary and skin of the sex-role reversed Wilson's phalarope. *J. Endocrinol.* 122: 573-581.

13. Schlinger, B.A. 1990. Song as part of high intensity aggressive interactions of wintering White-throated Sparrows (*Zonotrichia albicollis*). *Condor.* 92: 527-530.
14. Schlinger, B.A. and G.V. Callard. 1990. Aromatization mediates aggressive behavior in quail. *Gen. Comp. Endocrinol.* 79: 39-53.
15. Schlinger, B.A. and G.H. Adler. 1990. A nonparametric aid in identifying sex of cryptically dimorphic birds. *Wilson Bulletin.* 102: 545-550.
16. Callard, G.V., B.A. Schlinger, and M. Pasmanik. 1990. Nonmammalian vertebrate models in studies of brain-steroid interactions In: Unconventional vertebrate models in endocrine research. Callard, I.P. and G.V. Callard (eds). *J. Exp. Zool. Supplement.* 4:6-16.
17. Callard, G.V., B.A. Schlinger, M. Pasmanik and K. Corina. 1990. Aromatization and estrogen action in brain. *Prog. Clin. Biol. Res.* 342: 105-111.
18. Schlinger, B.A. and G.V. Callard. 1990. Aggressive behavior in birds: A model for steroid hormone action in brain. A Mini-Review *Comp. Biochem. Physiol.* 97A:307-316.
19. Fivizzani, A.J., L.W. Oring, M.E. El-Halawani, and B.A. Schlinger. 1990. Hormonal basis of male parental care and female intrasexual competition in sex-role reversed birds. In *Endocrinology of Birds: Molecular to Behavioral.* Eds. M. Wada, G. Ishii and C. Scanes. Japan Scientific Society Press Tokyo/ Springer-Verlag, Berlin.
20. Schlinger, B.A. and A.P. Arnold. 1991. Brain is the major site of estrogen synthesis in an adult male songbird. *Proc. Nat. Acad. Sci. USA* 88:4191-4194.
21. Schlinger, B.A. and A.P. Arnold. 1991. Androgen effects on sexual differentiation of the Zebra Finch song system. *Brain Res.* 561: 99-105.
22. Schlinger, B.A. and G.V. Callard. Brain-Steroid Interactions and the Control of Aggressive Behavior in Birds. In: *Neuroendocrine Perspectives*, Vol. 9, R.M. MacLeod and E. Muller eds, Springer-Verlag, New York, pp 1-43, 1991.
23. Schlinger, B.A. and A.P. Arnold. 1992. Plasma steroids and tissue aromatization in hatchling Zebra Finches: Implications for the sexual differentiation of singing behavior. *Endocrinology.* 130: 289-299.
24. Schlinger, B.A., R.H. Slotow and A.P. Arnold. 1992. Plasma estrogens and brain aromatase in winter white-crowned sparrows. *Ornis Scandinavica* 23: 292-297.
25. Schlinger, B.A. and A.P. Arnold. 1992. Circulating estrogens in a male songbird originate in the brain. *Proc. Nat. Acad. Sci. USA*, 89: 7650-7653.
26. Schlinger, B.A. and A.P. Arnold. 1993. Estrogen synthesis *in vivo* in the adult zebra finch: Additional evidence that circulating estrogens can originate in brain. *Endocrinology.* 133:2610-2616.

27. Arnold, A.P. and B.A. Schlinger. 1993 Sexual differentiation of brain and behavior: the zebra finch is not just a flying rat. *Brain Behav. Evol.* 42:231-241.
28. Arnold, A.P. and B.A. Schlinger. 1993. The puzzle of sexual differentiation of the brain and behavior in the zebra finch. *Poultry Sci Revs.* 5: 3-13.
29. Wade, J., B.A. Schlinger, L. Hodges and A.P. Arnold. 1994. Fadrozole: A potent and specific inhibitor of aromatase in the zebra finch brain. *Gen. Comp. Endocrinol.* 94: 53-61.
30. Shen, P., C.W. Campagnoni, K. Kampf, B.A. Schlinger, A.P. Arnold and A.T. Campagnoni. 1994. Isolation and characterization of a zebra finch aromatase cDNA: *In Situ* hybridization reveals high aromatase expression in brain. *Mol. Brain Res.* 24:227-237.
31. Schlinger, B.A., S. Amur-Umarjee, P. Shen, A.T. Campagnoni and A.P. Arnold. 1994. Neuronal and non-neuronal aromatase in primary cultures of developing zebra finch telencephalon. *J. Neuroscience.* 14:7541-7552.
32. Schlinger, B.A. 1994. Estrogens and song: Products of the songbird brain. *BioScience* 44:605-612.
33. Schlinger, B.A. 1994. Estrogens to song: Picograms to sonograms. *Horm. Behav.* 28: 191-198.
34. Schlinger B.A., S. Amur-Umarjee, A.T. Campagnoni, A.P. Arnold. 1995. 5 $\beta$ -reductase and other androgen metabolizing enzymes in primary cultures of developing zebra finch telencephalon. *J. Neuroendocrinol.* 7: 187-192.
35. Wade, J., B.A. Schlinger and A.P. Arnold. 1995. Aromatase and 5 $\beta$ -reductase activity in cultures of developing zebra finch brain: An Investigation of sex and regional differences. *J. Neurobio.* 27: 240-251.
36. Shen, P., B.A. Schlinger, A.T. Campagnoni and A.P. Arnold. 1995. An atlas of aromatase mRNA expression in the zebra finch brain. *J. Comp. Neurology* 360:172-184.
37. Schlinger, B.A. and A.P. Arnold. 1995. Estrogen synthesis and secretion by the songbird brain. In: *Neurobiological Effects of Sex Steroid Hormones*, eds. P.E. Micevych and R.P. Hammer, Jr., Cambridge University Press, Cambridge.
38. Vanson, A., A.P. Arnold, B.A. Schlinger. 1996. 3 $\beta$ -Hydroxysteroid dehydrogenase/isomerase and Aromatase Activity in Primary Cultures of Developing Zebra Finch Telencephalon: Dehydroepiandrosterone as Substrate for Synthesis of Androstenedione and Estrogens. *Gen. Comp. Endocrinol.* 102: 342-350.
39. Kendrick, A. and B.A. Schlinger. 1996. Independent differentiation of sexual and social traits. *Hormones and Behavior.* 30: 600-610.

40. Schlinger, B.A. 1997. Sex-steroids and their actions on the bird song system. Invited Review. *Journal of Neurobiology*. 35: 619-631.
41. Grisham, W., A. Tam, C.M. Greco\*, B.A. Schlinger and A.P. Arnold. 1997. A putative  $5\alpha$ -Reductase inhibitor demasculinizes portions of the zebra finch song system. *Brain Research*. 750: 122-128.
42. Saldanha, C.J. and B.A. Schlinger. 1997. Estrogen synthesis and secretion in the brown-headed cowbird (*Molothrus ater*). *General and Comparative Endocrinology*. 105:390-401.
43. Schlinger, B.A. 1997. The activity and expression of aromatase in songbirds. *Brain Research Bulletin*. 44: 359-364.
44. Carlisle, H.J., Hales, T. G. and B.A. Schlinger. 1998. Characterization of Neuronal Zebra Finch GABA<sub>A</sub> Receptors. *Journal of Comparative Physiology A*. 182: 531-538.
45. Cam, V. and B.A. Schlinger. 1998. Activities of Aromatase and  $3\beta$ -HSD in Whole Organ Cultures of Developing Zebra Finches. *Hormones and Behavior* 33: 31-39.
46. Anagnostaras, S.G., S. Maren, B.A. Schlinger, J.P. DeCola, N.I. Lane, G.D. Gale and M.S. Fanselow. 1998. Testicular hormones do not regulate sexually-dimorphic pavlovian fear conditioning and perforant-path long-term potentiation in adult male rats. *Behavioral Brain Research*. 92: 1-9.
47. Schlinger, B.A. 1998. Sexual differentiation of avian brain and behavior: Current views on gonadal hormone-dependent and independent mechanisms. Invited Review. *Annual Review of Physiology* 60:407-429.
48. Saldanha, C.J. and Schlinger, B.A. 1998. Estrogen, Effects in Birds. In: *Encyclopedia of Reproduction*, Eds., Knobil, E, Neil, J.D., Academic Press, San Diego, Vol. 2, pp 93-100.
49. Freking, F., C. Ramachandron and B.A. Schlinger. 1998. Regulation of aromatase,  $5\alpha$  - and  $5\beta$ -reductase in primary cell cultures of developing zebra finch telencephalon. *Journal of Neurobiology* 36: 30-40.
50. Saldanha, C.J., P. Popper, P. Micevych and B.A. Schlinger. 1998. The songbird hippocampus is a site of high aromatase: inter- and intra-species comparisons. *Hormones and Behavior*. 34: 85-97.
51. Schlinger, B.A., N.I. Lane, W. Grisham and L.Thompson. 1999. Androgen synthesis in a songbird: A study of Cyp17 (17 $\alpha$ -Hydroxylase/C17-20 Lyase) activity in the Zebra finch. *General and Comparative Endocrinology*, 113: 46-58.
52. Schlinger, B.A., C. Greco\* and A.H. Bass. 1999. Aromatase activity in hindbrain vocal control region: Divergence between “singing” and “sneaking” males. *Proceedings of the Royal Society of London: B*. 266:131-136.

53. Saldanha, C.J., N. S. Clayton and B.A. Schlinger. 1999. Androgen metabolism in the juvenile oscine forebrain: a cross-species analysis at neural sites implicated in memory formation. *Journal of Neurobiology*. 40: 397-406.
54. Schultz, D. and B.A. Schlinger. 1999. Widespread accumulation of  $^3\text{H}$ -testosterone in the spinal cord of a wild bird with an elaborate courtship display. *Proc. Nat. Acad. Sci. USA*. 96: 10432-10436.
55. Gong, A, F.W. Freking, B.A. Schlinger, A.P. Arnold and J. Wingfield. 1999. Pre-hatching inhibition of aromatase activity masculinizes syringeal and gonadal tissue but not the song system in zebra finch females. *Gen. Comp. Endocrinology* 115: 346-353.
56. Soma, K.K., R.K. Bindra, J. Gee, J. Wingfield and B.A. Schlinger. 1999. Androgen metabolizing enzymes show region-specific changes across the breeding season in the brain of a wild breeding song bird. *J. Neurobio*. 41: 176-188.
57. Ramachandran, B, B.A. Schlinger, A.P. Arnold and A.T. Campagnoni. 1999. Zebra finch aromatase gene expression is regulated in the brain through an alternate promotor. *Gene* 240: 209-216.
58. Saldanha, C.J., B. A. Schlinger and N.S. Clayton. 2000. Rapid effects of corticosterone on cache-recovery in Mountain chickadees (*Parus gambeli*). *Hormones and Behavior* 37: 109-115.
59. Saldanha, C.J., M.J. Tuerk\*, Y-H Kim, A.O. Fernandes, A.P. Arnold and B.A. Schlinger. 2000. The distribution and regulation of aromatase expression in the zebra finch revealed with a specific antibody. *Journal of Comparative Neurology* 423: 619-630.
60. Freking, F., T. Nazairians\* and B.A. Schlinger. 2000. The expression of the sex steroid synthesizing enzymes CYP11A1,  $3\beta$ -HSD and CYP17 in the gonads and adrenals of an adult and developing songbird. *Gen. Comp. Endocrinology* 119:140-151.
61. Soma, K.K., C.J. Saldanha, B.A. Schlinger and J. Wingfield. 2000. Acute and chronic effects of an aromatase inhibitor on territorial aggression in breeding and nonbreeding male song sparrows. *Journal of Comparative Physiology A*. 186: 759-769.
62. Saldanha, C.J., J. D. Schultz, S.E. London and B.A. Schlinger. 2000. Telencephalic aromatase, but not a song system, in a sub-oscine passerine, the golden collared manakin (*Manacus vitellinus*). *Brain, Behavior and Evolution* 56: 29-37.
63. Thompson, B.E., F. Freking, V. Pho, B.A. Schlinger and J.A. Cherry. 2000. Cyclic AMP Phosphodiesterase in zebra finch: distribution, cloning and characterization of a PDE4B homolog. *Molecular Brain Research*. 83: 94-106.
64. Peterson, R.S., C.J. Saldanha and B.A. Schlinger. 2001. Rapid upregulation of aromatase mRNA and protein following neural injury in the zebra finch (*Taenopygia guttata*). *J Neuroendocrinology* 13:317-323.

65. Schlinger, B.A., Schultz, J.D. and F. Hertel. 2001. Neuromuscular and endocrine control of an avian courtship behavior. *Hormones and Behavior* 40: 276-280.
66. Schultz, J.D, F. Hertel, M. Bausch\* and B.A. Schlinger. 2001. Adaptations for rapid and forceful contraction in wing muscles of the male Golden-collared manakin: Sex and species comparisons. *J Comp Physiology A*. 187:677-684.
67. Tsutsui, K. and B.A. Schlinger. 2001. Steroidogenesis in the avian brain. In *Avian Endocrinology*, Eds. A. Dawson and C.M. Chaturvedi., pp.59-77. Narosa Publishing, New Delhi, India.
68. Schlinger, B.A., Soma, K., and Saldanha, C. 2001. Perspectives in Ornithology: Advances in avian behavioral endocrinology. *The Auk*. 118:283-289.
69. Schlinger, B.A., K.K. Soma and S. London. 2001. Neurosteroids and brain sexual differentiation. *Trends in Neuroscience*. 24: 429-431.
70. Schlinger, B.A. and E. Brenowitz. 2002. Neural and Hormonal Control of Birdsong. In *Hormones, Brain and Behavior*, D. Pfaff, Ed. Vol. 2, pp 799-839.
71. Trainor, B.C., I.M. Bird, N.A. Alday, B.A. Schlinger and C.A. Marler. 2003. Variation in aromatase activity in the medial preoptic area and plasma progesterone is associated with the onset of paternal behavior. *Neuroendocrinology* 78: 36-44.
72. Soma, K., B.A. Schlinger, J.C. Wingfield and C.J. Saldanha. 2003. Brain aromatase, 5 $\alpha$ - and 5 $\beta$ -reductase change seasonally in wild male song sparrows: relationship to territorial aggression. *J. Neurobio*. 56: 209-221.
73. London, S.E., J. Boulter and B.A. Schlinger. 2003. Cloning of the androgen synthetic enzyme CYP17 in the Zebra Finch: A study of its neural expression throughout development. *J. Comp. Neurol*. 467: 496-508.
74. Saldanha, C.J., Schlinger, B.A. Micevych, P.E. and T.L. Horvath. 2004. Pre-synaptic NMDA-receptor expression is increased by estradiol in an aromatase-rich area of the zebra finch hippocampus. *J. Comp. Neurol*. 469: 522-534.
75. Soma, K.K., N.A. Alday and B. A. Schlinger. 2004. DHEA Metabolism by 3B-HSD in Adult Zebra Finch Brain: Sex Difference and Rapid Effect of Stress. *Endocrinology* 145: 1668-1677.
76. Oberlander, J.G., B.A. Schlinger, N.S. Clayton and C.J. Saldanha. 2004. Neural aromatization accelerates the acquisition of spatial memory via an influence on the songbird hippocampus. *Horm Behav* 45: 250-258.
77. Peterson, R.S., D.W. Lee, G. Fernando, and B.A. Schlinger. 2004 Radial glia express aromatase in the injured zebra finch brain. *J. Comp. Neurol*. 480: 261-269.

78. Soma, K.K., K. Sinchak, A. Lakter, B.A. Schlinger and P.E. Micevych. 2005. Neurosteroids and female reproduction: Estrogen increases  $3\beta$ -HSD mRNA and Activity in rat hypothalamus. *Endocrinology*. 146: 4386-4390.
79. Schlinger, B.A. 2005. Behavioral Neuroendocrinology Evolving: Contributions of Comparative and Field Studies. Introduction to Special Issue. *Hormones and Behavior*, 48: 349-351.
80. Peterson, R.S., Yarram, L., Schlinger, B.A. and C.J. Saldanha. 2005. Aromatase is Presynaptic and Sexually-Dimorphic in the Adult Zebra Finch Brain. *Proc Roy Soc Lond. B.* 272: 2089-2096.
81. Day, L.B., J.T. McBroom and B.A. Schlinger. 2006. Testosterone increases display behaviors but does not stimulate growth of adult plumage in male Golden-collared manakins. *Hormones and Behavior* 49: 223-232.
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174. Rensel, M.A. and B.A. Schlinger. 2020. The stressed brain: regional and stress-related corticosterone and an investigation of central stress-regulated gene expression in the adult zebra finch (*Taeniopygia guttata*). *J. Neuroendocrinol.* 2020;32:e12852.
175. Feng, Stiller, Deng, Armstrong.. (Schlinger) et al. Paten & Zhang (140 authors). 2020. Densely sampling genomes across the diversity of birds increases power of comparative genomics analyses. *Nature* 587:252-257.
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185. Vitousek, M., Dantzer, B., Fuxjager, M. Schlinger, B.A. Evolutionary behavioral nndocrinology. *Horm. Behav.* In Press.

## **Book**

Schlinger, B.A. “The WINGSNAPPERS Lessons from an Exuberant Tropical Bird”, Yale University Press. In Press

## **Submitted Papers**

Putman, B.J., Rensel, M., Schlinger, B.A., French, S., Blumstein, D.T., Pauly, G.B. Does Fear Filter Lizards from Urban Areas? Contrasting Responses to Human Disturbance in Two Lizard Species.

### **Additional Publications (+lab)**

Schlänger, B.A. 1985. Ecological Sampling in *Principles of Biology 1: Laboratory Manual*. ed. E.A. Godrick. Ginn Press, Lexington.

Schlänger, B.A., F. Wasserman and J. Traniello. 1985. Communication by Visual Signals in *Principles of Biology 1: Laboratory Manual*. ed. E.A. Godrick. Ginn Press, Lexington.

Feng, N\*. 2008. Muscles are targets of androgen action in a tropical bird with an elaborate courtship display. *UCLA Undergraduate Science Journal* 21: 63-69.

Schlänger, B.A. and L. Remage-Healey. 2009 Scientific scholarship requires a vertebrate-wide perspective. Comment on: Wu et al., 2009 "Estrogen masculinizes neural pathways and sex specific behaviors." *Cell – Comments*

Zhang, G., Li, B., Li, C., Gilbert, M.T.P., Schlänger, B., Jarvis, E.D., & Wang, J. (2014). The Avian Genome Consortium- Genomic data of the Golden-collared Manakin (*Manacus vitellinus*). *GigaScience Database*. <http://dx.doi.org/10.5524/101010>.

Micevych. P.E., Arnold, A.P., Schlänger, B.A. 2022. In Memoriam, Roger A. Gorski (1935–2021). *Front. Neuroendo*. 64: 64: 100969.

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### **RECENT INVITED TALKS**

- Department of Cell and Structural Biology, University of Illinois, Urbana-Champaign, 2004
- Max-Planck-Institut für Verhaltensphysiologie, Seewiesen, Germany, 2004
- Department of Biology, Princeton University, 2004
- Department of Biology, Brown University, 2004
- Department of Biology, Boston University, 100<sup>th</sup> Anniversary Distinguished Alumnus Speaker, 2005
- Department of Biology, University of Wyoming, 2005
- Physiology group, University of Wyoming, 2005
- Symposium entitled "Biosynthesis and Function of Neurosteroids in Vertebrate Brains" XVth International Congress on Comparative Endocrinology, May, 2005
- Neuroscience program, Texas A&M University, 2005
- Department of Biology, University of Indiana, 2006
- Department of Integrative Biology, University of California, Berkeley, 2006
- Department of Ecology, Evolution and Behavior, UCLA, 2007
- VIIIth Neotropical Ornithological Congress, 2007
- Annual meeting, American Ornithologists Union, 2007
- Department of Biology, University of Washington, 2008
- Department of Biology, Tufts University, 2009
- Cedars-Sinai Endocrine Research Group, 2010
- Lehigh University, Department of Biology, 2010
- International Ornithological Congress, 2010

- UCLA Learning and Memory Journal Club, 2010
- Keynote Address, International Meeting Steroids and Nervous System, Torino, Italy, 2011
- Michigan State University, 2011
- Symposium entitled: “Non-genomic Central Actions of Estrogens” Endocrine Society meeting, June, 2012
- International Symposium on Avian Endocrinology, Gifu, Japan, June 2012
- Northwestern University, November, 2012
- UC Davis Feb, 2013
- Max Planck Institute for Ornithology, July, 2013
- State-of-the-art lecture; International Congress on Comparative Endocrinology, Barcelona, Spain, July, 2013.
- U. Mass Amherst, Oct. 2013
- Invited Speaker, Smithsonian Tropical Research Institute, February, 2014
- Invited speaker Winter Conference on Neural Plasticity, February, 2014
- Neuroendocrinology Symposium, UCLA, May, 2014
- Invited Plenary talk, 8<sup>th</sup> International Conference on Hormones, Brain and Behavior, Liege Belgium, 2014.
- International Ornithological Congress, Tokyo, Japan, August, 2014
- Indiana University, May, 2015
- Smithsonian Natural History Museum, Washington, D.C., Aug. 2015.
- UC Riverside, May 2016
- UCLA Behavior, Evolution, and Culture, Nov, 2016
- Aromatase XIII international symposium, San Antonio, Dec, 2016
- Elsevier Keynote address, Society for Behavioral Neuroendocrinology Annual meeting, 2017
- Konrad Lorenz Institute of Ethology, Vienna, Austria, 2017
- Smith College, Neuroethology Symposium, 2018
- Presidential Symposium, Animal Behavior Society, 2019 (declined due to an illness).
- Manakin RCN series, Dec. 2020
- Society for Integrative and Comparative Biology Symposium, 1-2021

**MEMBERSHIPS:** AAAS, Society for Behavioral Neuroendocrinology (SBN)