

Curriculum Vitae – Luke Ramage-Healey

Present Address:

Department of Psychological and Brain Sciences,
University of Massachusetts, Amherst MA
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Appointments

Professor 2021- present	University of Massachusetts, Amherst Department of Psychological and Brain Sciences Neuroscience & Behavior Program; Molecular & Cellular Biology Program; Organismic and Evolutionary Biology Program
Associate Professor 2016- 2021	University of Massachusetts, Amherst Department of Psychological and Brain Sciences
Assistant Professor 2010- 2016	University of Massachusetts, Amherst Department of Psychological and Brain Sciences
Postdoctoral Fellow 2006-2010	University of California, Los Angeles Laboratory of Neuroendocrinology, Brain Research Institute Advisor: Dr. Barney Schlinger

Education

Ph.D. 2000-2006	Cornell University, Department of Neurobiology and Behavior, Advisor: Dr. Andrew Bass
B.S. Biology 1996-2000	Tufts University, <i>magna cum laude</i> with Highest Thesis Honors Advisor: Dr. L. Michael Romero

Research Grants

2019-2024	National Institutes of Health (NINDS R01 NS082179), "Rapid Estrogen Signaling in Brain Circuits that Guide Complex Behavior" (\$1,709,423)
2014-2019	National Institutes of Health (NINDS R01 NS082179), "Rapid Estrogen Signaling in Brain Circuits that Guide Complex Behavior" (\$1,737,350)
2014-2019	National Science Foundation (IOS 1354906), "Song Learning and Fluctuating Brain Estrogens" (\$640,000)
2009-2014	National Institutes of Health K99/R00 Pathway to Independence Career Development Award, NINDS (\$927,000)
2004-2006	National Science Foundation Doctoral Dissertation Improvement Grant IBN-0407802 (\$9,690)
2005	Research Grant Award, Cornell University Graduate School (\$2000)
2004	Sigma Xi Research Grant Award, Cornell University (\$1000)
2003	Animal Behavior Society Student Research Grant (\$1000)
2003	Society for Integrative and Comparative Biology Research Grant (\$1000)

Collaborative Grants

Active:

Agnes Lacreuse – University of Massachusetts (Luke Ramage-Healey, Collaborator) “Impact of brain estrogens on cognition and brain aging in a non-human primate” NIH R01 CA246929 TC:\$2,817,055 1/1/2021 – 12/31/2025

Kiran Soma, University of British Columbia (Luke Ramage-Healey, Consultant) “Neurosteroid regulation of executive function” 2/1/2020 - 2/2023

Completed:

Luke Ramage-Healey, David Moorman, Jun Yao “Next-generation mesh electrode arrays for large-scale, minimally-invasive, long-term neuron ensemble recording.” UMass Initiative on Neurosciences; TC: \$30,000 10/1/2019-9/30/2021

Agnes Lacreuse – University of Massachusetts (Luke Ramage-Healey, Collaborator) “Sex differences in cognitive and brain aging” NIH R01 TC:\$1,956,232 9/1/2014 – 5/31/2019

Carolyn Pytte – Queen’s College (Luke Ramage-Healey, Co-PI): “Effects of Statins on Juvenile Learning, Memory and Neuroestrogens.” NIH R15 TC:\$486,532 8/6/2015-7/31/2018

Paul Mermelstein, PI – University of Minnesota (Luke Ramage-Healey, Collaborator) “Estrogen Support of Cerebellar Neurotransmission” NIH R21 (07/2012-06/2014) TC: \$415,248

Fellowships

2007-2010	Ruth L. Kirschstein National Research Service Award Postdoctoral Fellowship, NINDS, National Institutes of Health
2006-2007	UCLA Postdoctoral Research Scholar
2005-2006	NIMH Research Training Fellowship, Cornell University
2002-2005	National Science Foundation Predoctoral Fellowship
2000-2001	Excellence Fellowship For First-Year Study, Cornell University
1998, 1999	Howard Hughes Summer Research Fellowship

Honors and Awards

2023	Fulbright US Scholar Award (for research conducted at Ludwig Maximilian University, Munich, Germany)
2019	Outstanding Research Award, College of Natural Sciences, University of Massachusetts
2015	Early Investigator Award, Endocrine Society
2012	Frank A. Beach Award, Society for Behavioral Neuroendocrinology
2012	Project Leader, Team Mentoring Grant, “Interdisciplinary Neurodegeneration Group” Andrew W. Mellon Foundation, University of Massachusetts
2012	“Top Performer” Alan T. Waterman Prize Competition, National Science Foundation (Non-recipient)

2011 Mutual Mentoring Grant, Andrew W. Mellon Foundation, University of Massachusetts

2010 Top Reviewer of 2009, *Hormones and Behavior*

2009 Chancellor's Postdoctoral Research Award Nomination Finalist, UCLA

2009 Fine Science Tools Postdoctoral Travel Award, Society for Neuroscience 39th Annual Meeting, Brain Research Institute, UCLA

2009 Best Poster Award (Postdoctoral), Society for Behavioral Neuroendocrinology, 13th Annual Meeting, Michigan State University

2007 Theodore H. Bullock Young Investigator's Award, International Society for Neuroethology

2006 Young Investigator's Award, Breckenridge Workshop on Steroid Hormones and Brain Function

2005 Young Investigator's Award, Society for Behavioral Neuroendocrinology

2005 Outstanding Graduate Teaching Assistant Award 2004-2005, Neurobiology and Behavior, Cornell University

2002 Society for Behavioral Neuroendocrinology, Student Travel Award

2001 Society for Integrative and Comparative Biology, Student Travel Award

2001/2/3/4 Conference Travel Award, Cornell University

2001 National Science Foundation Predoctoral Fellowship, Honorable Mention

2001 Howard Hughes Medical Institute Predoctoral Fellowship, Hon. Mention

2000 Sigma Xi Honor Society, Associate Membership

1999 Paula Frazier Poskitt Scholarship in Biology, Tufts University

Professional Service

2024- Reviewing Editor, *eNeuro*, Society for Neuroscience

2023 Panelist, BRAIN Initiative: Brain-Behavior Quantification and Synchronization – Transformative and Integrative Models of Behavior at the Organismal Level, US National Institutes of Health

2023 Panelist, 2023 Allen Distinguished Investigator Awards, Paul Allen Frontiers Group

2023 NINDS R13 review (ZNS1 SRB K39 meeting), US National Institutes of Health

2022 Panelist, NIH Behavioral Neuroscience F31/F32 Panel, ZRG1 F02A-K (20)

2022 External Examiner, Neurobiology Program, McGill University

2021 Panelist, NIH Behavioral Neuroscience F31/F32 Panel, ZRG1 F02A-K (20)

2021 Panelist, NIH BRAIN Initiative Fellows Review Panel: Ruth L. Kirschstein National Research Service Award (NRSA) Individual Postdoctoral Fellowship (F32)

2021-2024 Program Committee, Society for Behavioral Neuroendocrinology

2020 Panelist, NIH Behavioral Neuroscience F31/F32 Panel, ZRG1 F02A-K (20)

2019 Chair, Program Committee, Society for Behavioral Neuroendocrinology, 23rd Annual Meeting, Toronto CA

2019- 2021 Editorial Board, *Scientific Reports*, Nature Publishing Group

2019 Panelist, NIH Behavioral Neuroscience F31/F32 Panel, ZRG1 F02A-K (20)

2019 NSF EDGE panel reviewer (Enabling Discovery through Genomic Tools)

2018 Reviewer, NIH Transformative Research Award, Office of the NIH Director, 2018/05 ZRG1 BCMB-A (51) R

2018 Co-Organizer, Neuroethology Mini-Symposium, Smith College
2017- present Associate Editor, *Hormones and Behavior*
2017, 2018 Panelist, National Institutes of Health, Biobehavioral, Regulation, Learning and Ethology (BRLE) Study Section
2017-2020 Panelist, National Institutes of Health, R13 ZNS1 SRB-K Panel
2017-2018 Guest Editor, *Hormones and Behavior* Special Issue on 'Rapid Effects of Steroids'
2017 Ad Hoc Proposal Referee, Farouk Jabre Biomedical Research Grants, Lebanon
2017-2020 Advisory Committee, Society for Behavioral Neuroendocrinology
2017 Program Committee, Songbird Satellite "Mechanisms of Communication" 7th Annual Conference, Washington DC
2016- present Editorial Board, *Endocrinology*
2015, 2017 Panelist, NNRS (Neuroendocrinology, Neuroimmunology, Rhythms and Sleep) Study Section, Center for Scientific Review, National Institutes of Health
2015-2017 Program Committee, Society for Behavioral Neuroendocrinology
2015- present Editorial Board, *Hormones and Behavior*
2015, 2016, 2018 Ad Hoc Proposal Referee, Deutsche Forschungsgemeinschaft (DFG; German Research Foundation)
2014 Panelist, National Science Foundation, Neural Systems Cluster, Modulation I Panel
2014- present Ad Hoc Grant Referee, National Science Foundation, Behavioral Systems Cluster, Neural Systems Cluster
2014 Participant, NSF Workshop on 'New Frontiers in Integrative Animal Behavior', New York Genome Center, NYC
2014 Ad Hoc Proposal Referee, Research Foundation Flanders (Belgium) - FWO
2014 Chair, Nanosymposium "Neural Processing of Natural Sounds", 44th Annual Meeting of the Society for Neuroscience, Washington DC
2013-2015 Early Career Reviewer Program, National Institutes of Health
2013- present Ad Hoc Grant Referee, Natural Sciences and Engineering Research Council (NSERC) of Canada
2013 Ad Hoc Grant Referee, Medical Research Council (MRC), United Kingdom
2010 - present Ad Hoc Grant Referee, National Science Foundation, Neural Systems Cluster
2007-2009 Website Committee, Society for Behavioral Neuroendocrinology

University Service

2021-2023 Director, Neuroscience and Behavior Graduate Program
2022 Reviewer, University Faculty Research Grant Program
2022 Member, Strategic Task Force for Interdepartmental Graduate Education
2021 College of Natural Sciences Outstanding Achievement Awards Committee
2021 Search Committee, Associate Dean for Graduate, Postdoctoral, and Faculty Development, UMass College of Natural Sciences
2021 Chair, Awards Committee, Department of Psychological and Brain Sciences
2021 – 2024 Program Committee, Society for Behavioral Neuroendocrinology

2020 National Research Mentoring Network Mentor Training, UMass Graduate School

2019-2021 Associate Director, UMass Neuroscience and Behavior Graduate Program

2019 Personnel Committee, Department of Psychological and Brain Sciences, University of Massachusetts, Amherst

2019 CNS Resource Committee, Interdepartmental Graduate Programs

2016- 2019 Executive Committee, Division Head, *Behavioral Neuroscience* Department of Psychological and Brain Sciences, University of Massachusetts, Amherst

2018 - 2019 Chair, Search Committee for Senior Faculty Position in Neuroscience

2018 Neuroscience and Behavior “Food for Thought” workshop for graduate students on the topic Manuscript Writing

2018 ‘Okteacherfest’ Open Classroom Week to allow junior instructors to sit in

2017 - 2019 Steering Committee, UMass NEAGEP Program

2017 Mentor/Committee member, UMass PREP Program

2017- 2019 Chair, Seminar Committee, UMass Neuroscience and Behavior Graduate Program

2017-2018 Admissions Committee, UMass Neuroscience and Behavior Graduate Program

2016 Panel Organizer, 2nd Annual Neuroscience Retreat with UMass Medical School, Shrewsbury, MA

2015- present Director, Center for Neuroendocrine Studies, University of Massachusetts, Amherst

2015- present Member, UMass IALS Light Microscope Facility Oversight Committee

2014- 2016 Member, UMass Neuroscience Strategic Task Force

2013- 2017 Steering Committee, UMass Neuroscience and Behavior Graduate Program

2013-2015 Graduate Operations Committee, UMass Neuroscience and Behavior Graduate Program

2013- 2017 Seminar Committee, UMass Organismic and Evolutionary Biology Graduate Program

2011- 2018 Chair, Organizing Committee, UMass Center for Neuroendocrine Studies Annual Symposium

2004- 2011 Alumni Interviewer, Tufts University

2005 Undergraduate Research and Outreach Program, Cornell University

2004-2006 Seminar Committee, Department of Neurobiology and Behavior, Cornell University

2004 Panel Member, “Future Directions in Neuroethology”, Department of Neurobiology and Behavior, Cornell University

1999-2000 Co-chair, Planning Committee, Tufts Undergraduate Research and Scholarship Symposium

Outreach

2021 Shutesbury Elementary School, “Lives of Scientists” Yearlong Profile Project

2020 ICons podcast guest, “A little about a lot” University of Massachusetts undergraduate-run ICons program

2019 Booth host and presenter, ‘Binary coding and computers’ Amherst Regional Public Schools Science Day

2018 SciTech Café, Union Station Northampton MA “Shining Light On and In the Brain”

2018 In-studio appearance on 93.9 The River (Northampton MA) with hosts Monte Belmonte and Natalia Munoz to discuss research and the latest advances in neuroscience .

2017 Science Exploration Day, Paolo Freire School, Holyoke MA

2017 Summer high school internship lab visit, in collaboration with Dr. Joonkoo Park, UMass Department of Psychological and Brain Sciences

2017 “Studying Bird Brains” interviewee, Annual Society for Neuroscience Meeting

2016 Expert Panelist Interviewer, *Journal of Neurophysiology* Podcast

2016 Science Exploration Day, Paolo Freire School, Holyoke MA

2015 Nerd Nite Noho, Northampton, MA

2014 OEB Science Café, “Bird brains on steroids” Hadley MA

2014 Eureka Neuroscience Module, Girls Inc. of Holyoke

2014- 2016 Outreach Committee, UMass Neuroscience and Behavior Graduate Program

2014 Session Chair, 20th Annual Massachusetts Statewide Undergraduate Research Conference

2014 Interview participant, “Narrative and Imagination in Science” Jacobson Writing Center at Smith College, Pre-college summer course

2012 Panelist and Discussant with the Artist, UMass Center for Contemporary Art, Exhibition: “From Here to Ear” “Artist: Céleste Boursier-Mougenot

Invited Seminars & Symposia

2024 12th Annual Meeting “Steroids and the Nervous System”, Torino, Italy,

2023 Division of Neurobiology, Ludwig Maximilian University, Munich, Germany

2023 Konrad Lorenz Institute of Ethology, University of Veterinary Medicine, Vienna, University of Vienna, Austria

2023 Invited Speaker, “Neuroethology of Timing and Coordination”, Gordon Research Conference on Neuroethology, Mount Snow VT

2023 Keynote Speaker, Society for Behavioral Neuroendocrinology 27th Annual Meeting, Tours France, Professional Development

2023 Molecular, Cellular, and Integrative Neuroscience Program, Colorado State University, Fort Collins CO

2022 Molecular and Integrative Physiology and Neuroscience Program, University of Illinois, Urbana IL

2022 Laboratory of Neuroendocrinology, University of California, Los Angeles

2022 Guest Instructor, Neural Systems and Behavior, Marine Biological Laboratory, Woods Hole MA

2022 Invited Lecturer, Graduate Seminar in ‘Neurobiology of Social Behavior’, Departamento de Neurofisiología Celular y Molecular Instituto de Investigaciones Biológicas Clemente Estable, Montevideo, Uruguay, (delivered over Zoom)

2022 12th International Symposium on Avian Endocrinology, Edinburgh, Scotland

2022 Department of Biological Sciences, Hampton University, Hampton, VA (delivered over Zoom)

2021 Department of Neurosciences, Case Western Reserve University School of Medicine, Cleveland OH

2021 Association for Research in Otolaryngology, 44th Annual Meeting, Virtual Conference, Symposium Speaker “Non-sensory influences on auditory learning and plasticity”

2021 Society for Integrative and Comparative Biology, Washington DC, Symposium Speaker “Sending and Receiving Signals: Endocrine Modulation of Social Communication”

2021 24th Annual Meeting of the Society for Behavioral Neuroendocrinology Symposium on “New Understanding of Neural and Behavioral Regulation by GPER-1” Atlanta, GA

2021 Neuroscience Seminar Series, Worcester Polytechnic Institute, Worcester, MA

2021 CUNY Neuroscience Collaborative Graduate Program Seminar, New York, NY

2020 SfN Virtual Songbird Satellite Symposium, “Auditory Perception”

2020 24th Annual Meeting of the Society for Behavioral Neuroendocrinology Symposium on “New Understanding of Neural and Behavioral Regulation by GPER-1” Atlanta, GA [rescheduled to 2021 due to COVID 19]

2020 Graduate Program in Neuroscience T32 Invited Speaker, Emory University, Atlanta GA [rescheduled to 2021 due to COVID 19]

2020 2020 FASEB Summer Research Conference Speaker “Rapid Signaling and Genomic Steroid Hormone Actions in Health and Disease”, West Palm Beach, FL [rescheduled to 2021 due to COVID 19]

2020 Grass Foundation Neuroscience Fellows Summer Seminar Series, Woods Hole, MA

2020 Guest Instructor, Neural Systems and Behavior, Marine Biological Laboratory, Woods Hole MA [rescheduled to 2022 due to COVID 19]

2020 Mount Holyoke College Neuroscience Seminar, South Hadley, MA

2019 Florida Atlantic University Neuroscience Seminar Series, Scripps Research Institute Florida, Max Planck Florida Institute for Neuroscience, Boca Raton, FL

2019 10th Annual Meeting “Steroids and the Nervous System”, Chair of Symposium: “Molecular tools unleashed for the study of neuroactive steroid synthesis and action” Torino, Italy,

2019 5th Biennial Conference for the North American Society of Comparative Endocrinology, University of Florida, Gainesville, FL

2019 Department of Biological Sciences, North Carolina State University, Raleigh, North Carolina

2018 External Invited Speaker, Neurobiology and Behaviour Annual Retreat, McGill University, Montreal, PQ

2018 Department of Biology, Wesleyan University, Middletown CT

2017 11th Annual Meeting of the Organization for the Study of Sex Differences, Montreal, PQ

2017 39th Annual Winter Animal Behavior Conference, Steamboat Springs, CO

2017 Hofstra University, Department of Biology, Hempstead NY

2016 25th Annual Meeting, International Behavioral Neuroscience Society, Budapest, Hungary

2016 17th International Congress of Endocrinology, Beijing, China (declined)

2016 46th Annual Meeting, Society for Neuroscience, Minisymposium “Actions of Steroids: New Neurotransmitters.” San Diego, CA

2016 Avian Endocrinology Meeting, Niagra Falls, Canada

2016 Department of Biology, Stonehill College, Easton MA

2015 9th World Congress, International Brain Research Organization, Rio de Janeiro, Brazil

2015 Indiana University, Joint Seminar Neuroscience Program & Evolution, Ecology and Behavior Program, Bloomington, IN

2015 Society for Integrative and Comparative Biology Annual Meeting Symposium, West Palm Beach, FL

2015 Department of Neurobiology and Animal Physiology, University of Cologne, Germany

2015 Institute for Neuroanatomy, Hamburg-Eppendorf University, Hamburg, Germany

2015 38th Annual Meeting, Association for Research in Otolaryngology, Baltimore MD

2014 Johns Hopkins University, Department of Psychological and Brain Sciences, Baltimore MD

2014 8th International Conference on Hormones, Brain, and Behavior, Liege Belgium

2014 50th Anniversary Celebration Seminar, Cornell University, Department of Neurobiology and Behavior

2014 Boston University, Department of Biology, Boston, MA

2014 University of Wisconsin, Semester Guest Speaker for the Interdisciplinary Neuroscience Training Program, Madison, WI

2014 Grass Foundation Neuroscience Fellows Summer Seminar Series, Woods Hole, MA

2014 Bay Path College, Department of Biology, Springfield MA

2013 Symposium on Mechanisms of Communication: Critical Periods and Social Learning, Scripps Seaside Forum, La Jolla CA

2013 Society for Neuroscience Minisymposium "Rethinking Estrogen Actions in the Brain" 43rd Annual Meeting, San Diego CA

2013 7th Annual Meeting "Steroids and the Nervous System", Torino, Italy

2013 Wellesley College, Department of Neuroscience, Wellesley, MA

2012 Cornell University, Department of Neurobiology and Behavior, Ithaca, NY

2012 Tufts University, Department of Biology, Medford, MA

2012 Smith College, Department of Biological Sciences, Northampton, MA

2011 Bowdoin College, Department of Psychology, Brunswick, ME

2010 Columbia University, 'Neurolunch' Series, Dept of Biological Sciences, New York, NY

2010 Symposium on "Estradiol – A new role in auditory processing", 14th Annual Meeting of the Society for Behavioral Neuroendocrinology, Toronto, Canada

2009 Symposium on "Control of estrogen production in the brain", 11th International Neuroscience Winter Conference, Soelden, Austria

2009 Workshop on "Social modulation of hormones, brain and behavior" Champalimaud Foundation, Lisbon, Portugal

2009 Symposium on "Structure of memory", Ruhr University, Bochum, Germany

2009 University of Massachusetts, Amherst, Dept of Psychology, Amherst, MA

2009 McGill University, Dept of Biology, Montreal, PQ, Canada

2009 University of Washington, Seattle, Dept of Biology, Seattle, WA

2009 Retreat Symposium, Department of Physiological Science, UCLA, Los Angeles, CA

2008 Symposium on "Fast actions of glucocorticoids", Workshop on Steroid Hormones and Brain Function, Key Largo, FL

- 2008 Symposium on “Blazing the trail in integrative avian biology.” American Ornithologist’s Union, 126th Annual Meeting, Portland, OR
- 2007 University of California at San Diego, Dept of Psychology, San Diego, CA
- 2007 California State University, Fresno, Dept of Biology, Fresno, CA
- 2007 Santa Barbara City College, Dept of Biology, Santa Barbara, CA
- 2006 Young Investigator’s Symposium, Workshop on Steroid Hormones and Brain Function, Breckenridge, CO
- 2005 Laboratory of Neuroendocrinology Group Seminar, UCLA, Los Angeles, CA
- 2005 29th Annual Ecology and Evolutionary Biology Symposium, Cornell University, Ithaca, NY
- 2003 Florida State University Marine Laboratory, St Teresa, FL
- 1999 Howard Hughes Summer Research Symposium, Tufts University, Medford, MA

Societies

Society for Behavioral Neuroendocrinology; Society for Neuroscience; International Society for Neuroethology; American Association for the Advancement of Science

PUBLICATIONS

67. Spool, J.A., Lally, A., and **Remage-Healey, L.** (2023) Top-down, auditory pallial regulation of the social behavior network. *In submission. bioRxiv: 2023 Mar 9:2023.03.08.531754. doi: 10.1101/2023.03.08.531754.*
66. Winsor, A.M., **Remage-Healey, L.**, and Jakob, E. M. (2023) Visual attention and processing in jumping spiders. *In submission. Trends in Neurosciences*
65. Pollak, D.J., Vahaba, D.M., Macedo-Lima, M., Elgart, S., and **Remage-Healey, L.** (2023) Social context modulates processing of autogenous and exogenous song in auditory forebrain neurons of male zebra finches. *In submission*
64. Spool, J.A., Bergan, J.F., and **Remage-Healey, L.** (2022) A neural circuit perspective on brain aromatase. *Frontiers in Neuroendocrinology* Apr;65:100973. doi: 10.1016/j.yfrne.2021.100973
63. Jingyan He, Ting Fu, Ling Zhang, Lucy Wannong Gao, Michelle Rensel, **Luke Remage-Healey**, Stephanie A. White, Gregory Gedman, Julian Whitelegge, Xinshu Xiao, Barney Schlinger (2022) Improved zebra finch brain transcriptome identifies novel proteins with sex differences *Gene* Nov 15;843:146803
62. Scarpa, G.B., Starrett, J.R., Li, G.L., Brooks, C.T., Morohashi, Y., Yazaki-Sugiyama, Y. and **Remage-Healey, L.** (2022) Estrogens rapidly shape synaptic and intrinsic properties to regulate the temporal precision of songbird auditory neurons. *Cerebral Cortex* Mar 21;33(7):3401-3420.
61. Caras, M.L., Happel M.F.K., Chandrasekaran, B., Ripollés, P., Keesom, S.M., Hurley, L.M., **Remage-Healey, L.**, Holt, L.L., Wright, B.A. (2022) Non-sensory influences on auditory learning and plasticity. *Journal of the Association for Research in Otolaryngology* Apr;23(2):151-166

60. de Bournonville, C., Mendoza, K.R., and **Remage-Healey, L.** (2021) Aromatase and non-aromatase neurons in the zebra finch auditory forebrain are indistinct in their song evoked responses and intrinsic electrophysiological properties. *European Journal of Neuroscience* Nov;54(9):7072-7091
59. Macedo-Lima, M.M., Boyd, H.M., and **Remage-Healey, L.** (2021) Dopamine D1 receptor activation drives plasticity in the songbird auditory pallium. *Journal of Neuroscience* Jun 1;41(28):6050-69
58. Spool, J.A., Macedo-Lima, M.M., Scarpa, G.B., Morohashi, Y., Yazaki-Sugiyama, Y., **Remage-Healey, L.** (2021) Core mammalian-typical features in avian association pallium. *Current Biology* Jul 12;31(13):2831-2843
57. Schlinger, B.A., **Remage-Healey, L.**, and Saldanha, C.J. (2022). The form, function, and evolutionary significance of neural aromatization. *Frontiers in Neuroendocrinology* Jan;64:100967. doi: 10.1016/j.yfrne.2021.100967.
56. Macedo-Lima, M., and **Remage-Healey, L.** (2021) Dopamine modulation of motor and sensory cortical plasticity among vertebrates. *Integrative and Comparative Biology* Jul 23;61(1):316-336
55. Schroeder, K.M. and **Remage-Healey, L.** (2021) Adult-like neural representation of species-specific songs in the auditory forebrain of zebra finch nestlings. *Developmental Neurobiology* Mar;81(2):123-138
54. de Bournonville, C., McGrath, A., and **Remage-Healey, L.** (2020) Testosterone synthesis in the female songbird brain. *Hormones and Behavior* 121:104716
53. Vahaba, D.V., Hecsh, A. and **Remage-Healey, L.** (2020) Blocking neuroestrogen synthesis modifies neural representations of learned song without altering vocal imitation accuracy in developing songbirds. *Scientific Reports* Feb 27;10(1):3602.
52. Macedo-Lima, M., and **Remage-Healey, L.** (2020) Auditory learning in an operant task with social reinforcement is dependent on neuro-oestrogen synthesis in the male songbird auditory cortex. *Hormones and Behavior* 121:104713
51. Caballero, J.P., Scarpa, G.B., **Remage-Healey, L.** and Moorman, D.E. (2020) Differential effects of dorsal and ventral medial prefrontal cortex inactivation during natural reward seeking, extinction, and reinstatement. *eNeuro* Sep 25;6(5). pii: ENEURO.0296-19.
50. Krentzel, A.A., Ikeda, M.Z., Oliver, T.J.*, Korovesi, E.*, and **Remage-Healey, L.** (2019) Acute neuroestrogen production is necessary for song-induced immediate early gene expression in male and female zebra finches. *Journal of Comparative Physiology A*. 206:15-31
49. Gervais, N.J., **Remage-Healey, L.**, Starrett, J.R.*, Pollak, D.J.*, Mong, J.A., and Lacreuse, A. (2019) Aromatase inhibition compromises thermoregulation, memory and CA1 intrinsic excitability in monkeys. *Journal of Neuroscience*. Jan 30;39(5):918-928.

48. Krentzel, A.A., Macedo-Lima, M., Ikeda, M.Z. and **Remage-Healey, L.** (2018) A membrane g-protein coupled estrogen receptor is necessary but not sufficient for sex-differences in songbird auditory encoding. *Endocrinology* 159(3) 1360-1376
47. Lee, V.S. *, Pawlisch B.A., Macedo-Lima, M., and **Remage-Healey, L.** (2018) Norepinephrine enhances the responses and coding of song in the auditory forebrain of male zebra finches. *Journal of Neurophysiology*. Jan 1;119(1):209-220.
46. Hedges, V.L., Chen, G., Yu, L., Krentzel, A.A., Starrett, J.R. *, Zhu, JN., Suntharalingam, P., **Remage-Healey, L.**, Wang, J.J., Ebner, T.J., and Mermelstein, P.G. (2018) Local Estrogen Synthesis is Essential for Parallel Fiber-Purkinje Cell Neurotransmission within the Cerebellar Cortex. *Endocrinology* 159 (3) 1328-1338.
45. Vahaba, D.M. and **Remage-Healey, L.** (2018) Neuroestrogens rapidly shape auditory circuits to support communication learning and perception: Evidence from songbirds. *Hormones and Behavior*. Aug;104:77-87.
44. **Remage-Healey, L.** Choleris, E., and Balthazart, J. (2018) Rapid effects of steroids in the brain: Introduction to special issue. *Hormones and Behavior*. Aug;104:1-3.
43. Balthazart, J., Choleris, E., and **Remage-Healey, L.** (2018) Steroids and the brain: 50 years of research, conceptual shifts and the ascent of non-classical and membrane-initiated actions. *Hormones and Behavior*. 99:1-8
42. Moseley, D.L., Joshi, N.R. *, Prather, J.F., Podos, J., and **Remage-Healey, L.** (2017) A neuronal signature of accurate imitative learning. *Scientific Reports* Dec 11;7(1):17320.
41. Vahaba, D.V., Macedo-Lima, M., and **Remage-Healey, L.** (2017) Sensory coding and sensitivity to local estrogens shift during critical period milestones in the auditory cortex of male songbirds. *eNeuro*. Dec 12;4(6). pii: ENEURO.0317-17.2017.
40. Ikeda, M.Z. ^, Krentzel, A.A., Scarpa, G.B*, Oliver T.J*. and **Remage-Healey, L.** (2017) Clustered organization and region-specific identities of estrogen-producing neurons in the forebrain of zebra finches (*Taeniopygia guttata*). *Journal of Comparative Neurology*. 525(17):3636-3652
39. **Remage-Healey, L.** Krentzel, A.A., Macedo-Lima M., and Vahaba D (2017) Species Diversity Matters in Biological Research. *Policy Insights from the Behavioral and Brain Sciences*. 4 (2), 210-218
38. Tuscher, JJ, Szinte JS, Starrett JR*, Krentzel AA, Fortress AM, **Remage-Healey, L.**, Frick, KM. (2016) Inhibition of local estrogen synthesis in the hippocampus impairs hippocampal memory consolidation in ovariectomized female mice. *Hormones and Behavior* Jul;83:60-7.
37. Rudolph, L. Cornil, C.A., Mittelman-Smith, M., Rainville, J., **Remage-Healey, L.**, Sinchak, K., Micevych, P. (2016) Actions of Steroids: New Neurotransmitters. *Journal of Neuroscience* Nov 9;36(45):11449-11458
36. Brenowitz, E.A. and **Remage-Healey, L.** (2016) It takes a seasoned bird to be a good listener: communication between the sexes. *Current Opinion in Neurobiology* 38:12-7

35. Ikeda M.Z., Jeon S.D.*, Cowell, R.A. **Remage-Healey, L.** (2015) Norepinephrine Modulates Coding of Complex Vocalizations in the Songbird Auditory Cortex Independent of Local Neuroestrogen Synthesis. *Journal of Neuroscience*, Jun 24;35(25):9356-68
34. Pawlisch B.A., and **Remage-Healey, L.** (2015) Neuroestrogen signaling in the songbird auditory cortex propagates into a sensorimotor network via an 'interface' nucleus. *Neuroscience* 284:522-35
33. Chao A.*, Paon, A.P.*, **Remage-Healey, L.** (2015) Dynamic variation in forebrain estradiol levels during song learning. *Developmental Neurobiology* 75(3):271-86
32. Vahaba D.M., and **Remage-Healey, L.** (2015) Brain estrogen production and the encoding of recent experience. *Current Opinion in Behavioral Sciences* 6:148-153
31. Krentzel, A.A., and **Remage-Healey, L.** (2015) Sex differences and rapid estrogen signaling: a look at songbird audition. *Frontiers in Neuroendocrinology*. Jul;38:37-49
30. Ikeda, M., Rensel MA, Schlinger BA, and **Remage-Healey L.** (2014) In vivo detection of fluctuating brain steroid levels. *Cold Spring Harbor Protocols*. (12):1267-72
29. **Remage-Healey, L.** (2014) Frank Beach Award Winner: Steroids as Neuromodulators of Brain Circuits and Behavior. *Hormones and Behavior*. Aug; 66(3):552-560
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