

# DEVALEENA S. PRADHAN

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Google Scholar Index: h-index = 12 (669 citations total)

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## APPOINTMENTS

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2018 – present **Assistant Professor**, Biological Sciences, Idaho State University, Pocatello, ID  
2019 – 2024 **Assistant Editor**, Division of Comparative Physiology and Biochemistry, *Integrative and Comparative Biology*  
2017 – 2018 **Lecturer**, Department of Biology, California State University, Dominguez Hills  
2014 – 2018 **Postdoctoral Scholar**, Department of Integrative Biology and Physiology, University of California, Los Angeles; Advisor: Dr. Barney A. Schlinger

## DEGREES

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2008-2014 **Ph.D., M.S.** (2012) Department of Biology, Georgia State University, Atlanta  
Dissertation: **Role of social and endocrinological context in regulating life history transitions among reproductive phenotypes in the bluebanded goby, *Lythrypnus dalli***  
Advisor: Dr. Matthew S. Grober; Concentration: Neurobiology and Behavior  
2006-2008 **M.S.** (2008) Department of Zoology, University of British Columbia, Vancouver  
Dissertation: **Rapid social regulation of 3 $\beta$ -HSD activity in the song sparrow (*Melospiza melodia*) brain**  
Advisor: Dr. Kiran K. Soma; Concentration: Comparative Physiology  
2000-2004 **B.S.**, Department of Biology University of British Columbia, Vancouver  
Concentration: Animal Biology

## AWARDS AND HONORS

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2015 Dorothy M. Skinner Outstanding Young Investigator Award, Society for Integrative and Comparative Biology (\$500 USD)  
2014 Who's Who Among Students in American Universities & Colleges, Georgia State University  
2012 Graduate Leadership Award, Department of Biology, Georgia State University (\$100 USD)  
2011 Graduate Leadership Award, Department of Biology, Georgia State University (\$100 USD)  
2011 Georgia State University Foundation Scholarship for Academic Achievement (\$100 USD)  
2006 McLean Fraser Memorial Award for Research, University of British Columbia (\$1000 CDN)

## RESEARCH GRANTS AND FELLOWSHIPS

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2021-2022 Internal Seed Grant Program, Office for Research, Idaho State University "Mechanisms Regulating Phenotypic Plasticity in a Highly Social Hermaphroditic Fish" (\$20,000).  
2021 Villanova Match Research Program for First Year Students; Co-PI with Dr. Deeksha Seth, Villanova University (\$1000 USD, Luz Escobar<sup>U</sup>) Design of an experimental platform for image tracking to study fin kinematics related to reproductive behavior in fish  
2020-2021 Undergraduate Research SBOE Grant, Office for Research Outreach and Compliance, ISU (\$9000 USD)  
2020 Undergraduate Research SBOE Grant, Office for Research Outreach and Compliance, ISU (\$1500 USD, Kaysen Christensen<sup>U</sup> and \$1250 USD, Melissa Rivas<sup>U</sup>)  
2019-2021 Idaho NSF EPSCoR GEM3 Seed Funding (\$71,000 USD)  
2019 Undergraduate Research Funds, Biological Sciences ISU (\$1500; Michael Ruvalcaba<sup>U</sup>)  
2018 Undergraduate Research SBOE Grant, Office for Research Outreach and Compliance, ISU (\$2500 USD; Elizabeth Givens<sup>U</sup>)  
2018 College of Science and Engineering Mini Grant, ISU (\$2000)  
2015-2016 Laboratory of Neuroendocrinology of the Brain Research Institute, Postdoctoral Training Grant,

	NICHD – T32 (\$45000 USD)
2014	Neurobiology and Behavior Graduate Fellowship, Georgia State University (\$500 USD)
2013	Georgia State University Dissertation Grant for research (\$1000 USD)
2012	Society for Behavioral Neuroendocrinology, Best Graduate Student Poster Award (\$100 USD)
2012-2014	Doctoral Dissertation Improvement Grant, NSF (\$15000 USD)
2012-2014	Brains & Behavior, Georgia State University (\$44000 USD)
2010	Sigma Xi, Grants-in-Aid of Research (\$400 USD)
2009-2012	NSERC Post Graduate Scholarship (D3; \$63000 CDN)
2009-2012	Brains & Behavior, Georgia State University (\$5500 USD Supplement to NSERC D3)
2008	Center for Neuromics Award for Research, Georgia State University (\$1000 USD)

## TRAVEL AWARDS

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2010, 2012, 2013	Charlotte Mangum Student Support, Society for Integrative and Comparative Biology
2012	Travel Award, Biology Graduate Student Association, Georgia State University (\$500 USD)
2008, 2011	Society for Behavioral Neuroendocrinology Travel Award (\$1000 USD)

## AWARDS AND HONORS TO LAB MEMBERS AT ISU

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2022	Charlotte Mangum Student Support, Society for Integrative and Comparative Biology, A Jirik <sup>UG</sup> , S Barber <sup>UG</sup>
2021	Undergraduate Honors Program Research Funding Award, ISU, A Jirik <sup>UG</sup> \$125
2021	Outstanding Undergraduate Poster Award, SBN, A Jirik <sup>UG</sup> \$100
2021	Biological Sciences Graduate Research Award, ISU, AP Wooding <sup>MS</sup> \$1875
2021	Center for Ecological Research and Education, ISU, AP Wooding <sup>MS</sup> \$1585
2021	IDeA Network of Biomedical Research Excellence (Idaho INBRE), MG Rivas <sup>UG</sup> \$6000
2021	INBRE-4 Graduate Summer Teaching Assistantship, KJ White <sup>MS</sup> \$4000
2021	Kelly Creek Flycaster's Club, AP Wooding <sup>MS</sup> \$1500
2021	Summer Authentic Research Experiences (SARE), G Jeppson <sup>UG</sup> \$4500
2021	Welcome Initiative Award, Society for Behavioral Neuroendocrinology, MG Rivas
2021	Villanova Undergraduate Research Fellowship (VURF), L Escobar <sup>UG</sup> , \$4000
2020	Biological Sciences Research Committee, ISU, JM Starkey <sup>MS</sup> \$2,500
2020	Center for Ecological Research and Education, ISU, JM Starkey <sup>MS</sup> , \$1000
2020	Charlotte Mangum Student Support, Society for Integrative and Comparative Biology, JM Starkey <sup>MS</sup> , KJ White <sup>MS</sup>
2020	Biological Graduate Student Association Travel Grant, ISU, JM Starkey <sup>MS</sup> , KJ White <sup>MS</sup> , \$500 ea

## PROFESSIONAL DEVELOPMENT WORKSHOPS ATTENDED

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2021	Goal Setting Workshop, College of Science and Engineering, ISU, by Northwind Group
2020	Society for Behavioral Neuroendocrinology Workshop on Diversity, Inclusion, and Belonging for Novice & Experienced Mentors
2020	Workshops at Society for Integrative and Comparative Biology 1) Mentorship and Sponsorship: How to Curate Your Support Team and Guide Your Successful Career, with Dr. Laura Mydlarz 2) Can we Talk? Difficult Conversations with Underrepresented People of Color: Sense of Belonging and Obstacles to STEM Fields, with Dr. Kendall Moore
2019	Broader Impacts 101 Workshop with Dr. Jory Weintraub, Advancing Research Impact in Society
2019	Support Your Scholarship: Research and Creative Activity at ISU
2019	Early Career Workshop at Society for Behavioral Neuroendocrinology, topics included 1) Publishing: When Where and How to Publish and Review, Dr. Kim Wallen 2) SBN Science that Impacts Society: Jumping into the Public Conversation with Drs. Nicole Baran, Kristina Smiley, & Tessa Solomon-Lane 3) What's Next? Alternatives to Academic Jobs 4) Primarily Undergrad Institutions: What to Expect & What is Expected with Drs. Laura Been & Kelli Duncan
2019	Moving Towards Active Learning in 1-, 5-, 10, or 20-minutes: Motivations Strategies, and

	Examples, workshop conducted at ISU by Dr. Kimberly Tanner of Science Education Partnership & Assessment Lab, San Francisco State University
2018	Writing Across the Curriculum Early Adopters Workshop Series, CSUDH
2016	UCLA Entering Mentoring Training Program: 10-week workshop for development of mentoring ethos focusing on leadership, mentoring and diversity sensitivity training
2015	Teaching Behavioral Neuroendocrinology, Society for Behavioral Neuroendocrinology
2014	TALX: Teaching and Learning Evolution (with an emphasis on non-majors and introductory majors), Society for Integrative and Comparative Biology
2013	TALX: Teaching and Learning Roundtable: Vision and Change in Introductory Biology, Society for Integrative and Comparative Biology
2013	Graduate Teaching Assistant Pedagogy Conference, Georgia State University
2013	Teaching Behavioral Neuroendocrinology, Society for Behavioral Neuroendocrinology
2009-2012	Instructional Methods Courses, Georgia State University

## POPULAR PRESS COVERAGE

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2021	<a href="#">Desde Abajo: Roots to STEM, SACNAS ISU.</a>
2020	<a href="#">Featured Artist in Art in Bio – the 1<sup>st</sup> in an ICB/IOB Blog series</a> , A blog associated with the Journal Integrative and Comparative Biology.
2019	<a href="#">Interview, Idaho State Journal</a>
2014	<a href="#">Brain steroids make good dads: fish study provides insight; ScienceDaily.</a>
2014	<a href="#">Brain steroids make good dads. EurekAlert! AAAS</a>
2010	Research Highlighted in the article “Rapid Effects of Steroid Hormones on Animal Behavior” <a href="#">Nature Education Knowledge</a>

## CLASSROOM TEACHING

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### Teaching Overview:

- Employ technology, such as online projects and lecture by broadcasting simultaneously to up to 3 sites in classrooms with Distance Learning Technology and Zoom based during Covid-19
- Active learning, flipped classroom teaching, using group-based approaches and discussions
- Using the scientific method and engaging students in active research involving strong conceptual growth, trouble shooting, statistical analyses and communicating; topics in endocrinology, ecology and exercise physiology

<u>Courses taught as Primary Instructor at ISU:</u>	<u>Enrollment</u>	<u>Credits</u>	<u>Semester</u>	<u>Year</u>
BIOL 6692 (Topic: Biological Rhythms)	4	1	Fall	2021
BIOL 4486/5586 Human Systematic Physiology <sup>U/G</sup>	47	5	Fall	2021
BIOL 4491 Senior Seminar <sup>G</sup>	12	1	Spring	2020
BIOL 4486/5586 Human Systematic Physiology <sup>U/G</sup>	48	5	Fall	2020
BIOL 4491 Senior Seminar <sup>G</sup>	9	1	Fall	2020
BIOL 4443/5543 Endocrinology <sup>U/G</sup>	17	3	Spring	2020
BIOL 4482 Independent Problems <sup>U</sup>	1	3	Spring	2020
BIOL 4486/5586 Human Systematic Physiology <sup>U/G</sup>	47	5	Fall	2019
BIOL 4486L/5586L Human Systematic Physiology <sup>U/G</sup>	24	0	Fall	2019
BIOL 3301 Anatomy and Physiology <sup>U</sup>	141	5	Spring	2019
BIOL 4482 Independent Problems <sup>U</sup>	2	6	Spring	2020
BIOL 4486/5586 Human Systematic Physiology <sup>U/G</sup>	47	5	Fall	2018
BIOL 4486L/5586L Human Systematic Physiology <sup>U/G</sup>	23	0	Fall	2018

### Courses taught as Primary Instructor at CSUDH:

BIOL 501 Biological Literature <sup>G</sup>	4	12	Spring	2018
BIOL 332 Ecology	23	69	Spring	2018

BIOL 312 Animal Physiology	27	81	Fall	2017
BIOL 313 Animal Physiology Laboratory	24	72	Fall	2017

### Guest Lectures

Fall 2020	<b>Guest Lecturer</b> , Behavioral Endocrinology, Zoology Ohio Wesleyan University Topic: Endocrinology Techniques <sup>U</sup>
Spring 2020, 2021	<b>Guest Lecturer</b> , Evolution, Idaho State University, Topic: Sexual Selection and Evolution of Hermaphroditism <sup>U</sup>
Spring 2015, Fall 2015, Fall 2016	<b>Invited Lecturer</b> , Institute for Society and Genetics/ Integrative Biology and Physiology <sup>U</sup> , Hormones and Behavior in Humans & Other Animals University of California, Los Angeles Topic: Introduction to Fish Endocrinology and Evolution of Sex change
Winter 2016	<b>Invited Lecturer</b> , Recreation Center, University of California, Los Angeles Fitness Leadership Program: Human Physiology
Spring 2014	<b>Invited Lecturer</b> , Dept. of Biology, Agnes Scott College (upper level animal behavior) Topic: Hormonal regulation of parenting behavior
Fall 2013	<b>Invited Lecturer</b> , Georgia State University Biology 4241/Biology 6241 Hormones and Behavior <sup>U/G</sup> Topics: 1) Introduction to Hormones and 2) Aggression
Spring 2010	<b>Invited Lecturer</b> , Georgia State University Biology 2108 Introductory Biology for Majors <sup>U</sup> Topic: Co-evolution of Plants and Animals

### Teaching Assistantships

Spring 2012, 2013 2014	<b>Teaching Assistant</b> , Dept. of Biology, Georgia State University Biology 3440/7440 Fundamentals of Evolution <sup>U</sup> <ul style="list-style-type: none"> <li>Graded exams and assist instructor in preparing test questions</li> </ul>
Fall 2011, 2012, 2013	<b>Teaching Assistant</b> , Georgia State University Biology 4241/Biology 6241 Hormones and Behavior <sup>U/G</sup> <ul style="list-style-type: none"> <li>Graded exams and assist instructor in preparing test questions</li> </ul>
Fall 2012	<b>Teaching Assistant</b> , Georgia State University Biology 2108 Lab Introductory Biology for Majors, Honors students <sup>U</sup> <ul style="list-style-type: none"> <li>Developed course with focus on scientific methods</li> <li>Supervised students to build a forest ecosystem in class and conduct independent experiments</li> <li>Focused on data interpretation, protocol development, preparing graphs, proposing and presenting experiments (written and oral), and writing manuscripts</li> </ul>
2009-2012	<b>Teaching Assistant</b> , Georgia State University Biology 2108 Lab Introductory Biology for Majors <sup>U</sup> <ul style="list-style-type: none"> <li>Presented lab introduction, demonstrate lab procedures, and lead discussions</li> <li>Emphasized critical thinking and scientific methodology in experiment design and writing</li> <li>Designed and graded tests, lab reports, exercises, and evaluate student presentations</li> <li>Assisted in re-writing lab manual and implement new activities</li> </ul>
Spring 2011	<b>Teaching Assistant</b> , Georgia State University HON 3260 How We Think: Confluence of Technology, Philosophy, and Pedagogy <sup>U</sup> <ul style="list-style-type: none"> <li>Encouraged student discussions on the process of thinking on a variety of topics with combination of web-based and in-class discussions</li> <li>Evaluated assignments and student discussions</li> </ul>

Summer 2010 **Lecturer**, BRAIN Program<sup>U</sup>, Atlanta, GA  
Topics: 1) Neurons and Neurotransmitters, 2) Sensorimotor Systems, and 3) Hormones and Behavior

2006-2008 **Teaching Assistant**, University of British Columbia  
Biology 364: 3<sup>rd</sup> year undergraduate comparative physiology lab<sup>U</sup>

- Assisted lecturer with pre-lab presentation and demonstrate use of lab equipment
- Stimulate and encourage scientific discussion and critical thinking, with emphasis on experiment design
- Evaluated students' participation during lab and grade lab reports

## **STUDENTS MENTORED**

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Fall 2018-Present Current Graduate Students: Katrina White (MS student, ISU); Jeremy Starkey (MS student, ISU); Alexander Wooding (MS student, ISU), Kristina Wade (Ph.D. student, ISU)

Additional Graduate Students mentored: Avery McFarland (MS student, ISU); Ben Kline (MS student, ISU)

Undergraduate students mentored through Career Path Internship Program: Ian Curnutt (Fall 2020-Present, CPI) Tessa Williams (Summer 2019-Spring 2020, CPI, IP), Sanjay Sah (Fall 2019, CPI), Reecha Sapkota (Fall 2019-Fall 2020), Sabrina Wallace (Fall 2019-Spring 2020), Michael Ruvalcaba (Fall 2018-Spring 2019), Elizabeth Givens (Fall 2018-Summer 2019)

Undergraduate students supported through Research Outreach and Compliance (SBOE), ISU: Elizabeth Givens (Spring 2019), Kaysen Christensen (Spring 202, CPI, Senior Thesis), Melissa Rivas (Spring 2020, Fall 2020-Spring 2021), Shanna Vineyard (Fall 2020-Spring 2021), Anna Jirik (Spring 2021)

Undergraduate Senior Thesis: Reecha Sapkota (ISU, Fall 2020)

INBRE intern: Daniel Youngerman (BYU\_I, Fall 2020) Melissa Rivas (ISU, Summer 2021)

Undergraduate students mentored through Independent Problems: Tessa Williams (Spring 2020), Melissa Rivas (Fall 2020), Kaysen Christensen (Fall 2020-Spring 2021), Gabriel Jeppson (Spring 2021)

Summer Research Interns through USC Wrigley Institute's Coastal Ocean Processes Program: Alexandra Stella (Zinsmeyer Research Intern, USC; Summer 2019), Kyle Donnelly (REU, Texas A&M Galvestone; Summer 2019)

2014-2018 Megan Massa (PhD student, UCLA); Jeremy Covell (MS student, UCLA), Lara Ruby-Hovespian (MS student, UCLA), Rehan Karmali (MS student, UCLA), Devon Comito (MS student, UCLA), Joy Eaton (MS student, UCLA), \*Callan Porter-Romero (Undergrad, UCLA), Danny Ma (Undergrad, UCLA), \*Katherine Zhou (Undergrad, UCLA), Jessica Ding (Undergrad, UCLA), Raymond Van Ness (Undergrad, UCLA); Emily Miao (Undergrad, UCLA); Rice Zhang (Undergrad, UCLA); William Chen (High School), Mohak Kumar (Undergrad, UCLA); Fiona Roediger (Undergrad, UCLA); Laura Roudebush (Undergrad, UCLA)

2008-2014 Eric Schuppe (MS student, GSU), Kevin Thonkulpitak (Undergrad, GSU), Hannah Shin (Undergrad, GSU), Cory Grober (Lake Side High School/Undergrad. GCSU), Kimberly Connor (Undergrad, GSU), Elizabeth Pritchett (Undergrad, GSU), Madelyne Willis (Undergrad, GSU), Pierre Naude (Undergrad, UGA), Jason Crutcher (Undergrad, Rhodes College), Caitlin McCoyd (Undergrad, GSU)

2006-2008 \*Loretta Lau (Undergrad, UBC), Pralle Kriengwatana (Undergrad, UBC), Roveena Sequiera (Undergrad, UBC)

\* Denotes best poster awardees

## **ADDITIONAL GRADUATE COMMITTEES SERVED**

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### MS Thesis Committees

2020-present	Sarah Brockway	MS student	ISU, Biology
2020-present	Alleyna Martes	MS student	ISU, Psychology
2019-present	Alexander Lopez	MS student	ISU, Biology

### Diagnostic Exam Committees

2019	Lauren Faurot	MS student	ISU, Biology
2019	Sawyer Finley	MS student	ISU, Biology
2018	Jeremy Starkey	MS student	ISU, Biology
2018	Alexander Lopez	MS student	ISU, Biology

## **WORK EXPERIENCE**

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- 2005-2006      **Research Assistant**, Department of Psychology, University of British Columbia
- Assisted with field work in capturing songbirds, taking morphological and behavioral measurements and collecting tissue samples
  - Assisted with and perform laboratory experiments
  - Took blood and tissue samples from songbirds in various stages of development
  - Maintained a captive zebra finch population
  - Ordered laboratory equipment
  - Taught laboratory technique to students
  - Developed zebra finch and song sparrow colony protocols and standard operating procedures
- 2004-2005      **Research Assistant**, Centre for Aquaculture and Environmental Research, West Vancouver
- Perform necropsies (salmon and trout) and fertilizations
  - Collect blood and tissue samples for hormonal and genetic testing
  - Stain blood samples and conduct ploidy analysis using flow cytometer
  - Conduct morphological measurements (weight, length)
  - Perform seine netting/dip netting/trapping
  - Develop fish husbandry skills and handle fish in different life stages

## **CERTIFICATIONS**

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2003-Present	First Aid, CPR, AED
2009-2014	Oxygen Provider
2011	American Academy for Underwater Sciences
2009	Open water SCUBA

## **REVIEWER FOR THE FOLLOWING JOURNALS**

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*Hormones and Behavior*, 2020 (2); *Frontiers in Endocrinology*, 2020 (1); *Journal of Neurochemistry*, 2019 (1); *Functional Ecology*, 2019 (1); *Journal of Neuroendocrinology*, 2019 (1); *PLOS Biology*, 2019 (1); *Molecular Ecology*, 2018 (1); *Behavioral Brain Research*, 2018 (1); *Integrative and Comparative Biology*, 2018 (1); *General and Comparative Endocrinology*, 2017, 2018 (2); *Hormones and Behavior*, 2010, 2015, 2018 (3), 2019 (1); *Psychoneuroendocrinology*, 2012 (1); *PeerJ*, 2015 (1); *Animal Behavior*, 2014 (1); *Environmental Biology of Fishes*, 2014 (1)

## SERVICE

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2021	<b>Panelist, Mentoring Across the Academic Spectrum: Analyzing Success &amp; Failure,</b> Idaho Conference on Undergraduate Research
2021	<b>Cluster Hire Committee,</b> ISU
2020-present	<b>Community Education Website: Concept, Content and Creative Founder,</b> Biological Sciences ISU
2019-present	<b>IACUC Consultant,</b> ISU
2018-present	<b>Academic Advisor,</b> Biomedical Sciences Major (26 undergraduates), ISU
2018, 2019	<b>Assistant Professor TT Job Search Committees (2),</b> Biological Sciences ISU
2018-present	<b>Undergraduate Committee,</b> Chair since 2021; Biological Sciences ISU Initiated Biology Professional Development Series Spring 2019, 2019-2020 Academic Year <ul style="list-style-type: none"><li>Organized 5 Speed Networking events (in person and virtual), How to write a CV, Self-Assessment and IDP workshop, Alumni Panel, Biology Career Fair</li></ul>
2018	<b>Panelist,</b> Women in STEM Panel, Santa Monica College, Santa Monica
2018	<b>Session Chair,</b> Annual Student Research Day, California State University, Dominguez Hills
2016-2017	<b>Grad Slam,</b> Judge, University of California Los Angeles
2015-2017	<b>Award Committee,</b> Society for Integrative and Comparative Biology
2013-2017	<b>Professional Development Committee,</b> Society for Behavioral Neuroendocrinology
2014	<b>Atlanta Science Festival at GSU,</b> Discovery Day and Fusion Gallery volunteer
2014	<b>Atlanta NETwork Mentor,</b> Center for Behavioral Neuroscience
2013	<b>Local conference organizing committee member,</b> Society for Behavioral Neuroendocrinology
2012-2013	<b>Graduate Council Student Representative,</b> Faculty of Art and Sciences, Georgia State University
2012-2013	<b>Biology Ambassador,</b> Brains & Behavior Program, Georgia State University
2012	<b>Recruitment Panel,</b> BRAIN Program, Center for Behavioral Neuroscience
2012	<b>Student Presentations Judge,</b> Society for Integrative and Comparative Biology, Division of Neurobiology, Charleston, South Carolina
2011	<b>Student Panel,</b> Graduate Student Funding, Brains & Behavior Program, Georgia State University
2011-2012	<b>President,</b> Biology Graduate Student Association, Georgia State University <ul style="list-style-type: none"><li>Organized several new student activities such as Student Retreat, Graduate Student Seminar Series</li></ul>
2009-2010	<b>Vice-President,</b> Biology Graduate Student Association, Georgia State University
2010	<b>Poster Judge,</b> Psychology Undergraduate Research Conference, Georgia State University
2008	<b>Poster Judge,</b> Society for Behavioral Neuroendocrinology, Groningen, Netherlands
2003, 2004	<b>Science Fair Judge (high schools),</b> Vancouver, BC

## EDUCATION AND OUTREACH ACTIVITIES

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2020	<b>Bengal Stem Day</b> Build-a-Brain Workshops for 74 Junior High students
2020	<b>Celebrate ISU,</b> Build-a-Brain activity for kids K-12
2019	<b>Self-Assessment and Building Individual Development Plan,</b> 2-Day workshop for BGSA, ISU
2019	<b>Bengal Stem Day</b> Build-a-Brain Workshops for 75 High School students
2019	<b>On the Backs of Giants at Muggle Magic,</b> Herbarium display at Idaho Museum of Natural History, Pocatello
2019	<b>Saturdays at the Lab,</b> Wrigley Institute for Environmental Studies, Catalina Island
2018	<b>Haunted Science Lab</b> Volunteer, Physics Department, ISU
2015-2016	<b>School on Wheels, Los Angeles County Shelter</b> <ul style="list-style-type: none"><li>Provide weekly tutoring for homeless and foster-care children</li><li>Lead workshops on transformational teaching techniques intended to help tutors</li></ul>
2015, 2016	<b>Wrigley Institute for Environmental Studies,</b> Invited Biologist for Mount Madonna School <ul style="list-style-type: none"><li>Lead and conducted an activity-based exercise on "How do fish breathe under water?"</li></ul>

- Introduction to social behavior of bluebanded gobies and workshop on watching and quantifying social behavior with a goal to understand experiment design and data interpretation
- 2014 **Atlanta Science Festival**, Discovery Day, Eureka Screen, Fusion Gallery (Artist Manager)
- 2009-2014 **Out-reach programs**, Center for Behavioral Neuroscience, Atlanta, GA
- Brain Booth**, Science at Hand Day, Fernbank Museum of Natural History, Atlanta
  - Chaperone and Booth Presentations**, Neuroscience Expo, Zoo Atlanta (~ 400 students)
  - BRAIN Program**, Poster Judge
  - Brain Awareness Campaign**, classroom visits teaching students about the brain
  - Atlanta Science Bowl**, reader
- 2009-2013 **Founder and Organizer**, Evolution Journal Club, Georgia State University, Atlanta, GA
- 2010-2012 **Georgia Aquarium**
- Gallery Interpreter**, Ocean Voyager, River Scout
  - Whale shark research**, Behavioral observations and data collection
- 2005-2007 **Events Co-coordinator, Executive Committee**, Ankur Education Foundation, Vancouver, BC
- Plan and co-ordinate fund raising events
  - Design brochures
  - Manage Volunteer Program
- 2002-2005 **Nature House Host, Eco Ranger**, Stanley Park Ecology Society, Vancouver, BC
- Welcome visitors and share information about Stanley Park's history, flora, and fauna
  - Walk on specified trails and interact with visitors to enhance their awareness and experience in the park
  - Conduct waterfowl counts and monitor nest boxes and heron colonies
  - Assist with training new volunteers, planning programs and events
  - Represent the society through educational display tables at community events
  - Create, maintain, and explain educational displays
  - Created a story and board-game called "Adventures of a Great Blue Heron"
- 2002,2003 **Nature House Host**, Greater Vancouver Regional District Parks, Burnaby, BC
- Assisted interpreters on duty: public programs, nature house
  - Cared for captive animals by feeding them and cleaning tanks
  - Participated in arts and crafts activities with children
  - Created a jigsaw puzzle called "Wetland Creatures"

## MEMBERSHIPS

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2006-present	Society for Behavioral Neuroendocrinology
2009-present	Society for Integrative and Comparative Biology
2009-present	Diver's Alert Network
2011-2015	American Academy for Underwater Sciences
2009-2012	Sigma Xi
2013-2015	American Society for Ichthyologists and Herpetologists
2010-2014	Georgia Aquarium
2007	International Congress for Neuroethology
2005-2008	Vancouver Aquarium
2004-2006	Stanley Park Ecology Society

## MANUSCRIPTS IN PREPARATION

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**Pradhan D.S.**, Ding J.A., Roediger F.M., Massa M.G., Schlinger B.A. Rapid modulation of aromatase activity in organotypic cultures of the songbird brain. In preparation for submission to *International Journal of Molecular Biology*

Starkey J.M., White K.J., Sapkota R., and **Pradhan D.S.** Sexually dimorphic dorsal fin morphology and skeletal muscle hormones in bluebanded gobies. In preparation for submission to *Proceedings Biological Sciences*

White K.J., Rivas M.G., and **Pradhan D.S.** Status resolution: behavioral and hormonal differences across two social contexts in Bluebanded gobies. In preparation for submission to *Hormones and Behavior*



## MANUSCRIPTS IN REVIEW

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Munley K.M., Wade K.L., **Pradhan D.S.** Uncovering the seasonal brain: liquid chromatography-tandem mass spectrometry (LC-MS/MS) as a biochemical approach for studying social behavior. *Submitted to Hormones and Behavior*, Oct 15, 2021

## PUBLISHED MANUSCRIPTS

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Kay C., Delehanty D.J., **Pradhan D.S.**, Grinath, J.B. 2021. Climate change and wildfire induced alteration of fight-or-flight behavior. *Climate Change Ecology*, 1: 100012

**Pradhan D.S.**, Van Ness, R., Jalabert, C., Hamden, J.E., Austin S.H., Soma K.K., Ramenofsky M., and Schlinger B.A. 2019. Phenotypic flexibility of glucocorticoid signaling in skeletal muscles of a songbird preparing to migrate. *Hormones and Behavior*, 116: 104586

**Pradhan D.S.**, Ma C., Schlinger B.A., Soma K.K., and Ramenofsky M. 2019. Preparing to migrate: expression of androgen signaling molecules and insulin-like growth factor-1 in muscles of a long-distance migrant. *Journal of Comparative Physiology A*, 205: 113-123

Rensel M.A., Ding J.A., **Pradhan D.S.**, and Schlinger B.A. 2018. 11 $\beta$ -HSD Types 1 and 2 in the songbird brain. *Frontiers in Endocrinology*, 9: 86

Eaton J.<sup>†</sup>, **Pradhan D.S.**<sup>†</sup>, Barske J., Fusani L., Canoine V., Schlinger B.A. 2018. Differential expression of 3 $\beta$ -HSD in the CNS of two passerine songbirds. *General and Comparative Endocrinology*, 256: 43-49

Schuppe E.R., **Pradhan D.S.**, Thonkulpitak K., Drilling C., Black M. and Grober M.S. 2017. Sex differences in neuromuscular androgen receptor expression and sociosexual behavior in a sex changing fish. *PLoS ONE* 12(5): e0177711.

Schuppe E.R., Solomon-Lane T.K., **Pradhan D.S.**, Thonkulpitak K., and Grober M.S. 2016. Ancestral androgenic differentiation pathways are repurposed during evolution of adult sexual plasticity. *Evolution and Development* 18(5-6): 285-296 (Cover art)

Comito, D., **Pradhan D. S.**, Karleen, J. B., and Schlinger, B.A. 2016. Region-specific rapid regulation of aromatase activity in zebra finch brain. *Journal of Neurochemistry* 136: 1177-1185

Solomon-Lane T.K., **Pradhan D.S.**, Willis M.C. and Grober M.S. 2015. Agonistic reciprocity is associated with reduced male reproductive success within harem social networks. *Proceedings of the Royal Society of London B*, 282(1181) (Cover art)

**Pradhan D.S.**, Willis M.C., Thonkulpitak K., Solomon-Lane T.K., and Grober M.S. 2015. Simultaneous courtship and parenting in males and sex role reversal in females of the harem bluebanded gobies, *Lythrypnus dalli*. *Behaviour* 152: 917-940

**Pradhan D.S.**, Solomon-Lane T.K., and Grober M.S. 2015. Contextual modulation of social and endocrine correlates of fitness: insights from the life history of a sex changing fish. *Frontiers in Neuroscience* 8: 432

**Pradhan D.S.**, Solomon-Lane T.K., and Grober M.S. 2014. Water-borne and tissue endocrine profiles of an alternative male reproductive phenotype in the sex changing fish, *Lythrypnus dalli*. *Copeia*, 4: 716-724

Solomon-Lane T.K., Willis M. C., **Pradhan D.S.**, and Grober M.S. 2014. Female, but not male, agonistic behavior is associated with reproductive success in stable bluebanded goby (*Lythrypnus dalli*) hierarchies. *Behaviour*, 151: 1367-1387

**Pradhan D.S.**, Solomon-Lane T.K., Willis M.C., and Grober M.S. 2014. A mechanism for rapid neurosteroidal regulation of parenting behaviour. *Proceedings of the Royal Society of London, B*, 281 (1786)

**Pradhan D.S.**, Connor K.R., Pritchett E.M., and Grober M.S. 2014. Contextual modulation of androgen effects on agonistic interactions. *Hormones and Behavior*, 65(1): 47-56 (Cover art)

**Pradhan D.S.** and Soma K.K. 2012. Regulation of 3 $\beta$ -HSD activity in the songbird brain. *Journal of Ornithology*, 153, Supplement 1: 227-234

**Pradhan D.S.**<sup>†</sup>, Lau, L.Y.M.<sup>†</sup>, Schmidt K.L., and Soma, K.K. 2010. 3 $\beta$ -HSD activity in songbird brain: Subcellular localization and rapid regulation by estradiol. *Journal of Neurochemistry*, 115: 667-675

**Pradhan D. S.**, Newman A.E.M., Wacker D.W., Wingfield J.C., Schlinger B.A., and Soma K.K. 2010. Aggressive interactions rapidly increase androgen synthesis in the brain during the non-breeding season. *Hormones and Behavior*, 57(4): 381-389 (Cover art)

Schmidt K.L., **Pradhan D.S.**, Shah A.H., Charlier T. D., Chin E. H., and Soma K.K. 2008. Neurosteroids, Immunosteroids, and the Balkanization of Endocrinology. *General and Comparative Endocrinology* 157: 266-274

Newman A.E.M., **Pradhan D.S.**, and Soma K. K. 2008. DHEA and corticosterone are regulated by season and acute stress in a wild songbird: jugular versus brachial plasma. *Endocrinology* 149(5): 2537-2545

Schlinger B.A., **Pradhan D.S.**, and Soma K.K. 2008. 3 $\beta$ -HSD activates DHEA in the songbird brain. *Neurochemistry International* 52: 611-620

**Pradhan D.S.**, Yu Y., and Soma K.K. 2008. Rapid estrogen regulation of DHEA metabolism in the male and female songbird brain. *Journal of Neurochemistry* 104: 244-253

<sup>†</sup>Denotes co-first authors

## INVITED DEPARTMENTAL SEMINARS

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**Pradhan D.S.** Mechanisms regulating phenotypic plasticity in a highly social sex changing fish, Spring Seminar Series, School of Biological Sciences, Gonzaga University (March 2021)

**Pradhan D.S.** Mechanisms regulating phenotypic plasticity in a highly social sex changing fish, Spring Seminar Series, School of Biological Sciences, Washington State University (March 2021)

**Pradhan D.S.** Neurosteroidal regulation of parenting behavior in a hermaphroditic fish, Senior Seminar Series, Biology Department, Swarthmore College, Pennsylvania (January 2021)

**Pradhan D.S.** Biology Faculty Research Show Case, Biological Sciences, ISU Virtual (October 2020)

**Pradhan D.S.** Dynamic properties of estrogen synthesis and action in the songbird brain. Neuroscience Research Seminar, Institute for Neuroscience, University of Texas Health Rio Grande Valley, Virtual (March 2020)

**Pradhan D.S.** Preparing to migrate: regulation of androgen and glucocorticoid signaling in muscles of a migratory Songbird. Laboratory of Neuroendocrinology, Brown Bag Series (April 2017)

**Pradhan D.S.** From sexy tissues to sex change: mechanisms of plasticity in Bluebanded gobies, *Lythrypnus dalli*. Biology Colloquium, California State University, Northridge (Feb 2017)

**Pradhan D.S.** Preparing for the long haul: androgen signaling in the muscle of a migratory songbird. Department of Ecology and Evolutionary Biology, University of California, Los Angeles (Nov 2016)

**Pradhan D.S.** Mechanisms of local androgen signaling in birds and fish: what other vertebrates' muscles can teach us about our own. Laboratory of Neuroendocrinology, Brown Bag Series (May 2016)

**Pradhan D.S.** Integration of social context and fitness in the behavioral neuroendocrinology of the bluebanded goby, *Lythrypnus dalli*. Biology Seminar Series, Department Biology, Loyola Marymount University, Los Angeles (April 2016)

**Pradhan D.S.** Integration of social context and fitness in the behavioral neuroendocrinology of the bluebanded goby, *Lythrypnus dalli*. EcoEvoPub Series, Department of Ecology and Evolutionary Biology, University of California, Los Angeles (April 2015)

**Pradhan D.S.** Keep it local: rapid regulation of brain steroidogenic enzymes. Birdsong Affinity Group, University of California, Los Angeles (December 2014)

**Pradhan D.S.**, Solomon-Lane T.K., Willis M.C., and Grober M.S. A mechanism for rapid neurosteroidal regulation of parenting behavior. Department of Biology, Agnes Scott College (March 2014); Undergraduate Seminar Series (September 2013), Biology Graduate Student Seminar Series, Department of Biology, Georgia State University (December 2012)

**Pradhan D.S.** and Grober M.S. Role of endocrinological and social contexts in regulating life history transitions among reproductive phenotypes in the Bluebanded Goby, *Lythrypnus dalli*. Neuroscience Institute Breakfast and Lecture Series, Georgia State University (October 2013)

**Pradhan D.S.**, Solomon-Lane T.K., Willis M.C., and Grober M.S. Anabolic Steroids: from roid rage to devoted dads.; Department of Biology, Agnes Scott College (October 2012)

**Pradhan D.S.**, Connor K.R., Martin E.D., Willis M.C., and Grober M.S. Context is critical for understanding the relationship between androgens and aggressive behavior. Research in Progress Graduate Seminar Series, Department of Biology, East Carolina University, North Carolina (Oct. 2011); Biology Graduate Student Seminar Series, Department of Biology, Georgia State University (March 2012)

**Pradhan D.S.**, Solomon-Lane T.K., and Grober M. S. Local and systemic steroid levels in alternative reproductive males of the sex changing fish. Neuroscience Institute Breakfast and Lecture Series, Georgia State University (March 2011)

**Pradhan D.S.** and Soma K.K. Aggression and local Androgens: Neurosteroid metabolism rapidly increases during social encounters in the non-breeding season. Invited Lecture Series, Oglethorpe University, Chamblee, GA (September 2008)

**Pradhan D.S.** and Soma K.K. Rapid estrogen regulation of neural 3 $\beta$ -HSD in songbirds. University of British Columbia, The Retreat, Brackendale, BC (Nov. 2006); Department of Zoology Student Seminar Series, University of British Columbia, Vancouver, BC (Jan. 2007); Department of Psychology, University of British Columbia, Vancouver, BC (February 2007)

## INVITED SYMPOSIA AND MEETING TALKS

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**Pradhan D.S.** International Symposium on Avian Endocrinology (declined due to lack of funding, July 2022)

**Pradhan D.S.** Sexually dimorphic dorsal fin morphology and sex steroids in skeletal muscles of a sex changing fish, *Lythrypnus dalli*. Society for Integrative and Comparative Biology forthcoming, July 2022, *Phoenix, AZ*

**Pradhan D.S.** From devouring moms to devoted dads: hormonal regulation of parenting onset in a sex changing fish. Symposium on Neuroendocrine regulation of parental behavior. Society for Behavioral Neuroendocrinology. Virtual (June 2021)

**Pradhan D.S. and Rivas, M.G.**<sup>U</sup> Plasticity of social status: stress hormones in a hermaphroditic fish. Mentor Mentee Paired Research talk. Idaho Conference on Undergraduate Research. Virtual (July 2020)

**Pradhan D.S.**, Grober M.S., White, K.J. Onset and maintenance of male-typical parenting behavior during protogynous sex change. Special Symposium Honoring the Scientific Contributions of Rosemary Knapp. Society for Integrative and Comparative Biology, Austin, Texas (January 2020)

**Pradhan D.S.**, Van Ness, R.<sup>U</sup>, Ma C., Hamden, J.E., Jalabert, C., Soma, K.K. Schlinger, B.A., Ramenofsky, M. Glucocorticoid signaling in skeletal muscle of a migratory songbird. Contributed Talks Symposium. Society for Behavioral Neuroendocrinology, Long Beach, California (June 2017)

**Pradhan D.S.**, Ma C., Schlinger B.A., Soma K.K., Ramenofsky M. Androgen signaling in the muscle of a migratory songbird. Society for Integrative and Comparative Biology, New Orleans (Jan 2017)

**Pradhan D.S.** and Schlinger B.A. Dynamic properties of estrogen synthesis and action in the zebra finch brain. Symposium Entitled “Rapid effects of neuroestrogens on behavior”. International Symposium for Avian Endocrinology, Niagara on the Lake, Ontario (October 2016)

**Pradhan D.S.**, Connor K.R., Pritchett E.M., Grober M.S. Permissively loaded: confluence of social context and androgen treatment in a sex changing fish. Department of Comparative Endocrinology Finalist, Society for Integrative and Comparative Biology, West Palm Beach, Florida (January 2015)

**Pradhan D.S.**, Solomon-Lane T.K., Willis M.C., and Grober M.S. A mechanism for rapid neurosteroidal regulation of parenting behavior. South East Neuroscience Conference (April 2014)

**Pradhan D.S.**, Willis M.C., Solomon-Lane T.K., Crutcher J.B<sup>U</sup>., Thonkulpitak, K., and Grober, M.S. Female courtship solicitation is associated with reproductive success in Bluebanded Gobies. Animal Behavior Finalist Session, Society for Integrative and Comparative Biology, Austin, Texas (January 2014)

**Pradhan D.S.**, Solomon-Lane T.K., Willis M.C., and Grober M.S. A mechanism for rapid neurosteroidal regulation of parenting behavior. Session on Neuroendocrinology, Society for Integrative and Comparative Biology, San Francisco, California (January 2013)

**Pradhan D.S.**, Solomon-Lane T.K., Willis M.C., and Grober M.S. Anabolic Steroids: from roid rage to devoted dads. Brains & Behavior Annual Retreat, Georgia State University (April 2012)

**Pradhan D.S.** and Grober M.S. Pain and Pleasure in the Pacific: integration of science diving and biochemistry to understand the life history of Bluebanded Gobies. American Academy of Underwater Sciences Annual Meeting, Athens, GA (May 2012)

**Pradhan D.S.**, Solomon-Lane T.K., Willis M.C., and Grober M.S. Neural androgens regulate paternal behavior in a polygamous sex changing fish. Session on Parental Care and Parental Investment. Society for Integrative and Comparative Biology, Charleston, South Carolina (January 2012)

**Pradhan D.S.** and Grober M.S. Inhibition of 11 $\beta$ -HSD reduces 11KT levels in *Lythrypnus dalli*. Center for Behavioral Neuroscience Retreat, Alpharetta, GA (September 2009)

**Pradhan D.S.** and Soma K.K. Aggression and local Androgens: Neurosteroid metabolism rapidly increases during social encounters in the non-breeding season. Annual Zoology Graduate Student Symposium, University of British Columbia, Vancouver, BC (April 2008)

**Pradhan D.S.** and Soma K.K. Aggression and local Androgens: Neurosteroid metabolism rapidly increases during social encounters in the non-breeding season. Pacific Northwest Chapters Meeting for the Society for Neuroscience, Vancouver, BC (April 2008);

## **COLLABORATIVE MEETING TALKS**

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Grober M.S. and **Pradhan, D.S.** Rosemary Knapp: Scientist, Mentor, Friend. Special Symposium Honoring the Scientific Contributions of Rosemary Knapp. Society for Integrative and Comparative Biology, Austin, Texas (January 2020)

Ramenofsky M.R., **Pradhan D.S.**, Austin S.H., Soma K.K., Schlinger B.A. Phenotypic flexibility of glucocorticoid signaling in skeletal muscles of a songbird preparing to migrate. Society for Integrative and Comparative Biology, Austin, Texas (January 2020)

Solomon-Lane T.K., **Pradhan D.S.**, Williams M.M., Willis M.C., Rogers L., and Grober M.S. The central role of the middle-ranking female for behavior and reproductive success in the bluebanded goby (*Lythrypnus dalli*) social groups. Animal Behavior Conference, University of Indiana (April 2014)

Solomon-Lane T.K., **Pradhan D.S.**, Willis M.C., Crutcher J.B., Grober M.S. Playing the margins: the fitness consequences of individual behavioral variation in the bluebanded goby, *Lythrypnus dalli*. Society for Integrative and Comparative Biology, San Francisco, California (January 2013)

Soma K.K. Schmidt K.L., Chin E.H., Newman A.E.M., **Pradhan D.S.** Local steroid synthesis: examples and implications. NSERC/NSF/ESF Meeting Abstracts, University of Glasgow, Scotland (November 2006)

## **SCIENCE OUTREACH AND EDUCATIONAL WORKSHOPS/ TALKS**

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**Pradhan D.S.** What is undergraduate Research at Idaho State University, and how do I get involved? SACNAS, ISU Chapter (Oct 2020); Trio-McNair Program (Nov 2020)

**Pradhan D.S.** Pleasure and pain of science diving in the Pacific. Virtual Talk given to adult science divers at Audubon Aquarium of the Americas, New Orleans, LA (May 18, 2020)

**Pradhan D.S.** Fish from Head to Fin: 3<sup>rd</sup>-5<sup>th</sup> grade children (10). Science Trek, Idaho Museum of Natural History, Pocatello, Idaho (cancelled due to Covid-19)

**Pradhan D.S.** Build-a-Brain: Comparative brain models and neuroanatomy. ISU Bengal STEM Day, Pocatello, ID (October 2019, February 2020)

**Pradhan D.S.** Finding your “inner steroids”. Fitness education workshop for personal fitness trainers. University of California, Riverside Recreation Center, UC Fitness conference (June 2017)

Guevara S.E. and **Pradhan D.S.** Your ability to “inner” agility: discover it and teach it. Featured workshop at the Annual UC Fitness Conference, University of California, Los Angeles (May 2016)

**Pradhan D.S.** Parenting on steroids: lessons from a sex changing fish. Los Angeles Nerd Nite, Busby’s East Bar (October 2015)

**Pradhan D.S.** Pre, active, and post: taking learning beyond the classroom. Session on “Interactive Models for Critical Thinking”, GSU Graduate Teaching Assistant Pedagogy Conference (April 2013)

## **STUDENT PRESENTATIONS SINCE ISU**

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Wooding A.P., Jirik A.M.<sup>U</sup>, Christensen K.R.<sup>U</sup>, Keeley E.R., Pradhan D.S. Coping with stress: the effects environment, seasonality, and sex have on cortisol in redband trout. Society for Integrative and Comparative Biology (Oral, Jan 2022), forthcoming, *Phoenix, AZ*

Jirik A.M.<sup>U</sup>, Wooding A.P., **Pradhan D.S.** Thermal stress affects cortisol levels in wild redband trout among perennial and intermittent streams differently. Society for Integrative and Comparative Biology (Poster, Jan 2022), forthcoming, *Phoenix, AZ*

Barber S.L.<sup>U</sup>, White K.J. and **Pradhan D.S.** Genital papilla morphogenesis in gravid female bluebanded gobies, *Lythrypnus dalli*. Society for Integrative and Comparative Biology (Poster, Jan 2022), forthcoming, *Phoenix, AZ*

White K.J. Behavioral and hormonal changes across two social contexts during rapid aggressive encounters. 3-minute Thesis. INBRE Annual Conference, Moscow, ID (Oral, July 2021)

Rivas M.R.<sup>U</sup>, Youngerman D.M.<sup>U</sup>, White K.J., **Pradhan D.S.** Social instability elicits different responses in brain cortisol levels within bluebanded goby hierarchies. INBRE Annual Conference, Moscow, ID (Poster, July 2021)

Jeppson, G.<sup>U</sup>, Wooding A.P., Whitworth R., Keeley, E.R., Pradhan D.S. Cutthroat Competition: how does ketotestosterone differ in the brains of competitive brook and cutthroat trout? *Idaho Conference for Undergraduates* (Poster, July 2021)

Starkey J.M., **Pradhan D.S.**, Delehanty D. A comparative species approach determines testis symmetry and testosterone concentrations within testes and the hypothalamus of male birds. Society of Behavioral Neuroendocrinology Virtual Conference (Poster, June 2021)

White K.J., Rivas M.G.<sup>U</sup>, **Pradhan D.S.** Brain region-specific concentrations of sex steroids during aggressive Encounters in a hermaphroditic fish. Society of Behavioral Neuroendocrinology Virtual Conference (Poster, June 2021)

Youngerman D.M.<sup>U</sup>, Rivas M.R.<sup>U</sup>, White K.J., Pradhan D.S. Social status and its effects on cortisol in the brain of the bluebanded goby. Society of Behavioral Neuroendocrinology Virtual Conference (Poster, June 2021)

Jirik A.M.<sup>U</sup>, Wooding A.P., **Pradhan D.S.** Effect of seasonal changes and thermal stress on cortisol and glucose levels in wild redband trout. Society of Behavioral Neuroendocrinology Virtual Conference (Poster, June 2021). *Best undergraduate poster award recipient.*

Barber S.L.<sup>U</sup>, White K.J. and **Pradhan D.S.** Genital papilla morphogenesis in gravid female bluebanded gobies, *Lythrypnus dalli*. Society of Behavioral Neuroendocrinology Virtual Conference (Poster, June 2021)

Wooding A.P., Kline B.C., Christensen K.R., Keeley E.R., **Pradhan D.S.** Stress in a dynamic environment: the variable effects of seasonality on cortisol in wild redband trout. Western Division American Fisheries Society. Virtual Annual Meeting Hosted by the Utah Chapter (Poster, May 2021)

Christensen K.R.<sup>U</sup> Stuck in a Bucket: The effect of confinement stress on Cortisol levels in brook trout (*Salvelinus fontinalis*) This is Biology: Research Roundup, Department of Biological Sciences, Idaho State University (Oral, April 2021)

Wade K.L., Grober M.S. and **Pradhan D.S.** Female social status, morphology and endocrinology in an hermaphroditic fish. Society for Integrative and Comparative Biology Virtual Conference (Oral, Jan 2021)

White K.J. and **Pradhan D.S.** Status resolution: behavioral differences across two social contexts in bluebanded gobies. Society for Integrative and Comparative Biology Virtual Conference (Oral, Jan 2021)

Christensen K.R.<sup>U</sup>, Wooding A.P., Rivas M.G.<sup>U</sup>, Whitworth R., **Pradhan D.S.** Stuck in a Bucket: The effect of confinement stress on Cortisol levels in brook trout (*Salvelinus fontinalis*) Society for Integrative and Comparative Biology Virtual Conference (Poster, Jan 2021)

Rivas M.G.<sup>U</sup>, White K.J. **Pradhan D.S.** Plasticity of social status: stress hormones in a hermaphroditic fish. Society for Integrative and Comparative Biology Virtual Conference (Poster, Jan 2021)

Wooding A.P. Kline B.C., Christensen K.R.<sup>U</sup>, Keeley E.R., **Pradhan D.S.** Stress in a dynamic environment: how a cold-water fish might cope with climate change. Society for Integrative and Comparative Biology Virtual Conference (Poster, Jan 2021)

Rivas M.G.<sup>U</sup>, White K.J. **Pradhan D.S.** Plasticity of social status: stress hormones in a hermaphroditic fish. Idaho Conference on Undergraduate Research Virtual Conference (Poster, July 2020)

Christensen K.R.<sup>U</sup>, Wooding A.P., Rivas M.G.<sup>U</sup> **Pradhan D.S.** Stuck in a Bucket: The effect of confinement stress on Cortisol levels in brook trout (*Salvelinus fontinalis*). Idaho Conference on Undergraduate Research. Virtual (Poster, July 2020)

Sapkota R.<sup>U</sup>, White K.J., and **Pradhan D.S.** Is dorsal fin length sexually dimorphic and plastic in the sex changing Fish, *Lythrypnus dalli*? National Conference on Undergraduate Research, Montana State University (Accepted for Poster, March 2020) Cancelled due to Covid-19

Starkey J.M., **Pradhan D.S.**, Delehanty D.J. Bilateral asymmetry in gonadal testosterone within Galloanserae. Idaho Chapter of the Wildlife Society, Moscow, ID (Poster, March 2020)

White K.J., Starkey J., Sah, S.<sup>U</sup>, **Pradhan D.S.** Different aggressive intensities within two social contexts in a sex changing fish. Special Society for Integrative and Comparative Biology, Austin, Texas (Poster, January 2020)

Starkey J., White K.J., **Pradhan D.S.** Androgen levels in sexually dimorphic musculature of a sex changing fish. Society for Integrative and Comparative Biology, Austin, Texas (Poster, January 2020)

## POSTER ABSTRACTS

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Kline B.C., Keeley E.R., **Pradhan D.S.** Seasonal and thermal regulation of hormone signaling, growth, and reproductive success in free-living redband trout. Annual EPSCoR GEM3 Meeting, Boise, Idaho (Dec 2019)

**Pradhan D.S.**, Ding J.A., Roediger F.M., Massa M.G., Schlinger B.A. Rapid modulation of aromatase activity in organotypic cultures of the songbird brain. Society for Behavioral Neuroendocrinology, Bloomington, Indiana (June 2019)

Hovsepian-Ruby L.A., **Pradhan D.S.**, Roediger F.M., and Schlinger B.A. Phosphoregulation of Aromatase in the zebra finch brain. Society for Behavioral Neuroendocrinology, Long Beach, California (June 2017)

**Pradhan D.S.** Ma C., Schlinger B.S., Soma K.K., Ramenofsky M. Preparing for migration: androgens and flight muscle hypertrophy in White-crowned sparrows (*Zonotrichia l. gambelii*). Society for Behavioral Neuroendocrinology, Montreal, Quebec (August 2016)

Comito D., **Pradhan D.S.**, Karleen B.M., Ma D., and Schlinger B.A. Region-specific characterization of rapid Aromatase regulation in the zebra finch brain, Society for Behavioral Neuroendocrinology, Monterey Bay, California (June 2015)

Ma D., **Pradhan D.S.**, Comito D., Porter-Romero C., Zhou K., and Schlinger, B.S. Effect of cofactor concentrations on aromatase activity in the zebra finch brain. Science Poster Day, UCA (May 2015)

Zhou K., Porter-Romero C., **Pradhan D.S.**, Ding J.A., Kosarussavadi S., Schlinger B.A. Sex differences in parental investment during development of the zebra finch, *Taenopygia guttata* (May 2015) *Best undergraduate Student Poster Award Recipients.*

Schuppe E.R., Solomon-Lane T.K., **Pradhan D.S.**, Thonkulpitak, K., Williams, M.M., Thomas, A., Lockhart, C., Millikin, A., and Grober, M.S. Organization of dimorphic genitalia: new insights into the evolution of sexual plasticity. Society for Integrative and Comparative Biology, West Palm Beach, Florida (January 2015)

**Pradhan D.S.**, Shin H.S., Thonkulpitak K., Solomon-Lane T.K., and Grober M.S. Tissue steroid levels are associated with female status, but not rates of behavior nor ovarian function. International Congress for Neuroendocrinology, Sydney, South Wales, Australia (August 2014)

Schuppe E., **Pradhan D.S.**, Thonkulpitak K., Grober M.S. Sexually dimorphic co-localization of steroidogenic enzyme and androgen receptor in spinal cord and supracarinalis muscle in *Lythrypnus dalli*. Joint Meeting of Ichthyologists and Herpetologists, Chattanooga, Tennessee (August 2014)

**Pradhan D.S.**, Solomon-Lane T.K., Willis M.C., and Grober M.S. Rapid neurosteroidal regulation of paternal behavior. Society for Behavioral Neuroendocrinology, Atlanta, Georgia (June 2013)

Yong L. **Pradhan D.S.**, Grober M.S., McKinnon J.S. Can hormonal pleiotropy mediate the evolution of female ornamentation? Society for Behavioral Neuroendocrinology, Atlanta, Georgia (June 2013)

Solomon-Lane T.K., **Pradhan D.S.**, Willis M.C., Crutcher J.B., Grober M.S. Reproductive and endocrine correlates of agonistic variation within stable social hierarchies. Society for Behavioral Neuroendocrinology, Atlanta, Georgia (June 2013)

Thonkulpitak K., **Pradhan D.S.**, Shin H., Solomon-Lane T.K. Willis M.C., Grober M.S. Honey I ate the kids: context-dependent role of brain steroids in regulating female parental behavior. Society for Behavioral Neuroendocrinology, Atlanta, Georgia (June 2013)

Shin H., **Pradhan D.S.**, Thonkulpitak K., Solomon-Lane T.K., Willis M.C., Grober M.S. Supply and demand: hormone factories mediate physiology and behavior, but express different agendas in different tissues. Society for Behavioral Neuroendocrinology, Atlanta, Georgia (June 2013)

**Pradhan D.S.**, Solomon-Lane T.K., Willis M.C., and Grober M.S. Do neural androgens regulate paternal care in a polygamous sex changing fish? Society for Behavioral Neuroendocrinology, Madison, Wisconsin (June 2012). *Best graduate Student Poster Award Recipient.*

Solomon-Lane T.K., **Pradhan D.S.**, Willis M.C., Naude P.W., and Grober M.S. The effect of corticotropin

releasing factor on agonistic behavior and sex change in the bluebanded goby. Society for Behavioral Neuroendocrinology, Madison, Wisconsin (June 2012)

**Pradhan D.S.**, Solomon-Lane T.K., Willis M.C., Naude P.W., and Grober M.S. Brain injections of an androgen synthesis inhibitor rapidly affects recovery from anesthesia and androgen levels in males. Society for Integrative and Comparative Biology, Charleston, South Carolina (January 2012)

Connor K.R., **Pradhan D.S.**, Solomon-Lane T.K., Willis M.C., Naude P.W., and Grober M.S. Endocrine correlates of initial sexual differentiation in the Bluebanded Goby. Society for Integrative and Comparative Biology, Charleston, South Carolina (January 2012)

Willis M.C., **Pradhan D.S.**, Naude P.W., Solomon-Lane T.K., and Grober M.S. Egg laying and development in Bluebanded Gobies. Society for Integrative and Comparative Biology, Charleston, South Carolina (January 2012)

Solomon-Lane T.K., **Pradhan D.S.**, Willis M.C., and Grober M.S. The relative contributions of allometry, individual behavior, and group dynamics to reproductive success in the Bluebanded Goby (*Lythrypnus dalli*). Society for Integrative and Comparative Biology, Charleston, South Carolina (January 2012)

**Pradhan D.S.**, Connor K.R., Martin E.D., Willis M.C., Grober M.S. Effects of exogenous androgens on systemic and local tissue loading. Society for Behavioral Neuroendocrinology, Queretaro, Mexico (June 2011)

Yong L., **Pradhan D.S.**, Pierotti M., Grober M.S., McKinnon J. Understanding female rednecks: hormonal bases for ornamentation and behavior in female *Gastrosteus aculeatus*. Sigma-Xi, Raleigh, North Carolina (November 2010)

**Pradhan D.S.** and Grober M.S. Inhibition of 11 $\beta$ -HSD decreases 11-ketotestosterone levels in *Lythrypnus dalli*. Society for Integrative and Comparative Biology, Seattle, Washington (January 2010)

**Pradhan D.S.**, Newman A.E.M., and Soma K.K. Aggression and local Androgens: Neurosteroid metabolism rapidly increases during social encounters in the non-breeding season. Society for Behavioral Neuroendocrinology, Groningen, Netherlands (July 2008); International Congress for Avian Endocrinology, Leuven, Belgium (July 2008)

Lau Y.M., **Pradhan D.S.**, and Soma K.K. 2008. Effect of estrogen on subcellular localization of 3 $\beta$ -HSD in the zebra finch brain. Society for Behavioral Neuroendocrinology, Groningen, Netherlands (July 2008). *Best undergraduate poster award recipient.*

**Pradhan D.S.**, Newman A.E.M., Lau Y.E.M., Soma K.K. Aggressive encounters regulate brain 3 $\beta$ -HSD in male song sparrows. Society for Behavioral Neuroendocrinology, Monterey Bay, California (June 2007); International Congress for Neuroethology, Vancouver, Canada (July 2007)

Kriengwatana B.P., **Pradhan D.S.**, Schmidt K.L., Newman A.E.M., and Soma K.K. Effects of melatonin on plasma DHEA and corticosterone levels in song sparrows. Society for Behavioral Neuroendocrinology, Monterey Bay, California (June 2007)

Newman A.E.M., **Pradhan D.S.**, Soma K.K. Effects of stress on CORT and dehydroepiandrosterone: Seasonal modulation. NSERC/NSF/ESF Meeting Abstracts, University of Glasgow, Scotland (November 2006)

**Pradhan D.S.**, and Soma K.K. Rapid estrogen regulation of steroid synthesis in brain. Society for Neuroscience (October 2006)

**Pradhan D.S.**, Yu Y., Soma K.K. Rapid, non-genomic effects of 17 $\beta$ -Estradiol by on DHEA metabolism by brain 3 $\beta$ -HSD in the songbird brain. Society for Behavioral Neuroendocrinology, Pittsburgh, PA (June 2006)