

## CURRICULUM VITAE: ELIZABETH ANNE SHIRTCLIFF

### CURRENT POSITION

#### WORK ADDRESS

Professor  
Department of Human Development and Family Studies  
Virtual Reality Applications Center Affiliate  
Office: 2361C Palmer Building. 1620H Howe Hall.  
SPIT Lab: 2115 Human Nutrition and Sciences Building  
CAR Lab: 0321/0319 Palmer Building  
Iowa State University  
Ames, IA 50011  
O: (515) 294-6316  
F: (515) 294-2502  
[birdie@iastate.edu](mailto:birdie@iastate.edu)

#### HOME ADDRESS

4915 Westbend Dr  
Ames, IA 50014  
H: (515) 292-9651  
C: (504) 256-7153  
Citizenship: USA

### BACKGROUND

#### EDUCATION

B.S. 1998, University of Oregon. *Major:* Psychology with Honors.

*Advisor:* Daniel P. Kimble.

Ph.D. 2003, The Pennsylvania State University. *Major:* Biobehavioral Health. *Minor:* Statistics.

*Thesis:* Low salivary cortisol levels are associated with externalizing but not internalizing behavior problems: A latent state trait model in normally developing youth. *Advisor:* Douglas A. Granger.

#### EXPERIENCE

June-August 2003, Research Associate. Mind/ Body Center Grant. University of Wisconsin, Madison. *Mentor:* Christopher L. Coe

August 2003 – July 2006, NIMH Emotions Training Grant Fellow: T32-MH18931. Department of Psychology; University of Wisconsin, Madison. *Primary Mentor:* Christopher L. Coe

August 2006-June 2007, NIMH Biological and Behavioral Approaches to Typical and Atypical Development Training Grant Fellow: T32-MH75880. Department of Psychology; University of Wisconsin, Madison. *Primary Mentor:* Seth D. Pollak

July 2007-August 2008, Assistant Scientist on a K01 Career Development Award, Department of Psychology and the Waisman Center, University of Wisconsin-Madison.

August 2008-April 2011, Assistant Professor, Department of Psychology,  
University of New Orleans.

April 2011-August 2013, Early Research Professor, Department of Psychology,  
University of New Orleans.

August 2013- 2014, Associate Professor, Department of Psychology, University of New Orleans.

July 2014-present, Associate Professor, Department of Human Development and Family Studies,  
Iowa State University

September 2014-present, Adjunct Appointment, Department of Food Science and Human  
Nutrition, Iowa State University

August 2016-present, Virtual Reality Applications Center Faculty Affiliate.

July 2019-present, Professor, Department of Human Development and Family Studies, Iowa  
State University

## **AWARDS, LECTURESHIPS, OR PRIZES**

### **NATIONAL/ INTERNATIONAL HONORS AND AWARDS**

2003 HealthEmotions Research Institute Scholar for the 9<sup>th</sup> Annual Wisconsin Symposium on  
Emotions, *Emotion and Health: Neurobiological Mechanisms*.

### **UNIVERSITY HONORS AND AWARDS**

2017 Mid-Career Research Award, College of Human Sciences, Iowa State University

2011 Early Research Professor award, University of New Orleans

2001 Biobehavioral Health Graduate Student Scientific Achievement Award Recipient for  
“Assessing Estradiol in Biobehavioral Studies Using Saliva and Blood Spots: Simple  
Radioimmunoassay Protocols, Reliability, and Comparative Validity”.

1998 Zach Award for Undergraduate Honor’s Thesis: Cortisol’s Role in Exam Expectation.

### **OTHER NATIONAL AND INTERNATIONAL EVIDENCE OF PRESTIGE**

2012 PhD opponent, Schale Azak, University of Oslo, Norway: Differential developmental  
pathways among children of depressed mothers.

### **INVITED TALKS**

2019 Invited Speaker: “Understanding the stress of growing up for adolescence, and what  
hormones have to do with it.” Department of Psychiatry and Biobehavioral Sciences and  
Department of Psychology, T32 Program in Brain and Behavioral Development During  
Adolescence Summer 2019 Lecture Series, University of California Los Angeles.

2019 Invited Speaker: “Feeling stressed out? Novel noninvasive stress biomarkers for human and  
nonhuman research applications”. Department of Anatomy and Physiology Speaker  
Series, Kansas State University.

2019 Invited Speaker: “Growing Up is Hard to Do: A Biomarker Perspective on Development”  
Adverse Childhood Speaker Series, Department of Psychiatry, Tulane University

2018 Plenary Speaker: “Riding the Physiological Roller-Coaster: How Life Stress Alters Stress  
Responsive Physiological Systems.” Wayne State University, Researchers of  
Biobehavioral Health in Urban Settings Today (RoBUST) group, 4<sup>th</sup> Annual fall  
symposium.

2018 Invited Speaker: “Growing Up is Hard to Do: A Biomarker Perspective on Development”  
Child Study Center Speaker Series, Department of Psychology, Penn State University  
and at Adverse Childhood Speaker Series, Department of Psychiatry, Tulane University

- 2017 Invited Plenary Speaker: “Sex, Hormones, and Cognition” Human Behavior and Evolution sponsored SRCO preconference.
- 2017 Invited Speaker: “Sex, love, and growing up: What do biomarkers have to do with it?” Adverse Childhood Speaker Series, Department of Psychiatry, Tulane University
- 2016 Invited Plenary Speaker: “Preliminary Clinical and Research Based Results from the First In-Human Testing of Near Real-Time Cortisol Assays”.
- 2016 Invited Presentation: “Riding the Physiological Roller-Coaster: How Life Stress Alters Stress Responsive Physiological Systems.” Stress and Development Symposium at University of Iowa DeLTA Center
- 2014 Invited Presentation: “Real-time salivary cortisol opens opportunity to understand context.” Presented at the SPSP Social Neuroendocrinology Preconference, Austin TX; Presented at the North American Saliva Symposium, Boston MA.
- 2013 Invited Presentation: “Riding the Physiological Roller-Coaster: Integrating Biomarkers and Behavioral Health Data in Life Course Stress Frameworks. Presented at the University of Washington School of Social Work, Seattle, WA and University of Vermont, Department of Psychology.
- 2012, PhD opponent, Schale Azak, University of Oslo, Norway: Differential developmental pathways among children of depressed mothers.
- 2012 Invited Presentation: “Riding the physiological roller-coaster: How life stress alters stress responsive physiological systems. Presented at the International Neuroscience and Biological Psychiatry Conference, New Orleans, LA, and Tulane University Neuroscience Speaker Series.
- 2011 Invited Presentation: “Riding the physiological roller-coaster: How life stress alters stress responsive physiological systems and what it means for adolescent health.” Presented at the Social Development Research Group and School of Social Work, University of Washington, Seattle, WA.
- 2009 Special Guest Lecturer: “Neurobiological consequences of childhood traumatic stress and abuse”. Presented at Southern University of New Orleans School of Social Work, Post-masters certificate program on childhood traumatic stress, New Orleans, LA.
- 2009 Invited Presentation: “Immunological and neuroendocrine dysregulation following early deprivation and stress.” Presented at the International Conference on Attachment and Early Disorders of Development, Ludwig-Maximilians-University, Munich, Germany
- 2008 Special Guest Lecture: “Stress Regulation in Adolescents: Insights from the Study of Hormones.” Presented at Western Psychiatric Institute and Clinic, Department of Psychiatry Seminar Series; Presented at Tulane University Seminar, co-sponsored by the Psychology Department and Neuroscience Program, New Orleans, LA.; Presented at Department of Epidemiology, Tulane University Seminar, New Orleans, LA.; Presented at Grand Rounds for Child and Adolescent Psychiatry Department, Tulane University School of Medicine.
- 2005 Invited Presentation: “Neuroendocrine contributions to pubertal development.” Presented at the National Academy of Science, Workshop on the Science of Adolescent Health and Development, Washington, DC.

## **CURRENT GRANTS AND CONTRACTS**

### **PRINCIPAL INVESTIGATOR**

LRP NIH2674-9. “Novel pubertal hormone measures provide insights into adolescent development.” Principal Investigator: Elizabeth Shirtcliff. Type: Pediatric Research Loan Repayment Program. Agency: NIH LRP. Total Direct Cost: NA. Renewed for funding 5/10/2018, 8/1/2019

### **CO-INVESTIGATOR**

- R43 DA043293: “Real-time Salivary Testosterone and extension to mobile Application and Multiple Biomarker Quantification Capability”. *Principal Investigator*: Paul Slowey. *Agency*: National Institute of Health Small Business Innovation Research Award (SBIR). *Role*: Co-Investigator. *Total Direct costs*: \$310,447. *Total ISU Direct Cost*: \$69,692.
- R01 DA045108. An adoption study of the development of early substance use: the joint roles of genetic influences, prenatal risk, rearing environment, and pubertal maturation”. *Type*: R01. *Principal Investigator*: Jenae Neiderhauser. *Agency*: National Institute of Drug Abuse. *Role*: Co-Investigator. *Total Direct costs*: \$2,892,828. *Total ISU Direct Cost*: \$595,980.
- R01 MH 03241: “Influence of Social Threat on Reward Function in At-Risk Adolescent Girls”. *Principal Investigator*: Jennifer Silk. *Agency*: National Institute of Mental Health. *Role*: Co-Investigator. *Total Direct Costs*: \$3,648,781. *Subcontract*: \$86,048.
- R01 DA035300. “Early Adversity Shapes Adolescent Risk Behavior Trajectories in Mexican Americans.” *Principal Investigator*: Juliana Deardorff. *Agency*: National Institute of Drug Abuse. *Type*: R01. *Role*: Co-Investigator. *Total Direct Costs*: \$3,015,558. *Subcontract*: \$216,352.
- R01 MH099007. “Pubertal Maturation and Motivational Influences on Frontolimbic Systems.” *Principal Investigator*: Cecile Ladouceur. *Agency*: National Institute of Mental Health. *Type*: R01. *Role*: Co-Investigator. *Total Direct Costs*: \$3,648,781. *Total ISU Direct Cost*: \$98,881.

**OTHER ROLES** (*where my role typically is to serve as a consultant with a contractual arrangement for assay services where my lab serves as a fee-for-service lab*).

- R01 MH069942: “Temperamental emotionality in preschoolers and depression risk. *Principal Investigator*: Dan Klein. *Agency*: National Institute of Mental Health. *Type*: R01. *Role*: Consultant & Contractual Arrangement. *Total Direct Costs*: \$2,297,783.
- R01 MH107418. 8/1/2015-4/30/2020: “Puberty, neural systems for social processes, and early adolescent mental health: A longitudinal neuroimaging study.” *Principal Investigator*: Jennifer Pfeifer. *Agency*: National Institute of Mental Health. *Type*: R01. *Role*: Consultant & Contractual Arrangement. *Total Direct Costs*: \$ 1,958,257.
- R01 MH112585. 4/21/2017-3/31/2022: “Biomarkers in the HPA axis and inflammatory pathways for maladaptive stress response in children.” *Principal Investigator*: Nadine Melhem. *Agency*: National Institute of Mental Health. *Type*: R01. *Role*: Consultant & Contractual Arrangement.
- UG3 OD023389. 9/21/2016-8/31/2023: “The early growth and development study pediatric cohort. *Principal Investigators*: Leve, Leslie, Ganiban, Jody, Neiderhiser, Jenae. *Agency*: Office of the Director, National Institutes of Health. *Type*: ECHO initiative. *Role*: Consultant. *Total Direct Costs*: \$1,570,142.

### **INTERNAL GRANTS**

HD FS 12 01 2017 “Impact of Personal Financial Literacy Stressor on Autonomic and Emotional Reactivity” *Principal Investigator*: Elizabeth Shirtcliff & Clinton Gudmunson. *Agency*:

- Department of Human Development and Family Studies Internal Grant Program. *Type:* Internal Grant Funding. *Role:* Principal Investigator. *Total Direct Costs:* \$4,000.
- CHS Seed Grant Program, “Improving the health of Latino Families with a Community-Based Curriculum: Abriendo Caminos”. Principal Investigator: Kim Greder. Agency: CHS Intramural Collaboration. Role: Co-Investigator. Total Direct Cost: \$25,000 split amongst multiple ISU Co-investigators.
- April 2015 Teaching as Research (TaR) program. “Scholarly writing stress and the effectiveness of trained graduate peer tutors”. Principal Investigators: Jenny Phan (graduate student mentee) and Elizabeth Shirtcliff. Agency: Center for the Integration of Research, Teaching and Learning (CERTL). Role: Co-PI. Total Direct Cost: \$1500.

## COMPLETED GRANTS AND CONTRACTS

### PRINCIPAL INVESTIGATOR

- OPT-IN, NSF EPSCoR, December 19, 2012: “An innovative tool to improve testosterone measurement for human research”. *Role:* Principal Investigator. *Agency:* Board of Regents of Louisiana. *Type:* Opportunities for partnerships in technology with industry (OPT-IN). *Total direct costs:* \$19,850.
- Pfund, NSF EPSCoR. March 1, 2012: “Oxytocin provides insight into social support in couples during stress”. *Role:* Principal Investigator. *Agency:* Board of Regents of Louisiana. *Type:* Pilot Funding for New Research (Pfund). *Total direct costs:* \$9,970.
- R21 MH093675. August 3, 2011: “Biobehavioral Mechanisms for Severe Disruptive Behavior in Adolescent Girls.” *Principal Investigator:* Elizabeth Shirtcliff. *Agency:* National Institute of Mental Health. *Role:* Principal Investigator. *Total direct costs:* \$275,000.
- SRP SCoRE. June 1, 2010: “Preliminary Data to Refine Measurement of Timing of Stress Regulation” *Role:* Principal Investigator. *Agency:* Summer Research Program. *Type:* Stimulating Competitive Research SCoRE. *Total direct costs:* \$14,911.
- K01 MH077687. April 4, 2007: “Stress Regulation and Psychopathology in Adolescents” *Role:* Principal Investigator. *Agency:* National Institute of Mental Health. *Type:* K01. *Total direct costs:* \$662,939.

### CO-INVESTIGATOR

- R01 DA034739, 04/01/13-03/31/18: “Stress and Drug Use Vulnerability in the African American Community”. *Principal Investigator:* Ezemenari Obasi. *Agency:* National Institute of Drug Abuse. *Type:* R01. *Role:* Co-Investigator. *Total Direct Cost:* \$2,510,912. *Subcontract:* \$139,517.
- R44 AT006634, 08/01/2013-05/31/2015: “Phase II of VerOFy: A new tool to improve productivity for stress research”. *Principal Investigator:* Paul Slowey. *Agency:* National center for complementary and alternative medicine. *Type:* SBIR. *Role:* Co-Investigator. *Total Direct Costs:* \$1,308,393. *Subcontract:* \$287,208.
- Oliver Fund Scholars Award, 1/1/2014-12/31/2014: “Tracking Health Disparities Using Innovative Biomarkers of Accelerated Aging in Adolescents.” *Principal Investigator:* Stacy Drury. *Agency:* Tulane University. *Type:* Faculty Development Seed Funding. *Role:* Co-Investigator. *Total Direct Costs:* \$40,000.
- R34 AT006634, 7/18/2011-12/31/2012: VerOFy: A New Tool to Improve Productivity and Reduce Costs for Stress Research. *Principal Investigator:* Paul D. Slowey. *Agency:*



- National Center for Complementary and Alternative Medicine: NIH. *Role*: Co-investigator. *Total direct cost*: \$325,567. *Subcontract*: \$21,344.
- OJA637550. 5/1/2006-4/31/2007: “Treatment for Chronically Antisocial Adolescents: Monitoring Cortisol Levels and Behavioral Change in Violent Juveniles” *Principal Investigator*: Michael Caldwell. *Agency*: Office of Justice Administration. *Role*: Co-Principal Investigator. *Total direct costs*: \$50,000 (overseen by Shirtcliff and Vitacco).
- R01 MH61285-S. 7/31/2005-7/31-2006: “Emotion Processing – Neuroendocrine Supplement” *Principal Investigator*: Seth Pollak and Elizabeth Shirtcliff. *Agency*: National Institute of Mental Health. *Type*: Supplement to R01. *Role*: Co-Principal Investigator. *Total direct costs*: \$98,213.

## OTHER ROLES

- R01 MH101533-01. 07/01/2013-06/31/2018: “Setting a trajectory: Biomarkers of early stress and attachment across development.” *Principal Investigator*: Stacy Drury. *Agency*: National Institute of Mental Health. *Type*: R01 BRAINS (Biobehavioral Research Award for Innovative New Scientist). *Role*: Consultant & Contractual Arrangement. *Total Direct Costs*: \$1,610,833.
- R01 ES020447. 8/20/2011-12/30/2013: “Telomere length as a biomarker of allostatic load in children.” *Principal Investigator*: Katherine Theall. *Agency*: National Institute of Environmental Health Sciences. *Type*: R01. *Role*: Consultant & Contractual Arrangement.
- R03 DA027481-0109. 9/1/2009-8/31/2011. “Stress and Drug Use Vulnerability in Rural African Americans.” *Principal Investigator*: Ezemenari M. Obasi. *Agency*: National Institute of Drug Abuse. *Type*: R03. *Role*: Consultant. *Total direct costs*: \$507,736.
- R21 MH082705. 4/1/2009-8/31/2011. “HPA Reactivity and Diurnal Patterns Associated with Adolescent Anxiety/Depression” *Principal Investigator*: Marilyn J. Essex. *Agency*: National Institute of Mental Health. *Type*: R21. *Role*: Other Significant Contributor. *Total Direct Costs*: \$275,000.
- R01 DA021737. 02/01/2008-03/31/2014: “Race Disparities of Drug Use in Emerging Adults” *Principal Investigator*: Kevin Haggerty. *Agency*: National Institute of Drug Abuse. *Type*: R01. *Role*: Consultant. *Total direct costs*: \$2,493,179.
- P50 MH069315. 1/1/2008-12/31/2013. “Neurobehavioral Bases of Emotion Regulation and Dysregulation in Adolescence.” *Principal Investigator*: Davidson, Richard J. P50 Center Mechanism, (total \$ 9,999,997). Project 2 “Longitudinal Associations of Stress Exposure, Cortisol, and the Brain. *Principal Investigator*: Essex, Marilyn J. *Agency*: National Institute of Mental Health. *Type*: P50. *Role*: Co-Investigator on Project 2. *Total Direct Costs*: \$999,484.
- R01 MH059785. 7/1/2006-6/30/2011: “Risk for Child Psychopathology: A Twin-Study Perspective” *Principal Investigator*: Hill Goldsmith. *Agency*: National Institute of Mental Health. *Type*: R01. *Role*: Researcher. *Total direct costs*: \$2,388,459.

## SELECT PENDING GRANTS AND CONTRACTS

### UNDER REVIEW

- R21 GRANT12885097, June 15, 2019: “Application of novel virtual reality tasks to understand biobehavioral stress reactivity and cardiometabolic health in high threat occupations”.

- Principal investigators: Elizabeth Shirtcliff, Nir Keren. Agency: National Heart, Lung and Blood Institute. Role: Principal Investigator. Total ISU cost: \$275,000.
- NSF SL1941236, July 10, 2019: “Collaborative Proposal: Utility of Scientific Visualization to Enhance Learning about Pubertal Development. Principal investigators: Elizabeth Shirtcliff, Kristine Marceau, Kimberly Moss. Agency: National Science Foundation Science of Learning. Role: Principal Investigator. Total ISU costs: \$599,270
- NSF DS 1941770, July 15, 2019: “Collaborative Research: The impact of pubertal development on youths' experiences in schools.” Principal investigators: Rona Carter, Elizabeth Shirtcliff, Eleanor Seaton. Agency: National Science Foundation Developmental Science. Role: Principal Investigator on collaborative research. Total ISU direct cost: \$338,473
- 1 P20 GM130447: “The Role of Testosterone and Cortisol in modulating top-down control neural systems in dysfunctional emotion regulation in pediatric psychiatric disorders.” Principal Investigator: Tony W. Wilson. Type: Cognitive Neuroscience of Development and Aging (CONDA) Center Grant. Project title: The Role of Testosterone and Cortisol in modulating top-down control neural systems in dysfunctional emotion regulation in pediatric psychiatric disorders. Admin Core: Training, Recruitment, Administration, Community and Transition (TRACT) Core. Role: Mentor/Consultant

### PLANNED RESUBMISSION

- R01 HD093900: “Timing of pubertal development and risk factors of early puberty in boys and girls: A population based study. Principal Investigator: Ai Kubo. Agency: National Institute of Child Health and Human Development. Role: Co-investigator: Total ISU direct cost: \$207,540. Scored 27% on 3/5/2018, pending council review.
- R01 MH104266. “Patterns of RDoC Risk for Serious Behavior Problems in Young Children”. *Principal Investigator: Paul Frick. Agency: National Institutes of Health. Role: Co-investigator. Total direct costs: \$2,035,660.*
- CHS Seed Grant Program, “Optimizing the characterization of the psychophysiological responses to mental stress”. Principal Investigator: Warren Franke. Agency: CHS Intramural Collaboration. Role: Co-Investigator.
- R21NR11158948. “Physiological Mechanisms for Gender Differences in Social Support During Stress” *Principal Investigator: Elizabeth Shirtcliff. Agency: National Institute of Nursing Research. Total Direct Cost: \$275,000*
- R21MH107936. “Applying Real-Time Cortisol to Index Individual Differences in Stress Regulation”. *Principal Investigator: Elizabeth Shirtcliff. Agency: National Institute of Mental Health, National Center for Complementary and Alternative Medicine, National Institute of Nursing Research. Total direct costs: \$275,000.*

## MENTORED GRANTS, FELLOWSHIPS AND CONTRACTS

### CURRENT

- K23 HD096052. 4/1/2019-3/31/2024: “Psychophysiology and Social Processes in Very Young Children with Externalizing Problems.” Principal investigator: Amy Mikolajewski. Agency: National Institute of Child Health and Human Development. Role: Mentoring Team Member. Total Direct Costs: \$540,784.
- K01 MH110643: “The role of testosterone in modulating neural response to threat cues and during emotion regulation in posttraumatic stress disorder. *Principal Investigator: Stuart*

- White. *Agency*: National Institute of Mental Health. *Role*: Mentor (with James Blair). Total Direct Costs: \$490,298.
- F32 MH114317: Neurodevelopmental mechanisms linking childhood adversity with adolescent psychopathology: Pubertal timing and cortical-limbic circuitry.” Principal Investigator: Natalie Colich. *Agency*: National Institute of Mental Health. *Role*: Mentoring Team Member. Total Direct Costs: \$71,304
- K01 MH111951: “The role of brain activity and connectivity in the association between immune function and depressive symptoms, and the effect of pubertal timing: A longitudinal study of adolescent girls.” Principal Investigator: Michelle Byrne. *Agency*: National Institute of Mental Health. *Role*: Mentoring Advisor. Total Direct Costs: \$423,371.
- R01HL137246-03S1: “Research Supplements to Promote Diversity in Health-Related Research National Heart, Lung, and Blood Institute Examining biomarkers and mechanisms of health disparities in sexual minority women 2019-2021” Principal Investigator: Kathryn Keenan. *Agency*: National Heart, Lung, Blood Institute. *Mentee*: Johnny Berona. *Role*: Mentoring Team Member. Total Costs: \$182,055
- F31 MH118853. July 15, 2019: “Pubertal impact on adolescents’ mental health and developmental disability symptoms.” Principal investigator: Jenny Phan. *Agency*: National Institute of Mental Health. *Role*: Mentoring Advisor. Total Direct Costs: \$39,116.
- K01 AG061260. “Sibling relations in the context of dementia parental care: Implications for health and well-being.” *Type*: K01 Career Development Award. *Principal Investigator*: Megan Gilligan. *ISU*. *Role*: Mentor (with Carolyn Cutrona). *Total Direct Costs* (to the candidate, at ISU): \$571,835.

## UNFUNDED GRANTS AND CONTRACTS

### PRINCIPAL INVESTIGATOR

- January 31, 2017. “Utility of Virtual Reality for Physiological Stress Responsivity.” *Agency*: Bailey Research Career Development Award, ISU. *Principal Investigator*: Elizabeth Shirtcliff. Total ISU Direct Cost: \$149,949. Successful at the college level.
- R01 HD091530. 04/01/17-03/31/22: “Hormone monitoring in real time toward personalized therapy in children with congenital adrenal hyperplasia.” *Principal Investigators*: Elizabeth Shirtcliff and Kyriakie Sarafoglou. *Agency*: National Institute of Child Health and Human Development. *Role*: Principal Investigator. *Total Direct costs*: \$2,850,051.
- Blavatnik Award for Young Scientists, 2015. Nominated by Iowa State University in the Category of Life Sciences.
- Bailey Research Career Development Award, 2015. *Title*: Noninvasive biomarkers as neurobiological indices of stress and stress buffers. *Principal Investigator*: Elizabeth Shirtcliff. *Agency*: Iowa State Internal Funding. *Total direct costs*: \$100,000. Successful at the college level.
- NSF 1209099. November 08, 2012. “Advance IT: Championing the Institutional Climate to Kickstart Success (ChICKS) in STEM.” *Principal Investigator*: Elizabeth Shirtcliff. *Agency*: National Science Foundation. *Total direct costs*: \$517,070.
- September 1, 2009: “Biopsychological Mechanisms Underlying Risk for Alcohol Use”. *Principal Investigator*: Elizabeth Shirtcliff. *Agency*: The Foundation for Alcohol Research (ABMRF). *Role*: Principal Investigator. *Total direct costs*: \$86,931.



## CO-INVESTIGATOR

- February 16, 2017. “Early adversity shapes adolescent risk behavior trajectories in Mexican Americans”. Type: R01 supplement. Principal Investigator: Juliana Deardorff. Agency: National Institute of Drug Abuse. Role: Co-Investigator. Total ISU Direct Cost: \$52,299.
- “Are anti-reward mechanisms for alcohol and marijuana use across adolescence and young adulthood observed in stress related biomarkers?” Principal Investigator: Martie Skinner. Agency: National Institute of Alcohol Abuse and Alcoholism. Role: Co-investigator.
- “Racial Disparities and the Consequences of Stress and Drug Use to Immune Function”. *Principal Investigator:* Martie Skinner. *Agency:* National Institute of Drug Abuse. *Type:* R01. *Role:* Co-Investigator.
- “The Stress Response System as a Mechanism of Calibration to the Environment.” *Principal Investigator:* Bruce Ellis. *Agency:* National Institute of Child Health and Human Development. *Type:* R01. *Role:* Co-Investigator.
- “Adolescent Behavioral and Emotional Health: Pubertal Changes in Threat and Reward Systems.” *Principal Investigator:* Neal Ryan on P50; Cecile Ladouceur on Project 3. *Agency:* National Institute of Mental Health. *Type:* P50 Center Grant. *Role:* Co-Investigator on Project 3.

## MENTORED GRANTS

- F31 MH110132: “From Micro-array to the HPA: Etiological considerations of callous unemotional traits in youth. *Principal Investigator:* Andrew Dismukes. *Agency:* National Institute of Mental Health. *Role:* Mentor (with Stacy Drury).
- Doris Duke Foundation Graduate Dissertation Fellowship: “Potential for Health-Related Mediation of the Link between Parenting Stress and Parenting Behavior in Parents Who Care for Children with Autism.” Principal Investigator: Jenny Phan. Agency: Doris Duke Foundation. Role: Mentor.
- Ford Foundation Graduate Dissertation Fellowship: “Race differences in the impact of stress on Hair cortisol” Principal Investigator: Shannin Moody. Agency: Ford Foundation. Role: Mentor

## OTHER ROLES

- “Pubertal Maturation and Social-Affective Influences on Decision Making”. Principal Investigator: Ron Dahl. Agency: National Institute of Mental Health. Type: R01. Role: Consultant.

## PUBLICATIONS

### JOURNAL ARTICLES IN PRESS

(\*DENOTES MENTORED SCHOLAR-LED PUBLICATIONS); H-INDEX=45, PUBLISH OR PERISH).

Shirtcliff, E. A., Wang, W., Moody, S. N., Smith, J. D., & Simmons, J. G. (2019). Letter to the editor: A call for transparency in immunoassay techniques to enhance rigor and reproducibility. *Developmental psychobiology*.

### BOOK CHAPTERS

(\*DENOTES MENTORED STUDENT-LED PUBLICATIONS;  $\partial$  DENOTES PUBLICATION WITH 50+ CITATIONS); H-INDEX=44, PUBLISH OR PERISH.

1. \*Zakreski, E., Dismukes, A. R., Tountas, A., Phan, J. M., Moody, S. N., & **Shirtcliff**, E. A. (2019). Developmental trajectories of HPA-HPG dual axes coupling: Implications for social neuroendocrinology. In Schultheiss, O. C., & Mehta, P. H. (Eds.). *Routledge International Handbook of Social Neuroendocrinology*. (pp. 608-632). Abingdon, UK: Routledge.
2. \*Dismukes, A.R., **Shirtcliff**, E.A., Drury, S.S. (2019). Genetic and Epigenetic Processes in Infant Mental Health. In Zeanah, C. (Ed.). *Handbook of Infant Mental Health* (4<sup>th</sup> edition, pp 63-80). Guildford Press, New York, NY.
3. Ellis, B.J., Del Giudice, M., **Shirtcliff**, E.A. (2017). The adaptive calibration model of stress responsivity: Concepts, findings, and implications for developmental psychopathology. In T. P. Beauchaine & S. P. Hinshaw (Eds.), *Child and adolescent psychopathology* (3<sup>rd</sup> Ed.). New York: Wiley & Sons.
4. Frick, P. J., & **Shirtcliff**, E. A. (2016). Children at risk for serious conduct problems. In Cima, M. (Ed.) *The Handbook of Forensic Psychopathology and Treatment*. Routledge, New York, NY.
5. Vitacco, M.J., **Shirtcliff**, E.A., Dismukes, A.R., Johnson, M. (2015). Biomarkers, Science and the Prediction of Violence: Clinical and Legal Issues. *The Courts and Sciences Journal*, 2(1). Special Issue on *Science in the courtroom: The science of aggression and violence in the courts*.
6. \*Allison, A., **Shirtcliff**, E.A. (2013). A biological perspective on positive adult-youth relationships. In DuBios, D. & Karcher, M. (eds.), *Handbook of Youth Mentoring* (2<sup>nd</sup> Ed, pp 117-128). Sage Publications, Thousand Oaks, CA.
7. Del Giudice, M., Ellis, B. J., & **Shirtcliff**, E. A. (2013). Making sense of stress: An evolutionary-developmental framework. In G. Laviola, & S. Macri (Eds.), *Adaptive and Maladaptive aspects of developmental stress* (pp. 23-44). New York: Springer.
8. ∂ Ellis, B. J., Del Giudice, M., & **Shirtcliff**, E. A. (2013). Beyond allostatic load: The stress response system as a mechanism of conditional adaptation. In T. P. Beauchaine & S. P. Hinshaw (Eds.), *Child and adolescent psychopathology* (2nd Ed.) (pp. 251-284). New York: Wiley & Sons.
9. **Shirtcliff**, E. A., Ruttle, P. (2010). Immunological and neuroendocrine dysregulation following early deprivation and stress. In Heinz Brisch, K. (Ed.), *Attachment and Early Disorders of Development*. Munich, Klett-Cotta & Stuttgart.
10. **Shirtcliff**, E. A. (2009). Biological Underpinnings of Adolescent Development. In DiClemente, R., Crosby, R., Santelli, J. (Eds.), *Adolescent Health: Understanding and Preventing Risk Behaviors*, (pp. 95-114). New York: Wiley.
11. ∂ Zahn-Waxler, C., Crick, N. R., **Shirtcliff**, E. A., & Woods, K. E. (2006). The origins and development of psychopathology in females and males. In D. Cicchetti & D. Cohen (Eds.), *Handbook of developmental psychopathology* (2nd ed., pp. 76-139). New York: Wiley.
12. Granger, D. A. & **Shirtcliff**, E. A. (2005). Commentary: The Biosocial Model, Hypothalamic-Pituitary-Adrenal Axis, and Behavioral Science. In B. Schneider & L. Waite (Eds.), *Being Together, Working Apart: Dual Career Families and the Work-Life Balance*, (pp. 135-138). Cambridge: Cambridge University Press.
13. Granger, D. A., Dreschel, N. A., & **Shirtcliff**, E. A. (2003). Developmental Psychoneuro-immunology: The Role of Cytokine Network Activation in the Epigenesis of Developmental Psychopathology. In D. Cicchetti & E. Walker (eds). *Neuro-*

*developmental mechanisms in the genesis and epigenesis of psychopathology*. Cambridge University Press: New York.

## JOURNAL ARTICLES PUBLISHED

(@ DENOTES PUBLICATIONS THAT HAVE BEEN CITED OVER 50 TIMES; \*MENTORED STUDENT-LED).

14. \*White, S. F., Lee, Y., Phan, J. M., Moody, S. N., & Shirtcliff, E. A. (2019). Putting the flight in “fight-or-flight”: Testosterone reactivity to skydiving is modulated by autonomic activation. *Biological psychology*, *143*, 93-102.
15. \*Phan, J. M., R. Dismukes, A., Barnett, N., Miocevic, O., L. Ruttle, P., & Shirtcliff, E. A. (2019). Adrenocortical and autonomic attunement between romantic partners in emerging adulthood. *Stress*, *22*(4), 461-471. Impact factor = 3.25
16. Ladouceur, C. D., Kerestes, R., Schlund, M. W., Shirtcliff, E. A., Lee, Y., & Dahl, R. E. (2019). Neural systems underlying reward cue processing in early adolescence: The role of puberty and pubertal hormones. *Psychoneuroendocrinology*, *102*, 281-291. Impact factor=4.99.
17. Aylwin, C. F., Toro, C. A., Shirtcliff, E., & Lomniczi, A. (2019). Emerging genetic and epigenetic mechanisms underlying pubertal maturation in adolescence. *Journal of Research on Adolescence*, *29*(1), 54-79. *Special Issue on Puberty*.
18. Deardorff, J., Hoyt, L. T., Carter, R., & Shirtcliff, E. A. (2019). Next steps in puberty research: Broadening the lens toward understudied populations. *Journal of Research on Adolescence*, *29*(1), 133-154. *Special Issue on Puberty*.
19. \*Wang, W., Moody, S. N., Kiesner, J., Appiani, A. T., Robertson, O. C., & Shirtcliff, E. A. (2019). Assay validation of hair androgens across the menstrual cycle. *Psychoneuroendocrinology*, *101*, 175-181. Impact factor=4.99.
20. Gonzales, N. A., Johnson, M., Shirtcliff, E. A., Tein, J. Y., Eskenazi, B., & Deardorff, J. (2018). The role of bicultural adaptation, familism, and family conflict in Mexican American adolescents’ cortisol reactivity. *Development and psychopathology*, *30*(5), 1-17. *Invited Contribution to a Special Issue on Cultural Development and Psychopathology*. Impact factor=4.36
21. \*Dismukes, A., Shirtcliff, E., Jones, C. W., Zeanah, C., Theall, K., & Drury, S. (2018). The development of the cortisol response to dyadic stressors in Black and White infants. *Development and psychopathology*, *30*(5), 1995-2008. *Invited Contribution to a Special Issue on Cultural Development and Psychopathology*. Impact factor=4.36
22. Vijayakumar, N., Shirtcliff, E.A., Pfeifer, J., Op de Macks, Z. (2018). Puberty and the human brain: insights into adolescent development. *Neuroscience and Biobehavioral Reviews*, *92*, 417-436. Impact factor = 9.44
23. Obasi, E. M., Tackett, J. L., Shirtcliff, E. A., & Cavanagh, L. (2017). The Effects of Alcohol and Cigarette Consumption on Dehydroepiandrosterone (DHEA) in Rural African Americans. *Journal of Black Psychology*, *43*(6), 588-607. Impact factor = 1.55
24. \*Phan, J.M., Schneider, E., Peres, J.C., Miocevic, O., Meyer, V., Shirtcliff, E.A. (2017). Social Evaluative Threat with Verbal Performance Feedback Alters Neuroendocrine Response to Stress. *Hormones and Behavior*, *96*, 104-115. Impact factor = 3.34
25. Black, S. R., Lerner, M. D., Shirtcliff, E. A., & Klein, D. N. Patterns of neuroendocrine coupling in 9-year-old children: Effects of sex, body-mass index, and life stress. (2017). *Biological Psychology*, *132*, 252-259. Impact factor = 3.4

26. \*Johnson, M., Vitacco, M.J., **Shirtcliff**, E.A. (2017). Callous-Unemotional Traits and Early Life Stress Predict Treatment Effects on Stress and Sex Hormone Functioning in Incarcerated Male Adolescents. *Stress*, 1-9. Impact factor = 3.252
27. \*Miocevic, O., Cole, C.R., Laughlin, M.J., Buck, R.L., Slowey, P.D., **Shirtcliff**, E.A. (2017). Quantitative Lateral Flow Assays for Salivary Biomarker Assessment: A Review. *Frontiers in Public Health*, 5, 133.
28. Obasi, E. M., **Shirtcliff**, E. A., Cavanagh, L., Ratliff, K. L., Pittman, D. M., & Brooks, J. J. (2017). Hypothalamic-Pituitary-Adrenal Reactivity to Acute Stress: an Investigation into the Roles of Perceived Stress and Family Resources. *Prevention Science*, 18(8), 923-931. Impact factor = 2.57
29. Johnson, M. M., Deardorff, J., Parra, K., Alkon, A., Eskenazi, B., & **Shirtcliff**, E. (2017). A Modified Trier Social Stress Test for Vulnerable Mexican American Adolescents. *Journal of visualized experiments: JoVE*, (125). Impact factor = 1.33
30. **Shirtcliff**, E. A., Skinner, M. L., Obasi, E. M., & Haggerty, K. P. (2017). Positive parenting predicts cortisol functioning six years later in young adults. *Developmental science*, 20(6), e12461. Impact factor = 3.808
31. \*Lockhart, P. A., Martin, P., Johnson, M. A., **Shirtcliff**, E.A., & Poon, L. W. (2017). The Relationship of Fertility, Lifestyle, and Longevity Among Women. *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences*, 72(6), 754-759. Impact factor = 5.42
32. Theall, K.P., **Shirtcliff**, E.A., Dismukes, A.R., Wallace, M., Drury, S. (2017). Association between neighborhood violence and biological stress in children. *JAMA Pediatrics*, 171(1), 53-60. doi:10.1001/jamapediatrics.2016.2321. impact factor = 10.25
33. Short, S.J., Stalder, T., Marceau, K.P., Entringer, S., Moog, N.K., **Shirtcliff**, E.A., Wadhwa, P.D., Buss, C. (2016). Correspondence between hair cortisol concentrations and 30-day integrated daily salivary and weekly urinary cortisol measures. *Psychoneuroendocrinology*, 71, 12-18. Impact factor=4.99
34. \*Dismukes, A.R., Meyer, V.J., **Shirtcliff**, E.A., Theall, K., Esteves, K.C., Drury, S.S. (2016). Diurnal and stress-reactive dehydroepiandrosterone levels and telomere length in youth. *Endocrine Connections*, 5(3), 107-114. Impact factor=3.04.
35. \*Marceau, K., Zahn-Waxler, C., **Shirtcliff**, E.A., Schreiber, J.E., Hastings, P.D., Klimes-Dougan, B. (2015). Adolescents' Mothers', and Fathers' gendered coping strategies during conflict: Youth and parent influences on conflict resolution. *Development and Psychopathology*, 27, 1025-1044. *Special Section Article on The Influential Child*. Impact factor=4.36.
36. Obasi, E. M., **Shirtcliff**, E.A., Brody, G.H., MacKillop, J., Pittman, D.M., Cavanagh, L., Philibert, R. (2015). The relationship between alcohol consumption, perceived stress, and CRHR1 genotype on the hypothalamic-pituitary-adrenal axis in rural African Americans. *Frontiers in Psychology*, 6, 832. Impact factor=2.32.
37. Suleiman, A.B., Johnson, M., **Shirtcliff**, E.A., Galvan, A. (2015). Navigating the neuroscience: What do we really know about sex, romance and adolescent brain development? *Journal of School Health*, 85(8), 567-574. Impact factor=1.43.
38. **Shirtcliff**, E.A., Dismukes, A.R., Marceau, K.P., Ruttle, P., Simmons, J., Han, G. (2015). A dual-axis approach to understanding neuroendocrine development. *Developmental Psychobiology*, 57(6), 643-653. *Introduction to the Special Issue on A dual-axis approach to understanding neuroendocrine development*. Impact factor=2.49.

39. \*Dismukes, A.R., **Shirtcliff**, E.A., Hanson, J.L., Pollak, S.D. (2015). Context influences the interplay of endocrine axes across the day. *Developmental Psychobiology*, 57(6), 731-741. *Special Issue on A dual-axis approach to understanding neuroendocrine development*. Impact factor=2.49.
40. \*Dismukes, A.R., Johnson, M.M., Vitacco, M.J., **Shirtcliff**, E.A. (2015). Coupling of the HPA and HPG axes in the context of early life adversity in incarcerated male adolescents. *Developmental Psychobiology*, 57(6), 705-708. *Special Issue on A dual-axis approach to understanding neuroendocrine development*. Impact factor=2.49.
41. \*Marceau, K.P., Ruttle, P.L., **Shirtcliff**, E.A., Susman, E.J., Essex, M.J. (2015). Developmental and contextual considerations for adrenal and gonadal hormone functioning during adolescence: Implications for adolescent mood and behavior. *Developmental Psychobiology*, 57(6), 742-768. *Special Issue on A dual-axis approach to understanding neuroendocrine development*. Impact factor=2.49.
42. Bobadilla, L., Asberg, K., Johnson, M., **Shirtcliff**, E.A. (2015). Experiences in the Military May Impact Dual-Axis Neuroendocrine Processes in Veterans. *Developmental Psychobiology*, 57(6), 719-730. *Special Issue on A dual-axis approach to understanding neuroendocrine development*. Impact factor=2.49.
43. \*Marceau, K.P., Ruttle, P.L., **Shirtcliff**, E.A., Hastings, P.D., Klimes-Dougan, B., Zahn-Waxler, C. (2015). Within-person coupling of changes in cortisol, testosterone, and DHEA across the day. *Developmental Psychobiology*, 57(6), 654-669. *Special Issue on A dual-axis approach to understanding neuroendocrine development*. Impact factor=2.49.
44. \*Ruttle, P. L., **Shirtcliff**, E.A., Armstrong, J.M., Klein, M.H., Essex, M.J. (2015). Neuroendocrine Coupling across Adolescence and the Longitudinal Influence of Early Life Stress. *Developmental Psychobiology*, 57(6), 688-704. *Special Issue on A dual-axis approach to understanding neuroendocrine development*. Impact factor=2.49.
45. Van Hulle, C.A., Moore, M.N., **Shirtcliff**, E.A., Lemery-Chalfant, K., Goldsmith, H.H. (2015). Genetic and Environmental Contributions to Covariation Between DHEA and testosterone in Adolescent Twins. *Behavior Genetics*, 45(3), 324-340. *Special Issue Article the Gene-Hormone Interplay*. Impact factor=2.04.
46. Nederhof, E., Marceau, K.P., **Shirtcliff**, E.A., Hastings, P.D., Oldehinkel, A.J. (2015). Autonomic and adrenocortical interactions predict mental health in late adolescents: the TRAILS study. *Journal of Abnormal Child Psychology*, 43(5), 847-861. *Special Issue: Developmental Mechanisms of Internalizing Problems*. Impact factor=3.01.
47. \*Johnson, M. M., Mikolajewski, A., **Shirtcliff**, E. A., Eckel, L. A., & Taylor, J. (2015). The association between affective psychopathic traits, time incarcerated, and cortisol response to psychosocial stress. *Hormones and Behavior*, 72, 20-27. doi:10.1016/j.yhbeh.2015.04.010 Impact factor=3.34.
48. \*Meyer, V.J., Lee, Y., Böttger, C., Leonbacher, U., Allison, A.L., **Shirtcliff**, E.A. (2015). Experience, cortisol reactivity, and the coordination of emotional responses to skydiving. *Frontiers in Human Neuroscience*, 9, 1-8. Impact factor=3.63.
49. \*Wren, M.E., **Shirtcliff**, E.A., Drury, S.S. (2015). Not All Biofluids are Created Equal - Chewing Over Salivary Diagnostics and the Epigenome. *Clinical Therapeutics*, 37(3), 529-539. *Special Issue Article from the North American Saliva Symposium*. Impact factor=2.95.
50. \*Peres, J.C., Rouquette, J.L., Miocevic, O., Warner, M.C., Slowey, P.D. **Shirtcliff**, E.A. (2015). Novel Techniques for Augmenting Saliva Collection: Bacon Rules and Lozenge



- Drools. *Clinical Therapeutics*, 37(3), 515-522. *Special Issue Article from the North American Saliva Symposium*. Impact factor=2.95.
51. **Shirtcliff**, E.A., Buck, R.L., Laughlin, M., Hart, T., Cole, C.R., Slowey, P.D. (2015). Salivary cortisol results obtainable within minutes of sample collection correspond with traditional immunoassays. *Clinical Therapeutics*, 37(3), 505-514. *Special Issue Article from the North American Saliva Symposium*. Impact factor=2.95.
  52. ∂ Hanson, J.L., Nacewicz, B.M., Sutterer, M.J., Cayo, A.A., Schaefer, S. M., Rudolph, K.D., **Shirtcliff**, E.A., Pollak, S.D., Davidson, R.J. (2015). Behavior problems after Early Life Stress: Contributions of the Hippocampus and Amygdala. *Biological Psychiatry*, 77 (4), 314-323. *Special Issue Article: Early Life Stress, Epigenetics, and Resilience*. Impact factor=11.41.
  53. ∂ Drury, S., Mabile, E., Brett, Z., Esteves, K., Jones, E., **Shirtcliff**, E.A., Theall, K. (2014). The Association of Telomere Length with Family Violence and Disruption. *Pediatrics*, 134(1), e128-e137. Impact factor=5.71.
  54. Short, S.J., Lubach, G.R., **Shirtcliff**, E.A., Styner, M.A., Gilmore, J. H., Coe, C.L. (2014). Population variation in behavioral inhibition and neuroendocrine activity is associated with hemispheric structure in young rhesus monkeys. *Psychoneuroendocrinology*, 47, 56-67. Impact factor=4.99.
  55. Drury, S. S., **Shirtcliff**, E.A., Shachet, A., Phan, J., Mabile, E., Brett, Z.H., Gaikwad, S., Wren, M., Esteves, K., Theall, K.P. (2014). Growing up or growing old? Cellular aging linked with testosterone reactivity to stress in youth. *The American Journal of the Medical Sciences*, 348(2), 92-100. Impact factor=1.20.
  56. \*Johnson, M.M., Caron, K.M., Mikolajewski, A.J., **Shirtcliff**, E.A., Eckel, L.A., Taylor, J. (2014). Psychopathic Traits, Empathy, and Aggression are Differentially Related to Cortisol Awakening Response. *Journal of Psychopathology and Behavioral Assessment*, 36, 380-388. Impact factor=1.79.
  57. \*Johnson, M.M., Dismukes, A.R., Vitacco, M.J., Brieman, C., Fleury, D., **Shirtcliff**, E.A. (2014). Psychopathy's influence on the coupling between Hypothalamic-Pituitary-Adrenal and –Gonadal Axes among incarcerated adolescents. *Developmental Psychobiology*, 56(3), 448-458. Impact factor=3.16.
  58. \*Gostisha, A., Vitacco, M.J., Dismukes, A.R., Brieman, C., Merz, J., **Shirtcliff**, E.A., (2014). Beyond physiological hypoarousal: The role of life stress and callous-unemotional traits in incarcerated adolescent males, *Hormones and Behavior*, 65, 469-479. Impact factor=3.34.
  59. **Shirtcliff**, E.A., Peres, J.C., Dismukes, A.R., Lee, Y., Phan, J.M. (2014). Riding the Physiological Roller Coaster: Adaptive Significance of Cortisol Stress Reactivity to Social Contexts. *Journal of Personality Disorders*, 28(1), 65-76. *Special Issue on A Developmental Psychopathology Perspective on Personality Disorder*. Impact factor=3.16.
  60. \*Marceau, K.P., **Shirtcliff**, E.A., Hastings, P.D., Klimes-Dougan, B., Zahn-Waxler, C., Dorn, L. Susman, E. (2014). Within-adolescent coupled changes in cortisol with DHEA and testosterone in response to three stressors. *Psychoneuroendocrinology*, 41, 33-45. Impact factor=4.99.
  61. ∂ Theall, K.P., Brett, Z.H., **Shirtcliff**, E.A., Dunn, E.C., Drury, S.S. (2013). Neighborhood disorder and telomeres: Connecting children's exposure to community level stress and cellular response. *Social Science and Medicine*, 85, 50-58. Impact factor=2.73.

62. **Shirtcliff**, E.A., Phan, J.M., Lubach, G., Crispen, H., Coe, C (2013). Stability of Maternal Care across Siblings after Disturbed and Challenged Pregnancies in Rhesus Macaques. *Developmental Psychology*, 49(11), 2005-2016. Impact factor=3.23.
63. ∂ Theall, K.P., Drury, S., **Shirtcliff**, E.A. (2012). Cumulative neighborhood risk and allostatic load in adolescents, *American Journal of Epidemiology*, 176, S164-174. *Special Issue Article*, 100<sup>th</sup> Anniversary issue. Impact factor=5.23.
64. ∂ Hanson, J. L., Chung, M. K., Avants, B. B., Rudolph, K. D., **Shirtcliff**, E. A., Gee, J. C., Davidson, R.J., Pollak, S. D. (2012). Structural variations in prefrontal cortex mediate the relationship between early childhood stress and spatial working memory. *Journal of Neuroscience*, 32(23), 7917-7925. Impact factor=5.97.
65. ∂ Van Hulle, C.A., **Shirtcliff**, E.A., Lemery-Chalfant, K. Goldsmith, H.H. (2012). Genetic and Environmental Influences on Individual Differences in Cortisol Level and Circadian Rhythm in Middle Childhood. *Hormones and Behavior*, 62(1), 36-42. Impact factor=3.34.
66. \*Allison, A.L., Peres, J.C., Böttger, C., Leonbacher, U., Hastings, P.D., **Shirtcliff**, E.A. (2012). Fight, flight, or fall: Autonomic Nervous System Reactivity During Skydiving. *Personality and Individual Differences*, 53(3), 218-223. Impact factor=1.97.
67. ∂ **Shirtcliff**, E. A., Allison, A.L., Armstrong, J.M., Slattery, M.J., Kalin, N.H., Essex, M.J. (2012). Longitudinal Stability and Developmental Properties of Salivary Cortisol Levels and Diurnal Rhythms in Early Adolescence. *Developmental Psychobiology*, 54(5), 493-502. Impact factor=2.49.
68. ∂ Loevinger, B., **Shirtcliff**, E.A., Alonso, C., Muller, D., Coe, C.L. (2012). Delineating Clinically Relevant Subgroups of Fibromyalgia Patients Via Cluster Analysis of Psychological and Biomedical Profiles. *Clinical Rheumatology*, 31, 677-685. Impact factor=2.04.
69. ∂ Skinner, M., **Shirtcliff**, E.A., Haggerty, K., Coe, C.L., Catalano, R. F. (2011). Allostatic model facilitates understanding race differences in the diurnal cortisol rhythm. *Development and Psychopathology*, 23, 1165-1184. *Special Issue article, Allostatic Load*. Impact factor=4.36.
70. ∂ Essex, M. J., **Shirtcliff**, E. A., Burk, L., Armstrong, J.M., Klein, M.H., Slattery, M.J., Kalin, N.H., (2011). Influence of early life stress on later HPA functioning and mental health symptoms: A study of the allostatic process from childhood into adolescence. *Development and Psychopathology*, 23, 1039-1058. *Special Issue article, Allostatic Load*. Impact factor=4.36.
71. ∂ Hastings, P.D. **Shirtcliff**, E.A., Klimes-Dougan, B., Allison, A.L., DeRose, L., Usher, B., Zahn-Waxler, C. (2011). Allostatic and the development of internalizing and externalizing problems: Changing relations with physiological systems across adolescence. *Development and Psychopathology*, 23, 1147-1163. *Special Issue article, Allostatic Load*. Impact factor=4.36.
72. \*Ruttle, P.L., **Shirtcliff**, E.A., Serbin, L.A., Stack, D.M., Schwartzman, A.E., Ledingham, J.E. (2011) Adrenocortical attunement in mother-child dyads: Importance of situational and behavioral characteristics. *Biological Psychology*, 88, 104-111. Impact factor=3.40.
73. ∂ Del Giudice, M., Ellis, B.J., **Shirtcliff**, E.A. (2011). The Adaptive Calibration Model of stress responsivity. *Neuroscience and Biobehavioral Reviews*, 35, 1562-1592. Impact factor=9.44.
74. \*∂ Ruttle, P.L., **Shirtcliff**, E.A., Serbin, L.A., Ben-Dat Fisher, D., Schwartzman, A.E. (2011). Disentangling psychobiological mechanisms underlying internalizing and

- externalizing behaviors in youth: Longitudinal and concurrent associations with cortisol. *Hormones and Behavior*, 59, 123-132. Impact factor=3.34.
75. ∂ Ellis, B.J., **Shirtcliff**, E.A., Boyce, W.T., Deardorff, J., Essex, M.J. (2011). Quality of early family relationships and the timing and tempo of puberty: Effects depend on biological sensitivity to context. *Development and Psychopathology*, 23, 85-99. *Special section article, Differential susceptibility to the environment: An evolutionary-neurodevelopmental theory*. Impact factor=4.36.
  76. Coe, C.L., Lubach, G.R., Crispin, H.R., **Shirtcliff**, E.A., Schneider, M.L. (2010). Challenges to maternal wellbeing during pregnancy impact temperament, attention, and neuromotor responses in the infant monkey. *Developmental Psychobiology*, 52, 625-637. Impact factor=2.49.
  77. ∂ Hanson, J.L., Chung, M.K., Avants, B.B., **Shirtcliff**, E.A., Gee, J.C., Davidson, R.J., & Pollak, S.D. (2010). Early stress is associated with alterations in the orbitofrontal cortex: A tensor-based morphometry investigation of brain structure and behavioral risk. *Journal of Neuroscience*, 30 (22), 7466-7472. Impact factor=5.97.
  78. ∂ Entringer, S., Buss, C., Camarck, **Shirtcliff**, E.A., Federenko, I.S., deMet, Sandman, C.A, Wadhwa, P.D. (2010). Attenuation of maternal psychophysiological stress responses and the maternal cortisol awakening response over the course of human pregnancy. *Stress*, 13, 258-68. Impact factor=3.25.
  79. ∂ Natsuaki, M. N., Klimes-Dougan, B., Ge, X., **Shirtcliff**, E. A., Hastings, P. D., Zahn-Waxler, C. (2009). Early Pubertal Maturation and Internalizing Problems in Adolescence: Sex Differences in the Role of Cortisol Reactivity to Interpersonal Stress. *Journal of Clinical Child and Adolescent Psychology*, 38, 513-524. Impact factor=5.01.
  80. ∂\*Eatough, E. M., **Shirtcliff**, E. A., Hanson, J. L., Pollak, S. D. (2009). Hormonal Reactivity to MRI Scanning in Adolescents. *Psychoneuroendocrinology*, 34, 1242-1246. Impact factor=4.99.
  81. ∂ **Shirtcliff**, E.A., Vitacco, M.J., Graf, A., Gostisha, A., Merz, J.L., Zahn-Waxler, C. (2009). Neurobiology of Empathy and Callousness: Implications for the Development of Antisocial Behavior. *Behavioral Sciences and the Law*, 27, 1-35. Impact factor=1.65.
  82. ∂ **Shirtcliff**, E.A., Coe, C.L., Pollak, S.D. (2009). Early Childhood Stress is Associated with Elevated Antibody Levels to Herpes Simplex Virus Type 1. *Proceedings of the National Academy of Sciences*, 106 (8), 2963-2967. Impact factor=9.50.
  83. ∂ **Shirtcliff**, E. A., Dahl, R. E., Pollak, S. D., (2009). Pubertal Development: Correspondence between hormonal and physical development. *Child Development*, 80, 327–337. Impact factor=3.78.
  84. ∂ **Shirtcliff**, E. A., Essex, M. J. (2008). Concurrent and Longitudinal Associations of Basal and Diurnal Cortisol with Mental Health Symptoms in Early Adolescence. *Developmental Psychobiology*, 50, 691-703. Impact factor=2.49.
  85. ∂ Wismer-Fries, A., **Shirtcliff**, E. A., Pollak, S. D., (2008). Neuroendocrine dysregulation following early social deprivation in children, *Developmental Psychobiology*, 50, 588-599. Impact factor=2.49.
  86. ∂ Booth, A., Granger, D. A., **Shirtcliff**, E. A., (2008). Gender- and Age-related Differences in the Association between Social Relationship Quality and Trait-levels of Salivary Cortisol, *Journal of Research on Adolescence*, 18, 239–260. Impact factor=1.99.
  87. Brown, G., Keller, A, McGarvery, E., **Shirtcliff**, E. A., Flavin, K. (2008). Cortisol, Dehydroepiandrosterone, and Testosterone Interrelationships in Healthy Young Males:

- Implications for Studies of Aggressive Behavior, *Psychiatry Research*, 159, 67-76.  
Impact factor=2.68.
88. ∂ Zahn-Waxler, C., **Shirtcliff**, E. A., Marceau, K. (2008) Disorders of Childhood and Adolescence: Gender and Psychopathology, *Annual Review of Clinical Psychology*, 4, 275-303. Impact factor=12.92.
  89. ∂ **Shirtcliff**, E. A., Zahn-Waxler, C., Klimes-Dougan, B., & Slattery, M. J. (2007). Salivary dehydroepiandrosterone responsiveness to social challenge in adolescents with internalizing problems, *The Journal of Child Psychology and Psychiatry*, 48(6), 580-591. Impact factor=6.62.
  90. ∂ Coe, C. L., Lubach, G., **Shirtcliff**, E. A., (2007). Maternal stress during pregnancy increases risk for iron deficient infants impacting innate immunity, *Pediatric Research*, 61(5), 520-524. Impact factor=3.12.
  91. ∂ Schreiber, J. E., **Shirtcliff**, E. A., Van Hulle, C., Lemery, K. S., Klein, M., Kalin, N., Essex, M. J., Goldsmith, H. H. (2006). Environmental influences on family similarity in afternoon cortisol levels: Twin and parent-offspring designs, *Psychoneuroendocrinology*, 31, 1131-113. Impact factor=4.99.
  92. ∂ **Shirtcliff**, E. A., Granger, D. A., Booth, A., & Johnson, D. (2005). Low salivary cortisol levels and externalizing behavior problems in youth. *Development and Psychopathology*, 17, 167-184. Impact factor=4.36.
  93. Schleicher, H., Alonso, C., **Shirtcliff**, E. A., Muller, D., Loevinger, B. L., Coe, C. L. (2005). In the face of pain: The benefits of psychological well-being in women with fibromyalgia. *Psychotherapy and Psychosomatics*, 74, 231-239. Impact factor=7.63.
  94. ∂ Granger, D. A., **Shirtcliff**, E. A., Booth, A., Kivlighan, K. T. & Schwartz, E. B. (2004). The "trouble" with salivary testosterone. *Psychoneuroendocrinology*, 29, 1229-1240. Impact factor=4.99.
  95. ∂ Kivlighan, K. T., Granger, D. A., Schwartz, E. B., Nelson, V., Curran, M., & **Shirtcliff**, E. A. (2004). Quantifying blood leakage into the oral mucosa and its effects on the measurement of cortisol, dehydroepiandrosterone, and testosterone in saliva. *Hormones and Behavior*, 46(1), 39-46. Impact factor=3.34.
  96. Coe, C.L., & **Shirtcliff**, E. A. (2004). Growth trajectory established by birth affects age of first delivery in female monkeys. *Pediatric Research*, 55, 914-920. Impact factor=3.12.
  97. ∂ Granger, D. A., **Shirtcliff**, E. A., Zahn-Waxler, C., Usher, B., Klimes-Dougan, B., & Hastings, P. (2003). Salivary testosterone diurnal variation and psychopathology in adolescent males and females: individual differences and developmental effects. *Development and Psychopathology*, 15(2), 431-449. Impact factor=4.36.
  98. **Shirtcliff**, E. A., & Marrocco, R. T. (2003). Salivary cotinine levels in human tobacco smokers predict the attentional validity effect size during smoking abstinence. *Psychopharmacology*, 166, 11 -18. Impact factor=3.88.
  99. ∂ Bateup, H.S., Booth, A., **Shirtcliff**, E., & Granger, D. A. (2002). Testosterone, cortisol and women's competition. *Evolution and Human Behavior*, 23, 181-192. Impact factor=3.62.
  100. ∂ **Shirtcliff**, E. A., Granger, D. A., & Likos, A. (2002). Gender differences in the validity of testosterone measured in saliva by immunoassay. *Hormones and Behavior*, 42, 62 – 69. Impact factor=3.34.
  101. ∂ **Shirtcliff**, E. A., Granger, D. A., Schwartz, E. B., & Curran, M. J., (2001). Use of salivary biomarkers in biobehavioral research: Cotton-based sample collection methods can interfere with salivary immunoassay results. *Psychoneuroendocrinology*, 26, 165 - 173. Impact factor=4.99.



102. **Shirtcliff**, E. A., Reavis, R., Overman, W. H., & Granger, D. A. (2001) Measurement of Gonadal Hormones in Dried Blood Spots Versus Serum: Verification of Menstrual Cycle Phase. *Hormones and Behavior*, 39(4), 258- 266. Impact factor=3.34.
103. **Shirtcliff**, E. A., Granger, D. A., Schwartz, E. B., Curran, M. J., Booth, A., & Overman, W. H. (2000). Assessing estradiol in biobehavioral studies using saliva and blood spots: Simple radioimmunoassay protocols, reliability, and comparative validity. *Hormones and Behavior*, 38, 137 – 147. Impact factor=3.34.

#### **REFEREED MONOGRAPH**

104. **Shirtcliff**, E. A., (2005). Neuroendocrine and neural contributions to pubertal development, normative adolescent development and affect-related behavior problems. Background Paper for the *Workshop on the Science of Adolescence Health and Development*, National Academy of Science, <http://www.bocvf.org/090805.html>

#### **REFEREED CONFERENCE PROCEEDINGS**

105. \*Finseth, T., Barnett, N. **Shirtcliff**, E. A., Dorneich, M., & Keren, N. (2018). Stress Inducing Demands In Virtual Environments. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*. Santa Monica, CA: HFES.

#### **MANUSCRIPTS UNDER REVIEW (SELECT LIST)**

- \*White, S.F., Lee, Y., Schlund, M.W., **Shirtcliff**, E.A., Ladouceur, C.D. (under review). Testosterone Reactivity is Associated with Reduced Neural Response to Reward in Early Adolescence.
- Johnson, M., **Shirtcliff**, E.A., Gonzales, N., Dahl, R., Eskenazi, B., Deardorff, J. (under review). Early Age of Sex Initiation is Associated with Heightened Cortisol and Testosterone Reactivity to Stress in Mexican American Adolescents.
- Rawls, E., Miskovic, V., Moody, S., Lee, Y., **Shirtcliff**, E.A., Lamm, C. (under review). Feedback-Related Negativity and Frontal Midline Theta Reflect Dissociable Processing of Salience and Unexpectedness During Reinforcement.
- Skinner, M., **Shirtcliff**, E.A., Haggerty, K.P. (under review) Alcohol and Cannabis Use in Adolescence and Young Adulthood Have Different Relationships to Diurnal Cortisol Over Time.
- Shirtcliff**, E.A., Hanson, J.L., Phan, J.M., Pollak, S.D. (under review). Stress sensitivity in post-institutionalized adolescents influenced by severity of neglect and context.
- Shirtcliff**, E.A, Hanson, J.L., Rudolph, R., Strang, N., Pollak, S.D. (under review). Cortisol's Diurnal Rhythm Indexes the Physiological Impact of Child Maltreatment in Adolescents.

#### **MANUSCRIPTS IN PREPARATION (SELECT LIST)**

- \*Verret, B., Allison, A.L., Peres, J.C., Vaughn, J.C., **Shirtcliff**, E.A. (revise and resubmit). Gender differences in autonomic nervous system reactivity to stress.
- \*Finseth, T., Barnett, N., **Shirtcliff**, E.A., Dorneich, M., Keren, N. (in preparation). Stress inducing demands in virtual environments.
- \*Böttger, C., **Shirtcliff**, E.A., Curtin, J., Skinner, M. (in preparation). Does alcohol consumption interfere with measurement of stress-responsive salivary hormones?

#### **PARTICIPATION AT PROFESSIONAL MEETINGS**



## (\* DENOTES MENTORED STUDENT-LED PRESENTATIONS)

## (€ DENOTES A PAPER SUBSEQUENTLY PUBLISHED)

1. Deardorff, J., Reeves, J., Kogut, K., Shirtcliff, E.A., Alkon, A., Dahl, R., Eskenazi, B. (2019). Early life exposures and pubertal trajectories among Mexican American boys and girls. *Presented at the Society for Research on Child Development*, Baltimore, MD.
2. Gonzales, N., Johnson, M., Shirtcliff, E.A., Yunn-Tien, J., Eskenazi, B., Deardorff, J. (2019). The role of bicultural adaptation, familism, and family conflict in Mexican American adolescents' cortisol reactivity. *Presented at the Society for Research on Child Development*, Baltimore, MD.
3. \*Lee, Y., Ladouceur, C., Shirtcliff, E.A. (2018). Association Between Striatal Activation to Reward Cues and Testosterone Reactivity in Healthy Adolescents. *Poster Presented at the International Society for Psychoneuroendocrinology*, Irvine, CA.
4. \*White, S.F., Lee, Y., Moody, S.N., Shirtcliff, E.A. (2018) Putting the Flight in
5. "Fight-or-Flight": Testosterone reactivity to skydiving is modulated by Autonomic Activation. *Poster presented at the International Society for Psychoneuroendocrinology*, Irvine, CA.
6. \*Wang, W., Moody, S.N., Lee, Y., Kiesner, J., Shirtcliff, E.A. (2018) Validation of Hair Estradiol Immuno-Assays Across the Menstrual Cycle in Emerging Adults. *Poster Presented at the International Society for Psychoneuroendocrinology*, Irvine, CA.
7. Johnson, M., Miocevic, O., Vitacco, M., Shirtcliff, E.A. (2018). Sex Differences in Diurnal Cortisol, Testosterone and DHEA Functioning in Incarcerated Adolescents. *Poster Presented at the International Society for Psychoneuroendocrinology*, Irvine, CA.
8. \*Phan, J., Drury, S., Theall, K., Shirtcliff, E.A. (2018) Maternal Experiences of Discrimination Moderates Dual Axis Coupling in African American Youth. *Poster Presented at the International Society for Psychoneuroendocrinology*, Irvine, CA.
9. \*Lee, Y., Willette, A., Marceau, K., Shirtcliff, E.A. (2018). Association Between Brain Thickness and Genomic Propensity for Late Puberty in Youth. *Poster Presented at the International Society for Psychoneuroendocrinology*, Irvine, CA.
10. Johnson, M., Shirtcliff, E.A., Eskenazi, B., Deardorff, J. (2018). The Role of Bicultural Adaptation in Mexican American Adolescents' Cortisol Reactivity. *Poster Presented at the International Society for Psychoneuroendocrinology*, Irvine, CA.
11. \*Stiens, L.S., Barnett, N., Finseth, T., Tountas, A., Keren, N., Shirtcliff, E.A. (2018) Utility of Virtual Reality for Physiological Stress Responsivity. *Poster Presented at the Wisconsin Symposium on Emotion*, Madison WI, the *Undergraduate Research Symposium*, Ames IA, the *Honors Poster Presentation*, Ames IA, and the *International Society for Psychoneuroendocrinology*, Irvine, CA.
12. \*Phan, J.M., Shirtcliff, E.A., Theall, K., Drury, S. (2018) Dual axes coupling in African American Youth with experiences of discrimination. *Wisconsin Symposium on Emotion*, Madison WI.
13. \*Phan, J.M., Skinner, M., Shirtcliff, E.A., Moody, S.N., Brindle, E., Catalano, R., Haggerty, K. (2018). Gender moderates relationship between salivary immune markers and exposure to violence. *Poster Presented at the Society for Research on Adolescence*, Minneapolis, MN.
14. \*Wang, W., Moody, S., Appiani, A., Kiesner, J., Robertson, O., Stiens, L., Shirtcliff, E. A. (2018, April). Validation of Hair Sex Steroid Assays Across the Menstrual Cycle in Emerging Adults. *Presented at Society for Research on Adolescence Biennial Meeting*, Minneapolis, MN.

15. \*Wang, W., Shirtcliff, E. A., Hastings, P., Marceau, K., Zahn-Waxler, C., Klimes-Dougan, B. (2018, April). Adolescent peer emotion socialization: The role of parent emotion socialization and autonomic arousal. *Poster presented at Society for Research on Adolescence Biennial Meeting*, Minneapolis, MN.
16. Vijayakumar, N., Mills, K., Flournoy, J.C., Mobasser, A., Cheng, T., Flannery, J.E., Byrne, M., Helzer, A.R., Allen, N.B., Shirtcliff, E.A., Pfeifer, J.H. (2018). Methodological considerations for the association between pubertal development and brain structure. *Presented at Society for Research on Adolescence Biennial Meeting*, Minneapolis, MN.
17. Ladouceur, C.D., Petal, H., Shirtcliff, E.A., Binnig, S., Berry, A., Dahl, R. (2018). Adolescents with elevated levels of circulating dehydroepiandrosterone (DHEA) show greater sensitivity to immediate rewards. *Presented at Society for Research on Adolescence Biennial Meeting*, Minneapolis, MN.
18. \*Lee, Y., Shirtcliff, E.A., Binnig, S., Berry, A., Ladouceur, C.D. (2018). Association Between Striatal Activation to Reward Cues and Dehydroepiandrosterone (DHEA) Reactivity in Healthy Adolescents. *Presented at the Society for Research on Adolescence*, Minneapolis, MN.
19. Ladouceur, C., Kerestes, R., Binnig, S., Berry, A., Schlund, M., Shirtcliff, E.A., Dahl, R. (2017). Sex and puberty-specific influences on striatal activation to reward cues in healthy adolescents. *Presented at Society for Research on Child Development*, Austin, TX.
20. \*Phan, J.M., Kroener, J., Peres, J.C., Miocevic, O., Dismukes, A.R., Shirtcliff, E.A. (2017). Physiological Attunement in Emerging Adult Partners during Stress. *Presented at Society for Research on Child Development*, Austin, TX.
21. Stiens, L.S., Tonon Appiani, A. Shirtcliff, E.A. (2017) Effects of Glucose on Cortisol and Implicit Cognition. *Poster Presented at the Undergraduate Research Symposium*, Ames, IA.
22. \*Dismukes, A.R., Shirtcliff, E.A., Allen, N., Byrne, M., Dennison, M., Simmons, J. (2017). Pituitary Volume and Glucocorticoid Receptor Genotype Contribute to the Development of Callous-Unemotional Traits. *Presented at Society for Research on Child Development*, Austin, TX.
23. €\*Johnson, M., Deardorff, J., Eskenazi, B., Parra, K., [Shirtcliff](#), E.A. (2017). Dual Hormone Axis Reactivity to Social Evaluative Threat Among Mexican American Adolescents. *Presented at Society for Research on Child Development*, Austin, TX.
24. \*Dismukes, A.R., [Shirtcliff](#), E.A., Drury, S.S., Humphreys, K., Nelson, C., Fox, N., Zeanah, C. (2017). Reactive DHEA(s) is Associated with Callous Unemotional Traits in Institutionalized Youth. *Presented at Society for Research on Child Development*, Austin, TX.
25. \*Phan, J.M., Kroener, J., Peres, J., Miocevic, O., Barnett, N., & Shirtcliff, E.A. (2016). Social Support from Romantic Partner Moderates Cortisol Stress Response. 5-Minute datablitz presented at the *Connecting Minds in Social Neuroendocrinology and Evolution Pre-conference at Human Behavior and Evolution Society Conference*, Vancouver, Canada.
26. \*Wang, W., Moody, S.N., [Shirtcliff](#), E.A. (2016). Noninvasive hair assay for sex hormones: Preliminary protocol validation. *Poster presented at International*

- Society for Psychoneuroendocrinology*, Miami FL.  
DOI: 10.1016/j.psyneuen.2016.07.119
27. **Shirtcliff**, E.A., Sarafoglou, K., Miocevic, O., Laughlin, M., Cole, C., Buck, R., Slowey, P.D. (2016). Preliminary clinical and research-based results from the first in-human testing of near real-time cortisol assays. *Presented at the North American Saliva Symposium (invited presentation)*, New York, NY.
  28. €\*Miocevic, O., Cole, C.R., Laughlin, M.J., Buck, R.L., Slowey, P.D., **Shirtcliff**, E.A. (2016) Technology for rapid assessment of salivary cortisol demonstrates as reliable alternative to traditional immunoassays. *Poster presented at International Society for Psychoneuroendocrinology*, Miami FL, and at the *North American Saliva Symposium*, New York NY  
DOI: 10.1016/j.psyneuen.2016.07.174
  29. \*Phan, J.M., Wang, W., Kroener, J., Peres, J.C., **Shirtcliff**, E.A. (2016) Social support of romantic partners moderates cortisol response to stress. *Poster presented at the Wisconsin Symposium on Emotion*, Madison WI, and *Presented at the Iowa State Graduate Professional Student Research Conference*, Ames IA and *Human Behavior and Evolution Society*, Vancouver BC, Canada. *WSoE Travel Award Winner, Jenny Phan*.
  30. \*Moody, S., Lee, Y., **Shirtcliff**, E.A., Lamm, C. (2016). Selective visual sensory attenuation and testosterone reactivity during a competitive task. *Poster Presented at the Wisconsin Symposium on Emotion*, Madison WI, and at the *Human Behavior and Evolution Society*, Vancouver BC, Canada.
  31. \*Tountas, A.M., Alkhafaf, F., Michel, J., Moody, S., Lee, Y., **Shirtcliff**, E.A., Lamm, C. (2016) High social competitiveness and N2 activation: An argument for reduced neural resource utilization. *Poster Presented at the Society for Psychophysiological Research*, Minneapolis MN.
  32. Stiens, L.S., Miocevic, O., Shirtcliff, E.A. (2016) Effects of Moderate Exercise on Stress Physiology. *Poster Presented at the HDFS Poster Presentation*, Ames IA.
  33. \*Ellis S.J., Miocevic, O., Bermudez, F.J., Restemayer, A.S., Stiens, L.S., Marcell, A.R., and Shirtcliff, E.A (2016) Cortisol Reactivity to Supportive Group Settings. *Poster Presented at the Undergraduate Research Symposium*, Ames IA.
  34. Heaphy, B., Slowey, P.D., Slowey, C., Cole, C., Laughlin, M.J., Buck, R., Sarafoglou, K., **Shirtcliff**, E.A. (2016). Modern saliva collection devices show excellent serial sample reproducibility. *Presented at the AIT Biomarker Symposium*, Vienna Austria.
  35. \*Dismukes, A.R., **Shirtcliff**, E.A., Theall, K.P., Merrill, L., Hatch, V., Drury, S.S. (2016). Sex and race differences in infant stress responsivity. *Presented at International Conference on Infant Studies*, New Orleans, LA.
  36. **Shirtcliff**, E.A. (2016). Diss'in on dysregulation: Hormonal biomarkers don't rage unless provoked. *Presented at Society for Research on Adolescence*, Baltimore, MD.
  37. \*Dismukes, A.R., **Shirtcliff**, E.A., Theall, K.P., Drury, S. (2016). Individual Differences in Infant Stress Reactivity at Four and Twelve Months of Age. *Presented at the Life History Research Society Meeting*, Amsterdam, Netherlands.
  38. €\*Johnson, M.M., Dismukes, A.R., **Shirtcliff**, E.A., Vitacco, M.J. (2016). Callousness Predicts Flattened Cortisol Functioning Across Time in Incarcerated Adolescents. *Presented at American Psychology-Law Society*, Atlanta, GA.

39. Wiggins, H., Dismukes, A.R., [Shirtcliff](#), E.A., Drury, S.S. (2015). Peak reactivity of the HPA and HPG axes in adolescence. *Poster presented at Tulane University Health Sciences Research Days*, New Orleans, LA.
40. \*Moody, S.N., Bottger, C., Curtin, J., Skinner, M., Moberg, C., [Shirtcliff](#), E.A. (2015). Does alcohol consumption interfere with measurement of stress-responsive salivary hormones? *Poster Presented at the North American Saliva Symposium*, Seattle, WA.
41. \*Lee, Y., Lamm, C., Moody, S.N., [Shirtcliff](#), E.A. (2015) Testosterone Reactivity to a Monetary Incentive Delay (MID) task during Electroencephalography (EEG). *Poster Presented at the North American Saliva Symposium*, Seattle, WA.
42. Skinner, M., Brindle, E., Haggerty, K., [Shirtcliff](#), E. A. (2015) Salivary immune markers related to violence exposure in early adulthood. *Poster Presented at the North American Saliva Symposium*, Seattle, WA.
43. Slowey, P.D., Miocevic, O., Buck, R.L., Laughlin, M.J., [Shirtcliff](#), E.A., Kaur, J., Rai, B. (2015). Salivary Biomarkers for Parkinson's Disease: Statistical Analysis for Panel Selection. *Poster Presented at the North American Saliva Symposium*, Seattle, WA.
44. Buck, R., [Shirtcliff](#), E.A. (2015). Issues with Quantitative Collection of Saliva- it's Not Just "Spit-in-a-Cup". *Presented at the North American Saliva Symposium*, Seattle, WA.
45. €\*Lockhart, P., Martin, P., Johnson, M., [Shirtcliff](#), E., & Poon, L. (2015). The Relationship of Fertility, Lifestyle and Longevity in Women. *Poster Presented at the Gerontological Society of America*, Orlando, FL.
46. \*Lee, Y., Moody, S., [Shirtcliff](#), E.A., Lamm, C. (2015). Testosterone reactivity and feedback related negativity in the MID task. *Poster Presented at Wisconsin Symposium on Emotion*, Madison, WI.
47. €\*Miočević, O., Schneider, E., Meyer, V.J., Phan, J.M., Bliem, H.R., [Shirtcliff](#), E.A. (2015). Testosterone Reactivity to a Modified Trier Social Stress Test: Testosterone as a Stress-Related Biomarker. *Poster Presented at Wisconsin Symposium on Emotion*, Madison, WI.
48. \*Phan, J.M., Meyer, V., Miocevic, O., Schneider, K., & [Shirtcliff](#), E.A. (2015). Cortisol Emotional Response to Social Evaluative Stress. *Poster presented at the Wisconsin Symposium on Emotion*, Madison, WI.
49. \*€Phan, J.M. & [Shirtcliff](#), E.A. (2015). Growing Up or Growing Old? Cellular Aging Linked with Testosterone Reactivity to Stress in Youth. *Poster presented at the Graduate Professional Student Research Conference*, Ames, IA.
50. €\*Marceau, K.P., [Shirtcliff](#), E.A., Klimes-Dougan, B., Zahn-Waxler, C., Hastings, P.D. (2015) Dual axis coupling of HPA-HPG hormones across multiple time-scales serve as biomarkers of positive psychosocial development. *Presented at Society for Research in Child Development*, Philadelphia, PA.
51. €\*Dismukes, A.R., [Shirtcliff](#), E.A., (2015). Temporally and Contextually Dependent Coupling of the HPA and HPG Axes. *Presented at Society for Research in Child Development*, Philadelphia, PA.
52. \*Peres, J.C., Phan, J.M., Dismukes, A., Lee, Y., Mocevic, O., Meyer, V. J. [Shirtcliff](#), E.A. (2015). Negative Affect Dampens Cortisol Reactivity to a Laboratory Stressor. *Poster presented at Society for Research in Child Development*, Philadelphia, PA.



53. \*Phan, J.M., Iturri, F., Miocevic, O., Warner, M., Kroener, J., **Shirtcliff**, E.A. (2015). Social support moderates the association between stress response and cortisol levels in romantic relationships in emerging adults. *Poster presented at Society for Research in Child Development*, Philadelphia, PA.
54. €Nederhof, E., Marceau, K.P., **Shirtcliff**, E.A., Hastings, P., Oldehinkel, A. (2015). Autonomic and Adrenocortical interactions predict mental health in late adolescents: the TRAILS study. *Poster presented at Society of Research in Child Development Conference*, Philadelphia, PA.
55. **Shirtcliff**, E.A., Lamm, C., Lee, Y., Moody, S. Velasquez, M. (2015). A neurobiological view on testosterone responsivity to reward- and challenge. *Presented at the International Convention of Psychological Science (ICPS)*, Amsterdam, The Netherlands.
56. Buck, R.L., Laughlin, M.J., Slowey, P.D., Cole, C., Slowey, C., Hart, T., **Shirtcliff**, E.A. (2014). Quantitative collection/purification and analysis of saliva analytes in a POC setting. *Presented at the American Academy of Clinical Chemistry*, San Diego, CA.
57. €**Shirtcliff**, E.A., Buck, R.L., Laughlin, M., Cole, C.R., Slowey, P.D. (2014). Prospects for Practical Psychological Research Applications for Salivary Innovations. *Presented at the North American Saliva Symposium (invited)*, Boston MA.
58. €\*Peres, J.C., Rouquette, J.L., Miocevic, O., Slowey, P.D., **Shirtcliff**, E.A. (2014). Bringing home the bacon: Techniques for augmenting saliva collection. *Poster presented at the North American Saliva Symposium*, Boston MA and *the Integrative Medicine and Health Conference*, Portland, Oregon 2012. *Student Award presented to Olga Miocevic for Best Poster Presentation*.
59. €**Shirtcliff**, E., Drury, S., Shachet, A., Phan, J.M., Mabile, E., Brett, Z., Gaikwad, S., Wren, M., Esteves, K., Theall, K.P. (2014) Growing up or growing old? Cellular aging linked with testosterone reactivity to stress in youth. *Presented at the American Academy of Child and Adolescent Psychiatry*, San Diego CA.
60. €\*Dismukes, A.R., Johnson, M., Vitacco, M.J., **Shirtcliff**, E.A., Callous-Unemotional Traits and Early Life Stress Impact Testosterone's Diurnal Rhythm. *Poster presented at the International Society for Psychoneuroendocrinology*, Montreal, Canada.
61. \*Phan, J.M., Iturri, F., Kroener, J., & **Shirtcliff**, E.A. (2014). Social Support Trumps Stress: Social Support Moderates the Association between Stress Response and Cortisol Levels in Romantic Relationships. *Poster presented at the International Society for Psychoneuroendocrinology*, Montreal, Canada.
62. €\*Meyer, V.J., Lee, Y., **Shirtcliff**, E.A. (2014). Neuroendocrine reactivity in males and females to the extreme challenge of skydiving. *Poster presented at the International Society for Psychoneuroendocrinology*, Montreal, Canada, and *Poster presented at Society for Neuroscience*, Washington DC.
63. \*Meyer V.J., Lee Y., **Shirtcliff** E.A. (2014). Higher DHEA levels are associated with both positive and negative affect. *Poster presented at Wisconsin Symposium on Emotion*, Madison, WI.
64. \*Velasquez, M. **Shirtcliff**, E.A. (2014). Reciprocal relation between psychophysiological patterns of stress responsivity and sleep. *Poster presented at Posters on the Hill Council for Undergraduate Research*. Washington, DC.



65. \*Warner, M.C., Falah, M., Peres, J.C., Phan, J.M., Shirtcliff, E.A. (2014). Happiness effects on cortisol reactivity to trier social stress test. *Poster Presented at the InnovateUNO, Undergraduate Research Council, New Orleans, LA.*
66. \*Piglia, A.T., Lee, Y., Peres, J.C., Phan, J.M., Shirtcliff, E.A. (2014) Testosterone during an acute challenge and facial features. *Poster Presented at the InnovateUNO, Undergraduate Research Council, New Orleans, LA.*
67. \*Barnett, N. P., Miočević, O., & Shirtcliff, E. A. (2014). Correlation between Supportive Body Language during the TSST and Relationship Satisfaction in Romantic Couples. *Poster Presented at the InnovateUNO, Undergraduate Research Council, New Orleans, LA, and the University of Louisiana System Academic Summit, Lafayette, LA. Won the 6rd place best poster at the UNO.*
68. \*Iturri, F., Phan, J.M., Lee, Y., **Shirtcliff**, E.A. (2014) Romantic partners' compatibility beliefs moderate testosterone reactivity to an acute stressor. *Poster Presented at the InnovateUNO, Undergraduate Research Council, New Orleans, LA, and the University of Louisiana System Academic Summit, Lafayette, LA. Won the 3rd place best poster at the UNO.*
69. €\*Lee, Y., Dismukes, A. R., Vitacco, M.J., **Shirtcliff**, E.A. (2014). Diurnal rhythm of testosterone with callous traits among incarcerated adolescent males. *Poster presented at the Society for Research on Adolescence, Austin, TX.*
70. €**Shirtcliff**, E.A., Skinner, M.L., Haggerty, K. (2014). Race differences in the buffering effect of positive parenting on waking cortisol. *Presented at the Society for Research on Adolescence, Austin, TX.*
71. €\*Dismukes, A., Vitacco, M.J., Johnson, M., Lee, Y., **Shirtcliff**, E.A. (2014). Early Life Stress and Callous-Unemotional Traits Influence Testosterone's Diurnal Rhythm: Implications for Juvenile Justice. *Presented at the American Psychology-Law Society, New Orleans, LA.*
72. €**Shirtcliff**, E.A., Slowey, P.D., Hart, T., Buck, R., Laughlin, M. (2014). Real-time salivary cortisol opens opportunity to understand context. *Presented at the Social Neuroendocrinology Data Blitz, SPSP preconference (invited), Austin, TX.*
73. €\*Meyer, V.J., Lee, Y., **Shirtcliff**, E.A. (2014). Cortisol reactivity to skydiving. *Presented at Social Neuroendocrinology Data Blitz, SPSP preconference, Austin, TX.*
74. €\*Lee, Y., Shrestha, S., **Shirtcliff**, E. (2013) Testosterone reactivity to skydiving. *Presented at the International Neuroscience and Biological Psychiatry Conference: Stress and Behavior (invited), New Orleans, LA.*
75. €**Shirtcliff**, E. (2013) Sex and stress hormone interplay across adolescence: A dual-axis approach. *Invited paper (and Chair) presented at the International Neuroscience and Biological Psychiatry Conference: Stress and Behavior, New Orleans, LA.*
76. €\*Johnson, M., Dismukes, A.R., Vitacco, M.J., **Shirtcliff**, E.A. (2013) Coupling between HPA and HPG hormones among incarcerated adolescents: The influence of callous-unemotional traits. *Presented at the Society for the Scientific Study of Psychopathy, Washington, DC.*
77. \*Iturri, F., Phan, J.M., Dismukes, A., **Shirtcliff**, E.A. (2013). Attachment level modifies testosterone reactivity in a laboratory setting. *Poster Presented at the InnovateUNO, Undergraduate Research Council, New Orleans, LA, and the*

- University of Louisiana System Academic Summit, Monroe, LA. Won the 2<sup>nd</sup> place best poster in the UNO College of Science.*
78. \*Shrestha, S.M., Lee, Y., Peres, J.C., Allison, A.L., **Shirtcliff**, E.A. (2013). Study of testosterone reactivity and its variance in response to skydiving. *Poster Presented at the InnovateUNO, Undergraduate Research Council, New Orleans, LA.*
  79. \*Velasquez, M.A., Phan, J.M., Lee, Y., Allison, A.L., Peres, J.C., **Shirtcliff**, E.A. (2013). Reciprocal relation between psychophysiological patterns of stress responsivity and sleep. *Poster Presented at the InnovateUNO, Undergraduate Research Council, New Orleans, LA, and at University of California Los Angeles Psychology Undergraduate Research Conference (PURC), Los Angeles, CA.*
  80. \*Gaudet, B.M., Schneider, K., Phan, J.M., Peres, J.C., Piglia, A.T., **Shirtcliff**, E.A. (2013). Gender on Testosterone-Stress Reactivity to the Trier Social Stress Test. *Poster Presented at the InnovateUNO, Undergraduate Research Council, New Orleans, LA.*
  81. €**Shirtcliff**, E.A., Slowey, P.D., Hart, T., Buck, R. (2013). Real-time salivary cortisol enhances the match of an individual's stressor with their stress reactivity. *Presented at Society for Research on Child Development, Seattle, WA.*
  82. €\*Dismukes, A.R., Johnson, M., Vitacco, M.J., **Shirtcliff**, E.A. (2013). Shared Role of Hypothalamic-Pituitary-Adrenal and -Gonadal Hormones in the Development of Callous Unemotional Traits and Response to Life Stress Exposure. *Presented at Society for Research on Child Development, Seattle, WA. COS travel grant awardee, Andrew Dismukes.*
  83. €\*Peres, J.C., Allison, A.L., Warner, M.C., Verret, B.E., Gaudet, B.M., **Shirtcliff**, E.A. (2013). Increased self-conscious emotional behaviors suppresses physiological responding to a laboratory stressor. *Presented at Society for Research on Child Development, Seattle, WA. COS travel grant awardee, Jeremy Peres.*
  84. €Del Giudice, M., Ellis, B.J., **Shirtcliff**, E.A. (2013). The Adaptive Calibration Model of Stress Responsivity. *Presented at Society for Research on Child Development, Seattle, WA.*
  85. **Shirtcliff**, E.A., Drury, S., Theall, K.P. (2013). Relative utility of the allostatic load and adaptive calibration models for explaining child and adolescent development. *Presented at Society for Research on Child Development, Seattle, WA.*
  86. Van Hulle, C., Moore, M., **Shirtcliff**, E.A., Lemery, K.S., Goldsmith, H.H. (2013). Genetic and environmental contributions to covariation between DHEA and Testosterone in adolescent twins. *Poster Presented at Society for Research on Child Development, Seattle, WA.*
  87. €\*Dismukes, A.R., Phan, J.M., Johnson, M., Hanson, J.L., Pollak, S.D., **Shirtcliff**, E.A. (2013). Transient stress in a Laboratory Setting impacts the coupling of HPA and HPG axes during adolescence. *Presented at Social Neuroendocrinology Data Blitz, SPSP preconference, New Orleans, LA.*
  88. €Vitacco, M.J., **Shirtcliff**, E.A., Brieman, C., & Dismukes, A. (2012, March). Beyond physiological hypoarousal: The role of context and callous-unemotional traits in incarcerated adolescent males. *Poster presented at the American Psychology and Law Society, San Juan, Puerto Rico.*

89. €Shirtcliff, E.A., Essex, M.J., Pollak, S.D., Vitacco, M.J. (2012). Life stress exposure is consistently linked to cortisol's diurnal rhythm. *Presented at American Academy of Child and Adolescent Psychiatry*, San Francisco, CA.
90. €Skinner, M.J., Shirtcliff, E.A., Haggerty, K. (2012). Positive parenting predicts calibration of cortisol functioning six years later in emerging adults. *Presented at SRCD Themed Meeting: Transitions from adolescence to adulthood*, Tampa, FL.
91. \*Warner, M.C., Allison, A.L., Shirtcliff, E.A. (2012). Social support predicts basal cortisol levels. *Poster Presented at the Society for Social Neuroscience*, New Orleans, LA.
92. €\*Scott, G., Allison, A.L., Boettger, C., Leonbacher, U., Peres, J.C., Shirtcliff, E.A. (2012). Acute physiological stress reactivity in novice and experienced skydivers across multiple physiological systems. *Poster Presented at the Society for Social Neuroscience*, New Orleans, LA.
93. €\*Allison, A.L., Scott, G., Boettger, C., Leonbacher, U., Peres, J.C., Shirtcliff, E.A. (2012). Sensation seeking and a real world stressor: Endocrine and autonomic effects. *Poster Presented at Society for Psychophysiological Research*, New Orleans, LA.
94. €\*Johnson, M.M., Dismukes, A.R., Vitacco, M.J., Shirtcliff, E.A. (2012). Coupling between hypothalamic-pituitary-adrenal and –gonadal axes among incarcerated adolescents: The influence of psychopathic traits and histories of abuse. *Presented at Society for Psychophysiological Research*, New Orleans, LA.
95. €\*Allison, A.L., Peres, J.C., Verret, B., Vaughn, J.C., & Shirtcliff, E.A. (2012). Sex Differences in Reactivity to Acute Stress. *Poster Presented at Wisconsin Symposium on Emotion*, Madison, WI. *Health Emotions Research Scholar travel grant awardee, Amber Allison.*
96. €\*Dismukes, A.R., Johnson, M.M., Shirtcliff, E.A., Vitacco, M.J. (2012). Abuse and the coupling of cortisol with testosterone and DHEA in adolescent males. *Poster presented at the Wisconsin Symposium on Emotion*, Madison, WI. *Health Emotions Research Scholar travel grant awardee, Andrew Dismukes.*
97. €\*Peres, J.C., Shirtcliff, E.A., Zgierska, A., Barrett, B., Coe, C. (2012). The Stress Thermometer: A Single-Item Measure for Evaluating Perceived Stress. *Poster Presented at the Society for Behavioral Medicine*, New Orleans, LA
98. \*Scott, G., Shirtcliff, E.A. (2012). Gender and Aggression: Concepts in Masculinity. *Poster presented at Society for Behavioral Medicine*, New Orleans, LA.
99. €\*Johnson, M., Dismukes, A., Vitacco, M.J., Shirtcliff, E.A. (2012). Psychopathy's Influence on the Interplay of Cortisol with Testosterone and DHEA. *Poster presented at Society for Behavioral Medicine*, New Orleans, LA. *UNO College of Science Travel grant awardee, Andrew Dismukes.*
100. €\*Allison, A.L., Peres, J.C., Boettger, C., Leonbacher, U., Hastings, P.D., Shirtcliff, E.A. (2012). Fight, Flight, or Fall: Autonomic Nervous System Reactivity During Skydiving. *Poster presented at Society for Behavioral Medicine*, New Orleans, LA. *UNO College of Science Travel grant awardee, Amber Allison.*
101. \*Rouquette, J.L., Peres, J.C., Slowey, P.D., Shirtcliff, E.A. (2012). Bringing Home the Bacon: Techniques for Augmenting Saliva Collection. *Poster presented at Society for Behavioral Medicine*, New Orleans, LA and *the Society for Psychophysiological Research*, New Orleans, LA.

102. Slattery, M.J., Grieve, A.J., Armstrong, J.M., **Shirtcliff**, E.A., Essex, M.J. (2012). Intolerance of uncertainty moderates the association of HPA acute stress response with co-morbid anxiety and depressive disorders in adolescents. *Poster presented at Anxiety Disorders Association of America*, Arlington, VA.
103. €**Shirtcliff**, E.A., Vitacco, M.J., Gostisha, A., Fluery, D. Del Giudice, M. (2012). Beyond Physiological Hypoarousal: Adaptive Calibration of Cortisol and Callous-Unemotional Traits in Incarcerated Adolescent Males. *Presented at the Society for Research on Adolescence*, Vancouver, BC.
104. €Ellis, B.J., Del Giudice, M., **Shirtcliff**, E.A. (2012). The adaptive calibration model of stress responsivity and reproductive strategy in adolescence. *Presented at the Society for Research on Adolescence*, Vancouver, British Columbia.
105. €\*Ruttle, P.L., **Shirtcliff**, E.A., Armstrong, J.M., Essex, M.J. (2012). Covariation of cortisol, DHEA, and testosterone across early adolescence and the impact of early life stress. *Presented at the Society for Research on Adolescence*, Vancouver, British Columbia.
106. €**Shirtcliff**, E., Hanson, J., Rudolph, K., Ruttle, P.K., Pollak, S.D. (2012). Paradoxical links between stress and sex hormones in adolescents. *Presented at the Society for Research on Adolescence*, Vancouver, British Columbia.
107. \*Thibodeaux, A., Allison, A.L., & **Shirtcliff**, E.A. (2011). Associations between Emotionality and Cortisol During Stress. *Poster Presented at the Undergraduate Research Conference*, Lafayette, LA.
108. \*Piglia, A., Allison, A.L., & **Shirtcliff**, E.A. (2011). Self-Reported Life Stress Exposure and Basal Cortisol Functioning. *Poster Presented at the Undergraduate Research Conference*, Lafayette, LA.
109. \*Verret, B., Allison, A.L., Peres, J., Vaughn, J., & **Shirtcliff**, E.A. (2011). Sex Differences in Heart Rate Reactivity to Stress. *Poster Presented at the Undergraduate Research Conference*, Lafayette, LA. *UNO College of Science SURF (Science undergraduate research fair) award winner, Brittany Verret.*
110. \*Scott, G., **Shirtcliff**, E.A. (2011). Aggression and gender: Concepts in masculinity. *Poster presented at the Psychology Undergraduate Research Conference*, Los Angeles, CA.
111. €\*Phan, J.M., **Shirtcliff**, E.A., Lubach, G., Crispen, H., Coe, C. (2011). Stability of maternal care across siblings after disturbed and challenged pregnancies in Rhesus Macaques. *Presented at the Psychology Undergraduate Research Conference*, Los Angeles, CA.
112. €\*Allison, A.L., **Shirtcliff**, E.A., Armstrong, J.M., Slattery, M.J., Kalin, N.H. Essex, M.J., (2011). Longitudinal stability and developmental properties of salivary cortisol levels and diurnal rhythms from childhood to adolescence. *Presented at the Society for Research on Child Development*, Montreal, Quebec. *UNO College of Science Travel grant awardee, Amber Allison.*
113. €Van Hulle, C.A., **Shirtcliff**, E.A., Lemery-Chalfant, K., Goldsmith, H.H. (2011). Genetic and environmental influences on individual differences in cortisol level and circadian rhythm. *Presented at the Society for Research on Child Development*, Montreal, Quebec.
114. €Skinner, M., **Shirtcliff**, E.A., Haggerty, K., (2011). Race differences and stress effects on circadian patterns of cortisol in early adulthood. *Presented at the Society for Research on Child Development*, Montreal, Quebec.



115. €\*Ruttle, P.L., **Shirtcliff**, E.A., Serbin, L.A., Ben-Dat Fisher, D., Stack, D.M., Schwartzman, A.E., (2011). Disentangling psychobiological mechanisms underlying behaviors in youth: Longitudinal and concurrent associations with cortisol. *Presented at the Society for Research on Child Development*, Montreal, Quebec. *SRCD travel award winner, Paula Ruttle.*
116. €Klimes-Dougan, B., Hastings, P.D., DeRose, L.M., **Shirtcliff**, E.A., Usher, B., Zahn-Waxler, C., (2011). Adolescent's reactions to stressors: A multi-method assessment of emotion. *Poster presented at the Society for Research on Child Development*, Montreal, Quebec.
117. €\*Gostisha, A., **Shirtcliff**, E.A., Vitacco, M.J., Graf, A., Brieman, C., Merz, J., (2011) Neuroendocrine functioning in incarcerated youth: A mechanism for the development of psychopathic traits. *Presented at the Society for Research on Child Development*, Montreal, Quebec and *Poster presented at the Society for the Scientific Study of Psychopathy*, Montreal, Quebec.
118. €**Shirtcliff**, E.A., Pollak, S.D., (2011). Impact of early vs. chronic stress exposure on the hypothalamic-pituitary-adrenal axis function in adolescents. *Presented at the Society for Research on Child Development*, Montreal, Quebec.
119. € Ellis, B.J., **Shirtcliff**, E.A., Boyce, W.T., Deardorff, J., Essex, M.J. (2010). Stress reactivity moderates the effect of parental supportiveness on puberty. *Presented at the American Psychological Association*, San Diego, CA.
120. Shirtcliff, B.A., & **Shirtcliff**, E.A. (2010). The Role of the Physical Environment on the Social Life and Biology of Youth. *Presented at the Landscape Legacy: Landscape Architecture Between Art and Science*, Maastricht, The Netherlands.
121. € DeRose, L.M., Klimes-Dougan, B., **Shirtcliff**, E.A., Hastings, P.D., Zahn-Waxler, C. (2010). Stress reactivity and regulation across the adolescent transition. *Presented at the Society for Research on Adolescents*, Philadelphia, PA.
122. € **Shirtcliff**, E.A., Ellis, B.J., Boyce, W.T., Deardorff, J., Essex, M.J. (2010). Nonlinear longitudinal trajectories of pubertal maturation in early adolescents. *Presented at the Society for Research on Adolescents*, Philadelphia, PA.
123. € Hanson, J.L., Chung, M.K., Avants, B., **Shirtcliff**, E.A., Schlaak, M., Gee, J., Davidson, R.J., Pollak, R.J. (2010). Effects of early deprivation and neglect on adolescent brain structure and neuropsychological functioning. *Poster Presented at the Society for Research on Adolescents*, Philadelphia, PA.
124. \*Allison, A.L., **Shirtcliff**, E. A., Hanson, J.L., Eatough, E.M., Pollak, S.D., (July, 2009). An Intra-individual Look at the Effects of Emotion Variability on Cortisol Levels in Adolescence. *Poster Presented at the International Society for Psychoneuroendocrinology*, San Francisco, CA.
125. € \*Gostisha, A., Vitacco, M.J., Graf, A., Brieman, C., **Shirtcliff**, E.A., (July, 2009). Endocrine Correlates of Psychopathy and Callous/Unemotional Traits in Incarcerated Youth. *Poster Presented at the International Society for Psychoneuroendocrinology*, San Francisco, CA.
126. € \*Gostisha, A., Vitacco, M.J., **Shirtcliff**, E.A., Brieman, C., Graf, A., Merz, J.L. (April, 2009). Neuroendocrine Correlates of Psychopathy and Callous/Unemotional Traits. *Poster Presented at the Society for the Scientific Study of Psychopathy*, New Orleans, LA.
127. € \*Marceau, K., Zahn-Waxler, C., **Shirtcliff**, E.A., Hastings, P.D., Klimes-Dougan, B. (April, 2009). Emotions as Mediators of Social Relations and Psychopathology



- in Adolescence. *Presented at the Society for Research on Child Development*, Denver, CO.
128. € Ellis, B.J., [Shirtcliff](#), E.A., Boyce, W.T., Essex, M.J. (April, 2009). Biological Sensitivity to Context: Stress Reactivity Moderates the Effect of Parental Supportiveness on Pubertal Maturation. *Presented at the Society for Research on Child Development*, Denver, CO.
  129. € \*Eatough, E.M., [Shirtcliff](#), E.A., Hanson, J., & Pollak, S.D. (September, 2008). Differential Effects of MRI and Simulation Scanning on Cortisol and Emotion. *Poster presented at Frontiers in Psychoneuroimmunology*, Tampa, FL.
  130. € \*Eatough, E.M., [Shirtcliff](#), E.A., Hanson, J., & Pollak, S.D. (September, 2008). HPA Axis Reactivity to an MRI Scan: The Impact of Individual Differences in Adolescents. *Poster presented at Frontiers in Psychoneuroimmunology*, Tampa, FL.
  131. Mazzulla, E.C., Oler, J.A., Johnstone, T., Kirkland, J.Z., [Shirtcliff](#), E.A., Armstrong, J.M., Davidson, R.J., Essex, M.J. (November, 2008). The effect of cortisol on fMRI signal during emotion-regulation in adolescent subjects. *Poster Presented at the Society for Neuroscience*, Washington, DC.
  132. € Klimes-Dougan, B., Natsuaki, M.N., Ge, X., [Shirtcliff](#), E.A., Hastings, P., & Zahn-Waxler, C., (2008). Early pubertal maturation and internalizing problems: The mediating role of cortisol reactivity to interpersonal stress. *Presented at the International Society for Psychoneuroendocrinology*, Leiden, Germany.
  133. € \*Marceau, K. [Shirtcliff](#), E.A., Schreiber, J.E., Klimes-Dougan, B., Zahn-Waxler, C. (2008). Adolescents' and Parents' Observed Coping Strategies as Risk Factors for Psychopathology. *Presented at the Society for Research on Adolescents*, Chicago, IL.
  134. Burk, L. R., [Shirtcliff](#), E. A., Armstrong, J.M., Black, D.A., Klein, M. H., Essex, M. J. (2008). Interparental Conflict, Negative Parenting and Child Cortisol Predict Peer Relations and Mental Health from Kindergarten to Age 13. *Presented at the Society for Research on Adolescents*, Chicago, IL.
  135. € \*Bauer, P. M., Hanson, J. L., Tober, C. L., Pierson, R. K., [Shirtcliff](#), E. A., Pollak, S. D. (2008). The Correlates of Neglect on the Developing Human Cerebellum. *Presented at the Society for Research on Adolescents*, Chicago, IL.
  136. € \*Eatough, E. M., [Shirtcliff](#), E. A., Hanson, J. L., Pollak, S.D. (2008). Effects of Sex and Puberty on Neuroendocrine Responses to an MRI. *Presented at the Society for Research on Adolescents*, Chicago, IL.
  137. € [Shirtcliff](#), E. A., Essex, M. J., Kalin, N. (2007). Longitudinal Stability and Developmental Properties of Salivary Cortisol Levels and Diurnal Rhythms in Early Adolescence, *Poster Presented at the International Society for Psychoneuroendocrinology*, Madison, WI.
  138. € \*Dorshorst, J. J., [Shirtcliff](#), E. A., Coe, C. L., Pollak, S. D. (2007). Reduced Containment of Herpes Simplex Virus Type 1 After Child Maltreatment and Institutionalization. *Poster Presented at the International Society for Traumatic Stress Studies*, Baltimore, MD, and *the International Society for Psychoneuroendocrinology*, Madison, WI.
  139. € \*Eatough, E. M., [Shirtcliff](#), E. A., Hanson, J. Pollak, S. D. (2007). Pubertal Maturation and Sex Impact HPA Axis Reactivity to an MRI. *Poster Presented at the International Society for Psychoneuroendocrinology*, Madison, WI.

140. € \*Eatough, E. M., **Shirtcliff**, E. A., Hanson, J., Pollak, S. D. (2007). Cortisol Reactivity to MRI Scanning in Adolescents. *Poster Presented at the Organization for Human Brain Mapping*, Chicago, IL.
141. **Shirtcliff**, E. A., Dorshorst, J. L., Nguyen, J., Pollak, S. D. (2007). Pubertal Maturation and Age Influence Adolescents' Perception of the Impact of Recent Negative Life Events. *Presented at the Society for Research on Child Development*, Boston, MA.
142. € **Shirtcliff**, E. A., Heiligenstein, M. Hoornstra, L., Squires, K. Pollak, S.D. (2007). Raging Hormones? Stages of Pubertal Development Largely Capture Underlying Hormonal Processes in Early Adolescence. *Presented at the Society for Research on Child Development*, Boston, MA.
143. € Zahn-Waxler, C., **Shirtcliff**, E. A., Schreiber, J. E., Marceau, K., Brand, A. E. Adolescents' Emotion Regulation, Coping Strategies and Parenting Experiences as Risk Factors for Later Psychopathology. *Presented at the Society for Research on Child Development*, Boston, MA.
144. € \*Dorshorst, J. J. **Shirtcliff**, E. A., Coe, C. L., Pollak, S. D., Hanson, J. (2007) How Early Experience Can Get Under Your Skin: Child Maltreatment has Detrimental Effects on Immunity in Adolescents. *Poster Presented at the Society for Research on Child Development*, Boston, MA.
145. € **Shirtcliff**, E. A., Klimes-Dougan, B., Zahn-Waxler, C. (2006). Stress Reactivity Patterns of DHEA in At-Risk Adolescents. *Paper Presented at the International Society for Psychoneuroendocrinology*, Leiden, Netherlands.
146. \*Marceau, K., Schreiber, J. E., **Shirtcliff**, E. A., Zahn-Waxler, C. (2006) Adolescents' Coping Strategies during Conflict Relate to Maternal Socialization of Emotions. *Presented at the Midwest Psychological Association*, Chicago, IL.
147. € **Shirtcliff**, E. A., Zahn-Waxler, C. (2006). Integrative change in neuroendocrine and cardiovascular markers predict behavior problems in control and at-risk adolescents. *Presented at the Biennial Meeting of the Society for Research on Adolescents*, San Francisco, CA
148. Klimes-Dougan, B., Zahn-Waxler, C., **Shirtcliff**, E.A., Gunnar, M. (2005). Transition from childhood to adolescence in the HPA axis: Gender and risk status differences. *Presented at the International Society for Psychoneuroendocrinology*, Montreal, Quebec.
149. € Brown, G., McGarvey, E., Keller, A., Flavin, K., **Shirtcliff**, E. A. (2005). Human salivary levels of cortisol, DHEA and Testosterone. *Poster Presented at the American Psychiatric Association*, Atlanta, GA.
150. € **Shirtcliff**, E. A., Klimes-Dougan, B., Zahn-Waxler, C. (2005). Cortisol Declivity During Social Challenge Is Related to Stress and Coping Strategies in At-Risk Adolescents. *Presented at the Biennial Meeting of the Society for Research in Child Development*, Atlanta, GA.
151. € **Shirtcliff**, E. A., Zahn-Waxler, C., Essex, M. J. (2005). Separating Traits from States: New Approaches to Understanding Cortisol Stability. *Presented at the Biennial Meeting of the Society for Research in Child Development*, Atlanta, GA.
152. € Wismer Fries, A. B., **Shirtcliff**, E. A., Pollak, S. D. (2005) Effects of Early Social Deprivation on Emotion Regulation in Children. *Poster Presented at the Biennial Meeting of the Society for Research in Child Development*, Atlanta, GA.

153. **Shirtcliff**, E. A., Booth, A., & Granger, D. A. (2004). Social Anxiety Moderates the Relationship between Trait Cortisol Levels and Social Competence in Girls. *Poster Presented at the Society for Research in Psychopathology*, St. Louis, MO.
154. € Hartley, D. **Shirtcliff**, E.A., Coe, C. (2004). Influence of maternal birthweight on subsequent growth and fecundity of female rhesus macaques (*Macaca Mulatta*): An analysis of reproductive success. *Poster presented at the American Society of Primatologists*, Madison, WI.
155. € **Shirtcliff**, E. A., Granger, D. A., Booth, A. & Johnson, D. (2003). Low adrenocortical activity and high levels of externalizing behavior problems in normally developing youth: A latent state-trait model of basal salivary cortisol. *Presented at the Biennial Meeting of the Society for Research in Child Development*, Tampa, FL.
156. € Schwartz, E., **Shirtcliff**, E. A. Kivlighan, K. T., & Granger, D. A (2003). Blood Contamination of Saliva Samples and the Assay of Common Salivary Biomarkers Used in Studies of Child Health and Development. *Poster Presented at the Biennial Meeting of the Society for Research in Child Development*, Tampa, FL.
157. Granger, D. A., and **Shirtcliff**, E. A. Adolescent Psychopathology and the HPA Axis: Correlated Rates of Change Between Salivary Cortisol and DHEA Across the Day and in Response to Social Challenge (2002). *Presented at the 5<sup>th</sup> International Institute for Developmental Science*, State College, PA.
158. € **Shirtcliff**, E. A., Granger, D. A., & Booth, A. (2002). Latent State-Trait Estimates of Intrinsic and Extrinsic Sources of Variance in Salivary Cortisol in Normally Developing Youth. *Poster Presented at the 5<sup>th</sup> International Institute for Developmental Science*, State College, PA.
159. € **Shirtcliff**, E. A., Klimes-Dougan, B. Salivary Testosterone Levels and Diurnal Rhythm: Links to Adolescent Internalizing, Externalizing, and Attention Problems (2002). *Presented at the Society for Research on Adolescence*, New Orleans, LA.
160. **Shirtcliff**, E. A., Granger, D. A., Booth, A. Hypothalamic-pituitary-adrenal axis and Psychiatric Symptoms in Men: Cortisol, DHEA, and the Cortisol/Dehydroepiandrosterone Ratio. (2002). *Poster Presented at Society for Behavioral Medicine*, Washington, DC.
161. € **Shirtcliff**, E. A., Granger, D. A., Schwartz, E. B., Curran, M. J., Booth, A. & Overman, W. H. (2001). Assessing Estradiol in Biobehavioral Studies Using Saliva and Blood Spots: Simple Radioimmunoassay Protocols, Reliability, and Comparative Validity. *Award and Colloquium Presented at the Department of Biobehavioral Health Colloquium*, State College, PA.
162. **Shirtcliff**, E. A., Granger, D. A., Booth, A. Salivary Cortisol and Testosterone in Children and Adolescents: Developmental and Gender Differences in Levels, Variance and Stability (2001). *Poster Presented at the International Society of Psychoneuroendocrinology*, Quebec City, Canada.
163. **Shirtcliff**, E. A., Parent- Child Closeness and Children's Cortisol Levels Mediate the Link Between Marital Satisfaction and Childhood Depressive Symptoms (2001). *Poster Presented at the International Institute on Developmental Science*, Jyväskylä, Finland.

164. € **Shirtcliff**, E. A., Booth, A., Bateup, H., Granger, D. A., Hormone Reactivity in Women's Rugby Competition (2001). *Poster Presented at the Society of Behavioral Medicine*, Seattle, WA.

## OTHER SCHOLARLY OR CREATIVE ACTIVITIES

### EDITORIAL ACTIVITIES

- Special Issue Editor, Developmental Psychobiology, *Special Issue on A dual-axis approach to understanding neuroendocrine development*.
- Research Topic Editor, Frontiers in Public Health, *Special Issue on Real-time Point-of-Care Quantitative Biomarkers: Trekkie Hype or the Future of Personalized Medicine?*
- Editorial Board, Development and Psychopathology
- Editorial Board, Psychiatry Journal
- Editorial Board, Psychoneuroendocrinology
- Editorial Board, Adaptive Human Behavior and Physiology
- Editorial Board, Journal of Abnormal Child Psychology
- Associate Editor, Journal of Research on Adolescence

### ADVISORY BOARDS

- Oasis Diagnostics

### GRANT REVIEWER

- National Institute of Child Health and Human Development Loan Repayment Project
- The Netherlands National Initiative Brain and Cognition Grant Reviewer for the program, "Brain and Cognition: societal innovation in health care, education and social safety"
- National Health and Medical Research Council (NHMRC) of the Australian Government Grant Reviewer, "Early Career Fellowships"
- Study Section member and grant reviewer, special panel for RFA on "Effects of the Social Environment on Health: Measurement, Methods and Mechanisms"
- Study Section member and grant reviewer, special panel for RFA on "Early Head Start University Partnership Grants: Buffering Children from Toxic Stress"
- Study Section member and grant reviewer, RFA 10-020, -021, -022, "Neural Processes Underlying Sex Differences Related to Risk and Resilience for Mental Illness".
- Innovational Research Incentives Scheme Vici, Netherlands Organisation for Scientific Research.
- Study Section member and grant reviewer, PA11-197, "NIH Pathway to independence award (parent K99/R00)".
- Netherlands Organisation for Scientific Research (NWO, the Dutch Research Council) reviewer for Vidi programme.
- Study Section member and grant reviewer, MESH (Biobehavioral Mechanisms of Emotion, Stress, and Health), NIH.
- U.S.-Israel Binational Science Foundation (BSF) Grant Reviewer, BSF.

### AD HOC JOURNAL REVIEWER (SELECT LIST)

- |                          |                     |                       |
|--------------------------|---------------------|-----------------------|
| Advances in              | Archives of General | Biological Psychiatry |
| Pharmacological Sciences | Psychiatry          |                       |
| Biological Psychology    | Brain Behavior and  | Child Development     |
|                          | Immunity            |                       |

Child Abuse & Neglect	Developmental Psychobiology	Developmental Psychology
Emotion	European Child and Adolescent Psychiatry	Hormones and Behavior
Human Reproduction Journal	Journal of Adolescence	Journal of Adolescent Health
Journal of the American Medical Association	Journal of Applied Social Psychology	Journal of Behavioral Medicine
Journal of Clinical Child and Adolescent Psychology	Journal of Child Psychology and Psychiatry	Journal of Pediatric Psychology
Physiology and Behavior	Psychiatry Research	Psychological Bulletin
Psychoneuroendocrinology	Revue d'Epidémiologie et de Santé Publique	Stress
Proceedings of the National Academy of Science	Journal of Abnormal Child Psychology	New England Journal of Medicine
Psychophysiology	Sleep	Steroids

### REVIEWER FOR PROFESSIONAL MEETING

- Society for Research on Child Development, “Panel #2: Biology and Neuroscience”, Co-Chair with Jennifer Pfeifer
- Society for Research on Child Development, “Adolescence: Biological & Cognitive” Review Board Member.
- Society for Research on Adolescence, “Adolescence: Biological & Cognitive” Review Board Member & Alternate Chair.
- Society for Research on Child Development, “Health & Neurophysiology,” Review Board Member & Alternate Chair.
- Society for Research on Adolescence, “Biological Processes and Evolutionary Perspectives” Review Board Member.

### MEMBERSHIP IN PROFESSIONAL AND HONOR SOCIETIES

- International Society for Psychoneuroendocrinology
- Society for Research on Child Development

## TEACHING: MENTORSHIP

### TEACHING MENTOR

Wen Wang, Teaching Assistant, Teaching Intern, and Graduate Student Instructor Supervisor  
 Jenny Phan, Teaching Assistant, Teaching Intern, and Graduate Student Instructor Supervisor

Olga Miocevic, Teaching Assistant and Graduate Student Instructor Supervisor

### MENTORED RESEARCH SCIENTIST/ ASSISTANT PROFESSOR SUPERVISION

Kristine Marceau, K01 award 2016-  
 Michelle Byrne, K01 award 2017-  
 Amy Mikolajewski, K23 award 2019-

Stuart White, K01 award 2017-  
 Natalie Colich, F32 award 2017-



**POST-DOCTORAL SCHOLAR SUPERVISION**

Vanessa Meyer, 2013 – 2015  
 Caspar Van Lissa, 08/2014  
 Lotte Van Dammen, 02/2019-

Julian Simmons 11/2014  
 Kristine Marceau, 09/2014 – 2016

**ONGOING DISSERTATION COMMITTEE SUPERVISION**

Chair, Yoojin Lee, M.S.  
 Chair, Olga Miocevic, M.S.  
 Chair, Jenny M. Phan, M.S.

Chair, Andrea Tountas, M.S.  
 Chair, Wen Wang, M.S.  
 Member, Tor Finseth, M.S.

**COMPLETED DISSERTATION SUPERVISION**

Member, Emily Kuhn, PhD, 2013  
 Member, Moira Riley, PhD, 2015  
 Chair, Jeremy C Peres, PhD, 2015

Member, Rachel Kahn, PhD, 2014  
 Member, Brenna Sapotichne, PhD, 2015  
 Chair, Andrew R. Dismukes, PhD, 2018  
 Member, Justin Russell, PhD, 2018

**ONGOING THESIS SUPERVISION**

Chair, Neil Barnett

Member, Bethany McCurdy

**COMPLETED THESIS SUPERVISION**

Chair, Amber L Allison, M.S., 2010  
 Chair, Andrew J Gostisha, M.S., 2011  
 Chair, Jeremy C Peres, M.S., 2012  
 Chair, Andrew R Dismukes, M.S., 2013  
 Chair, Yoojin Lee, M.S., 2014  
 Chair, Jenny M. Phan., 2016  
 Chair, Olga Miocevic, M.S. 2017  
 Chair, Shannin Moody, M.S., 2018

Member, Monica Gremillion, M.S., 2011  
 Member, Bethan Roberts, M.S., 2011  
 Member, Brenna Sapotichne, M.S. 2012  
 Member, Leslie Kelly, M.S., 2014  
 Member, Peggy Lockhart, M.S., 2015  
 Member, Anna Tonin Appiani, 2017  
 Member, Logan Stiens, MS, 2019

**GRADUATE STUDENT INTERNSHIP SUPERVISION** (\* denotes international intern)

\*Paula Ruttle, 10/2009-12/2009  
 Megan Johnson, 8/2011-6/2012  
 \*Katharina Schneider, M.S., 2015  
 \*Anna Tonin Appiani, 6/2016-11/2016

Jacob Rouquette, 2/2011-8/2011  
 \*Julia Kroener, M.S., 2014  
 Michael Wren, 2013-2015  
 \*Ellen Zakreski 6/2017-2/2018

**HONOR'S THESIS OR PROJECT STUDENT SUPERVISION**

**NOTE:** W=work study student, C=College of Science Undergraduate Research Scholar or College of Human Sciences Scholar, I=International Student Scholar, A=Student won an award (or more) while in the SPIT lab, M=Student co-authored a manuscript or presentation while in the SPIT lab

Florencia Iturri<sup>CIAM</sup>  
 Megan Long  
 Logan Stiens<sup>AM</sup>

Miguel Velasquez<sup>IAM</sup>  
 Brittany Verret<sup>AM</sup>

Swornim Shrestha<sup>CA</sup>  
 Gem Scott<sup>AM</sup>

**POST-BACCALAUREATE STUDENT INTERNSHIP SUPERVISION [VOLUNTEER OR PAID]**

Olga Miocevic<sup>IAM</sup>  
 Dev Mitruka  
 Jarrod Honeycutt

Amanda Rivera  
 Andrew Dismukes<sup>AM</sup>  
 Logan Stiens<sup>AM</sup>

Justin Vaughn<sup>AM</sup>  
 Jenny Phan<sup>CAM</sup>  
 Summer Castillo

## **BACCALAUREATE STUDENT SUPERVISION [PAID]**

Katharina Schneider <sup>CAIM</sup>	Melissa Warner <sup>CAM</sup>	Maria Latomaki <sup>IA</sup>
Julia Kroener <sup>IM</sup>	Masa Fallah <sup>CAM</sup>	Jacob Raborn <sup>C</sup>
Amanda Piglia <sup>CAM</sup>	Brandon Gaudet <sup>AM</sup>	Kyle Hankinson <sup>A</sup>
Neil Barnett <sup>AM</sup>	Chuma Enekebe <sup>I</sup>	Donald Fleury <sup>WM</sup>
Jennifer Hathway <sup>IA</sup>	Uwe Leonbacher <sup>AI</sup>	Skylar Hicks <sup>W</sup>
Christian Böttger <sup>AIM</sup>	Thilo Buck <sup>I</sup>	Madeline Jansen
Alexa Thibodeaux <sup>M</sup>	Francisco Bermudez <sup>CIA</sup>	Cecilia Chavarria <sup>C</sup>
Logan Stiens <sup>AM</sup>	Olivia Robertson <sup>I</sup>	Allissa Van Steenis
Evalina Grimaldi	Ala Sobi	Samuel Messbarger

## **SPIRE-EIT STUDENT SUPERVISION**

(summer program for interdisciplinary research and education – emerging interface technologies)

Bradon Thymes                      Lucas Wright                      Roselynn Conrady

## **TEACHING: COURSE DEVELOPMENT**

### **COURSE/PROGRAM DESIGN AND DEVELOPMENT**

Iowa State University

HD FS 608: Grantwriting

HD FS 634: Adolescence

HD FS 640/ 440X: Individual and Family Health from a Biobehavioral Health Perspective

HD FS 276: Human Sexuality

HD FS 616: Human Development and Family Studies:

Special Topics on Biomarkers of the Family

Independent Study: Logan Stiens, Francisco Bermudez, Alexandra Marcell, Sydney Ellis, Alexander Restemayer, Olivia Robertson, Samuel Massey, Samuel Messbarger, Jacob Liebman, Evalina Grimaldi, Allissa Van Steenis, Luo Jin

(Inspire-LSAMP) HHMI Summer Scholar Program for Underrepresented Minorities. Funded by NSF Grant #HRD-1619654: Cecilia Chavarria, Francisco Bermudez, Ala Sobi

Honor's College First Year Research Mentor Program: Logan Stein, Sydney Ellis, Jacob Liebman, Samuel Massey, Samuel Messbarger, Evalina Grimaldi, Allissa Van Steenis

SPIRE – EIT 2019. Summer Program for Interdisciplinary Research and Education – Emerging Interface Technologies). Funded by NSF Grant #1757900. *Virtual Reality Based Stress Tasks – Is Virtual Stress Real?*

Roselynn Conrady, Bradon Thymes, Lucas Wright

Vertically Integrated Projects (VIP): SPIT LAB and Virtual Reality. Sponsored by HHMI and Iowa State University. 2019.

University of New Orleans

Psychology 6895, Special Topics Social Neuroendocrinology



2017-present: Biotechnology Council Member  
2016-present: ISU Big Data Brain Initiative Collaborator

### **IOWA STATE UNIVERSITY DEPARTMENT COMMITTEES**

2018: HDFS Website redevelopment committee chair  
2016-2017: HD FS Department Speaker Series Chair  
2016-2017: HDFS Department Strategic Research Plan Ad Hoc Committee Chair  
2015-2016: Promotion and Tenure Review Committee Member  
2014-2017: Graduate Education Committee Member  
2014-2015: Undergraduate Curriculum Committee Member

### **OTHER IOWA STATE UNIVERSITY SERVICE ACTIVITIES**

2017-2018: ISU I-Corps program, Cohort #1 (affiliated with the ISU Startup Factory).  
2017, 2018: Guest speaker “Environmental Justice in Landscape Architecture”  
2017: Invited Guest Speaker HCI 591 “Adaptive Calibration of Stress in Virtual Environments: Implications for Human Computer Interactions”  
2016, 2017: Guest speaker “Adaptive Calibration Model of Stress Responsivity, EEOB evolutionary biology course”  
2016: ISU LARCH CityPlay course guest speaker “Happiness is a State of Mind”  
2016: ISU BIOL 335 guest speaker: “Adaptive Calibration Model of Stress Responses”  
2016: Alpha Delta Pi panel expert speaker: “Human Sexuality on College Campuses”  
2015: ISU Honor’s Salon Speaker “How Manly is your Testosterone? 10 things you didn’t know about your gonads”  
2015: ISU Honor’s 121 showcase speaker “Happiness is a State of Mind”  
2014, 2015, 2016, 2017, 2018: Guest speaker “Sex on the Brain” Human Sexuality course

### **UNIVERSITY OF NEW ORLEANS DEPARTMENT COMMITTEES**

2012-2014: Biopsychology Area Director  
2011: Biopsychology Faculty search committee chair (2)  
2010-2012: Grievance committee member  
2009: Biopsychology Faculty search committee member  
2009-2014: Webmaster committee  
2008-2014: Undergraduate Policy Committee member  
2008-2014: Awards committee member

### **UNIVERSITY-WIDE COMMITTEES AT UNIVERSITY OF NEW ORLEANS**

2012-2014: Faculty Senate Faculty Welfare Committee member  
2010-2014: UNO Faculty Senate, psychology departmental representative  
2010-2014: Faculty Senate Plagiarism Committee member  
2008-2011: Pre-med committee, psychology departmental representative

### **OTHER UNIVERSITY OF NEW ORLEANS SERVICE ACTIVITIES**

2014, Save UNO Children’s Center Committee Member  
2013, Inaugural guest speaker, *The Magnificent Teenage Mind*, Sci Academy and Cohen College Prep Summer Institute.  
2013, Inaugural Guest speaker, *How Manly is your Testosterone?: 10 things you didn’t know about your gonads*, Student Activities Council “Pizza with the Professor”.  
2009, 2010, Host for the graduate student recruitment or Holiday soiree

2009, 2010, Panel speaker for Student Activities Council event “Sex in the Dark”

## **ACADEMIC SERVICE: OTHER**

### **INVITED COMMUNITY TALKS OR EVENTS**

- 2017, 2018 Sawyer Elementary School Invited Presentation, Ames, IA.
- 2016 Northcrest Community Center Invited Speaker, Ames, IA.
- 2010-2011 Abramson Science Fair Advisory Committee member, New Orleans, LA.
- 2010 International Collaborator, Center for Research in Human Development, Concordia University, Montreal, Quebec.
- 2010 Junior High School Science Fair Judge, Greater New Orleans Science and Engineering Fair, University of New Orleans, New Orleans, LA.
- 2009 Junior and Senior High School Science Fair Judge, Abramson Science and Technology Science and Engineering Fair, New Orleans, LA.
- 2008 Invited Presentation: “Neurobiological underpinnings of adolescent brain development.” Presented at the Adolescent Literacy Leadership Conference for Public Librarians, Madison, WI; Presented at St. James School, Madison, WI; Presented at the Parent Teaching Organization, Madison Metropolitan School District.