



# PREVENTION SCIENCE INSTITUTE



ANNUAL REPORT 2016





## Table of Contents

Welcome from the Director.....	1
Health Promotion and Obesity Prevention.....	2
Center for Translational Neuroscience .....	4
National Institute on Drug Abuse PSI Interns ...	5
Grant-Funded Research at PSI.....	6
UO Faculty at PSI .....	11
PSI 2016 Trainees.....	14
PSI Publications.....	16

**O**

UNIVERSITY OF  
OREGON

### Photo Credits

Cover: *Top to Bottom*: sisters reading, ©Petro Feketa, dreamstime.com; mother-father-baby, ©Santiago Nunez Iniguez, Dreamstime.com; group diverse teens, ©Mandy Godbehear, Dreamstime.com; family riding bike, ©Imtmphoto, Dreamstime.com; *Inside Front Cover*: children on slide, ©Marzanna Syncerz, Dreamstime.com; *Page 3*: Brain, ©Sergey Shenderovsky, Dreamstime.com; *Page 4*: mother and kids running, ©Jacek Chabraszewski, Dreamstime.com.

## *Welcome to Our Annual Report for Fiscal Year 2016*

**T**he Prevention Science Institute at the University of Oregon is a multidisciplinary research institute where scientists seek to understand human development, prevent behavioral health problems, and implement effective interventions in community settings. PSI builds on more than two decades of prevention research across several units at the university, including the College of Education and the Department of Psychology.

An integrated model of health and human development has guided the expansion of our prevention research in many ways. First, we are studying both behavioral and biological outcomes of our research and interventions to better understand the interplay between neuroscience and intervention science. Second, we know that human problems often spill over into numerous life domains. As such, we are focused on multiple risk outcomes and their effects on long-term health, such as substance abuse and obesity throughout the lifespan. Third, we have expanded our portfolio of population-based research to include children and adults with a range of potential risk outcomes, such as autism and disrupted relationships during the emerging adult years.

The past year has been marked by growth and expansion opportunities that will continue into Fiscal Year 2017. We hired four new scientists who are associated with the University of Oregon's cluster hire in health promotion and obesity prevention, and we are looking forward to expanding our research portfolio in this content area and to welcoming the new scientists to campus this year. See their story on page 2 of this report. We also established the Center for Translational Neuroscience in 2015, and it has been up and running for a full year with support from successful grants and contracts. See the story about CTN included on page 4 of this report.

During the past year we forged new relationships with scientists in the Departments of Biology and Human Physiology, and they have led to several collaborative grant proposals that are aimed at expanding our understanding of the interplay between human behavior, genetics, and health. We will continue these relationships into the next fiscal year as we complete the hiring associated with the cluster in health promotion and obesity prevention.

Our commitment to graduate training, education, and science is integrated into our organizational structure and research model. This annual report provides information about our grants, contracts, and community partnerships and highlights our activities during the past year. As is evident from this report, we could not conduct the research and community collaborations without the support of our many local, state, and federal partners. We hope you enjoy reading about our activities from the past year, and we look forward to new research activities and partnerships in the coming year.

## University of Oregon Cluster Hire Health Promotion and Obesity Prevention

**H**ealth promotion and obesity prevention is a growing multidisciplinary area of research that integrates the fields of psychology, biology, human physiology, and medicine. The United States is leading the way in the epidemic health crisis that is obesity, with two-thirds of the adult population and nearly one-third of the nation's children classified as obese or overweight. Ethnic minorities and those living in poverty are overrepresented among obese populations (Institute of Medicine, 2012). State-wide, 27% of Oregonians are obese, a rate that is comparable to the national average (Centers for Disease Control, 2010). The epidemic has propelled several federal initiatives, including the "Let's Move" campaign led by First Lady Michelle Obama, that are examining the etiology of obesity and testing prevention programs that target children, adolescents, and adults.

Philanthropic support of a UO cluster hire in health promotion and obesity prevention is launching the Prevention Science Institute toward helping address the obesity problem in the United States. In 2014 University of Oregon alumna Connie Ballmer, a 1984 graduate and UO board member, and her husband, Steve, generously donated \$20 million to the university in support of obesity research. The cluster is led by PSI, with collaborations across campus that include the Departments of Biology and

Human Physiology. PSI's research portfolio and interdisciplinary work are being newly enhanced by four College of Education faculty recruited and hired in 2016 to focus on health promotion and obesity prevention. The faculty were enlisted as part of the Clusters of Excellence Faculty Hiring Initiative announced in 2014. The cluster will integrate new expertise with existing research in related disciplines and builds on longstanding UO strengths in prevention science and biological systems. Additional hires in biology and human physiology are planned for the cluster later in the year.

The new hires are among the first in a focused effort to engage more research-active, tenure-track faculty members. They are Nicole Giuliani, who received her doctoral degree from Stanford University; Elizabeth L. Budd, who has a doctoral degree in public health from Washington University in St. Louis; Tasia M. Smith, who has a doctoral degree in counseling psychology from the University of Florida; and Nichole R. Kelly, currently a post-doctoral researcher in a joint position at the Uniformed Services University of Health Sciences and at the National Institutes of Health.

Giuliani studies basic brain processes and mechanisms that link to emotional and self-regulatory aspects of food consumption and seeks to help develop interventions that



Tasia Smith, Elizabeth Budd, UO president Michael Schill, Nicole Giuliani, Nichole Kelly.

improve diet and health behaviors. Her work integrates neuroimaging techniques and the study of human behavior. She will also be affiliated with the UO Lewis Center for Neuroimaging and the Center for Translational Neuroscience.

“I am thrilled to be joining the College of Education as part of the Health Promotion and Obesity Prevention cluster,” said Giuliani, who has a doctoral degree in psychology. “I chose to stay at the University of Oregon for many reasons, including the UO’s community of supportive and collaborative faculty, the fantastic research being done here in both basic and applied science, and Eugene itself.”

Budd, whose undergraduate work at Santa Clara University combined sociology and Spanish studies, has lived in St. Louis for a decade, but she grew up in Oregon and is happy to be returning to the state.

“When I found the position announcement, I thought, ‘this is perfect,’” Budd said. “I have a transdisciplinary background and a research focus on physical activity and health promotion, especially among youth and adolescents. I am joining a team of really smart, down-to-earth people who are doing exciting work that is complementary to mine. I couldn’t ask for anything better.”

Smith has focused her studies on the connection of motivation and community-based partnerships with engagement of culturally diverse families to improve health behaviors. She has authored two papers about barriers to healthy eating that have recently been accepted for publication.

“I chose to join the UO because of the strong emphasis on prevention-based scholarship in the College of Education and the opportunities



available to build strong collaborative relationships with my fellow colleagues, students, and community stakeholders,” Smith said. “These core strengths of the college, among many others, are an excellent fit for my research interests, which focus on the prevention and reduction of health disparities among underserved populations.”

Kelly holds a doctorate in counseling psychology from Virginia Commonwealth University. Her current research, funded by a National Institutes of Health fellowship, involves building brain-based models for studying energy intake and excess weight gain in young people.

“After having met with several faculty and students at the University of Oregon, it quickly became evident that this institute is an ideal place to conduct a program of research that will have a meaningful influence on the lives of others,” Kelly said. “The UO is home to countless bright, creative, and experienced faculty conducting rigorous research spanning multiple disciplines. It is my belief that a multidisciplinary approach is vital to enhancing our understanding of both the etiology and effective prevention of a complex physical, psychological, and sociocultural issue like obesity.”

## The Center for Translational Neuroscience Transformative Neuroscience for Social Change

Early adverse experiences, such as poverty, abuse, and neglect, place people at increased risk for mental and physical health problems throughout life. Society has yet to find ways to reduce the effects of early adversity, even after its major investment in the problem. Researchers who are part of the Center for Translational Neuroscience at the PSI are using cutting-edge neuroscience to understand the effects of early adversity on the brain. In turn, they use this knowledge to create “neurally informed” treatments that target specific brain systems. For example, they have built a computerized program, based on current brain science, to improve teens’ self-control.

The CTN, which launched in September 2015, emphasizes translation of basic knowledge about brain structure and function into practical, robust, and scalable tools to improve mental health and well-being.

“Neuroscience gives us the ability to cut to the core of the causal properties behind many behavioral issues, such as addiction, anxiety, aggressive behavior, and overeating,” said Phil Fisher, the center’s director and a professor who studies some of these problem areas at a societal level. “If we can identify common neural

circuitry underlying these problems, particularly brain processes that are malleable and can change with the right kind of experiences, we have the ability to really move the needle and address some of these problem areas at a societal level.”



The new center brings together University of Oregon faculty from the Department of Psychology, the College of Education, and other UO centers and departments, including the Lewis Center for Neuroimaging, a core research facility with an fMRI that supports multifaceted research in neuroscience and biological imaging. Beyond campus, the CTN coordinates its efforts with a network of groups around the world, such as the Center for the Developing Child at Harvard University and the Center on the Developing Adolescent at the

University of California. Funding for projects comes from government research grants; public services funding from Oregon and Washington states and Alberta, Canada; and from philanthropic donors and foundations. Belief in the value of a collaborative, multidisciplinary team-based approach is a common thread among the faculty involved in the center.

The center reflects PSI’s interdisciplinary focus on understanding human development, preventing behavioral health problems, and implementing evidence-based interventions in community settings. In addition to using traditional randomized trials to deliver results, CTN will implement smaller, quicker pilot programs that are more targeted. A major goal is to reach a broad audience of paraprofessionals, policy makers, and philanthropists.

Graduate students will be involved in all aspects of the research and communication as part of their training to be next-generation translational neuroscientists. These students receive advanced training in both neuroscience and clinical science and mentorship from an interdisciplinary team of faculty at UO.

## Research Training at PSI

# Summer Interns: Scientists of the Future

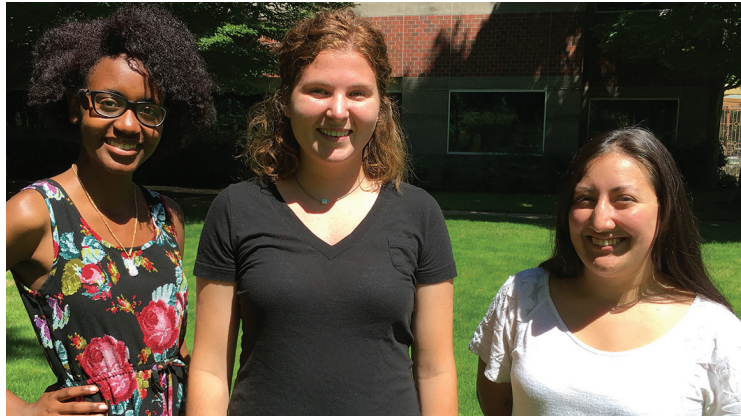
The Prevention Science Institute welcomed two summer 2016 undergraduate interns to its Eugene location and one to its Portland base of operations. All three were assigned to PSI by the National Institute on Drug Abuse (NIDA), which routinely places underrepresented undergraduate students at research institutions across the country each summer for an eight-week research internship.

Mekael Daniel and Margaret Stelzner joined Dr. Elizabeth Skowron's research team at Dr. Skowron's Family Biobehavioral Health Lab in PSI's Eugene offices, where they assisted with the CAPS Project, and Toni Humphrey joined Dr. Allison Caruthers in Portland, where she assisted with data collection, assessment, and intervention development for a NIDA-funded grant to evaluate the efficacy of an online intervention for families (Stormshak & Seeley, MPIs).

Mekael, whose prospective major is in sociology, is a rising freshman at Colorado College in Colorado Springs, Colorado. She is interested in parenting, counseling, and family processes, which she hopes to investigate further throughout her college career and beyond.

Margaret is currently a junior studying neuroscience with an emphasis in psychology at Macalester College in St. Paul, Minnesota. She is interested in investigating biomarkers as predictors of behavior and hopes to pursue graduate school after graduation.

Toni will earn her bachelor's degree in family and human services from the University of Oregon in December. She is interested in family processes, racial identity development, and social work. She is currently weighing her options regarding her academic and professional goals



Mekael Daniel, Margaret Stelzner, Toni Humphrey.

after graduation, but plans to eventually pursue graduate school.

Mekael and Margaret expanded their research interests and skills while working on the Coaching Alternative Parenting Strategies (CAPS) project, an NIH-funded study led by Dr. Skowron. The CAPS project is investigating the neurobiological changes that occur during Parent-Child Interaction Therapy as parents enhance their parenting skills and change their interaction patterns that lead to abuse. Interns learned a new parent behavioral coding system, shadowed biobehavioral assessments, and completed independent research projects, all while receiving individual and group mentoring from research staff and graduate students in the lab.

Toni gained exposure to longitudinal research on parenting, academic skills, and substance use. She acquired experience working with sensitive research populations and with following standardized research protocols, and became familiar with the Family Check-Up. She shadowed research and intervention staff in the PSI Portland and Eugene locations to learn about observational data collection and coding, data management, biobehavioral assessments, and motivational interviewing. She also completed an independent research project.

## Grant-Funded Research in 2016 at PSI

### **ADAPT Online: After Deployment Adaptive Parenting Tools**

Funding period: 2013–2015

Principal Investigators: David DeGarmo, PhD, University of Oregon; Brion Marquez, IRIS Media; Abigail Gewirtz, PhD, University of Minnesota

Funded by: National Institute of Child Health and Human Development

Grant number: R44 HD066896

The project goal is to use the ADAPT Online intervention to address the parenting needs of reintegrated military families potentially at risk for depression, anxiety, substance abuse, mental illness, and posttraumatic stress.

### **Behavioral Effects of Teen Exposure to Multiple Risk Behaviors in Media**

Funding period: 2014–2016

Principal Investigators: Atika Khurana, PhD, University of Oregon; Amy Bleakley, PhD, University of Pennsylvania

Funded by: National Institute of Child Health and Human Development

Grant number: R21 HD079615

This project is examining the influence of exposure to multiple risk portrayals in popular movies and TV shows on adolescent health risk behaviors.

### **Brain-Based Intervention to Remediate the Effects of Early Adversity on Inhibitory Control**

Funding period: Jan.–Dec. 2015

Principal Investigator: Elliot Berkman, PhD

Frontiers of Innovation initiative, Harvard Center on the Developing Child

This study evaluated a neurally

informed intervention to reduce adolescents' peer-linked risk behaviors by increasing inhibitory control in peer contexts. It also sought to clarify effects of early adversity on inhibitory control and the mechanisms through which those effects could be remediated with intervention.

### **Brief Alcohol Screening and Intervention for College Students**

Funding period: 2016–2018

Principal Investigator: Jessica Cronce, PhD

Funded by: National Institute on Alcohol Abuse and Alcoholism

Grant number: 5R34AA023047

This pilot study is adapting the Brief Alcohol Screening and Intervention for College Students (BASICS) for use with community college students by using an iterative process of adaptation and development, prototype models and instructions, focus groups, usability testing, and individual interviews. A delivery method will be developed that adapts normative and consequence-related content specific for CC students and provides protective behavioral strategies via text messages.

### **Comparing Web, Group, and Telehealth Formats of a Military Parenting Program**

Funding period: 2014–2019

Principal Investigators: David DeGarmo, PhD, University of Oregon; Abigail

Gewirtz, PhD, University of Minnesota  
Funded by: US Department of Defense  
Grant number: W81XWH-14-1-0143

This research is testing e-technology approaches to increase access and portability of a family-based substance use intervention for reintegrated military reserve personnel and their families.

### **Early Onset vs. Pre-Existing Vulnerabilities in Adolescent Drug Use**

Funding period: 2012–2016

Principal Investigators: Atika Khurana, PhD, University of Oregon; Daniel Romer, PhD, University of Pennsylvania

Funded by: National Institute on Drug Abuse

Grant number: R01 DA033996

The central goal of this project is to identify the neurocognitive precursors underlying dysfunctional forms of drug use and symptoms of substance use disorders during the late-adolescence years.

### **Effectiveness of a Web-Enhanced Parenting Program for Military Families**

Funding period: 2014–2016

Principal Investigators: David DeGarmo, PhD, University of Oregon; Abigail Gewirtz, PhD, University of Minnesota

Funded by: National Institute on Drug Abuse

Grant number: R01 DA030114

This study is examining whether an Oregon Parent Management Training intervention, enhanced



with e-technology and adapted for combat-deployed families, will reduce risk behaviors associated with youth substance use by improving child and parent adjustment.

**Endogenous Opioids in Meditation Pain Relief**

Funding period: 2014–2015  
 Principal Investigators: Elliot Berkman, PhD; Lisa May, University of Oregon  
 Funded by: Mind and Life Institute  
 Grant number: 2013-VARELA-MAY

This experiment is using the opioid antagonist Naloxone to research meditation-based pain relief to determine if opioid receptors are activated and if endogenous opioids interact with trait factors in meditation-based pain relief.

**Family Check-Up Online: Support for Middle School Families in Rural Oregon**

Funding period: 2015–2017  
 Principal Investigator: Elizabeth Stormshak, PhD  
 Funded by: Ford Family Foundation  
 Grant number: 20130431

The Family Check-Up-Online for middle school youths and their families uses multimedia and technology, including a user-friendly web program, to support effective family management, including tailored messaging, in-person feedback, and interactive instruction.

**Family and Peer Processes and Gene–Environment Interplay in Early Adolescence: An Adoption Study**

Funding period: 2014–2016  
 Principal Investigator: Leslie Leve, PhD  
 Funded by: National Institute of Child Health and Human Development  
 Grant number: R56 HD042608

This study aims to disentangle inherited influences from social–environmental influences on youth behavior problems and competencies by examining how children develop over time, how inherited risks are overcome, and how inherited strengths help children develop to their fullest potential.

**Fathering Through Change: Online Parent Training for Divorced Fathers (FTC)**

Funding period: 2014–2016  
 Principal Investigators: David DeGar-

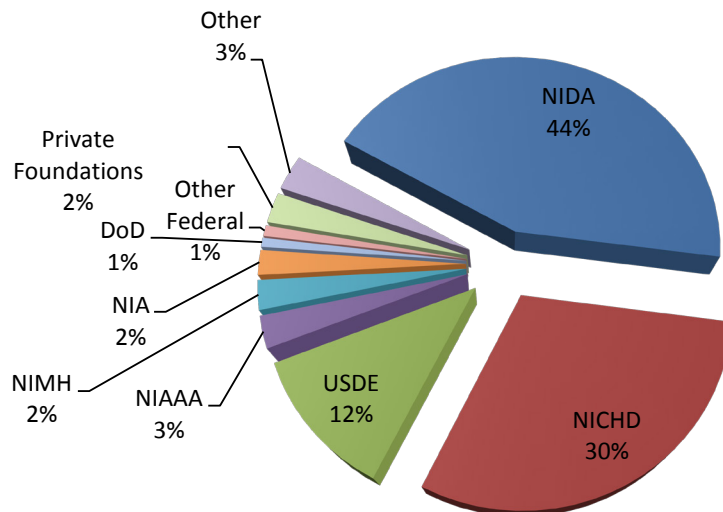
mo, PhD, University of Oregon; Neil Caraway, IRIS Media  
 Funded by: National Institute of Child Health and Human Development  
 Grant number: R44 HD075499

This project seeks to provide divorced fathers with skills necessary to be effective parents and coparents following divorce, by testing effectiveness of the FTC on fathers’ parenting skills, coparenting conflict reduction, and cooperation.

**Gene–Environment Interplay and Childhood Obesity: An Adoption Study**

Funding period: 2013–2016  
 Principal Investigators: Leslie Leve, PhD, University of Oregon; Jody Ganiban, PhD, George Washington University  
 Funded by: National Institute of Diabetes and Digestive and Kidney Disease  
 Grant number: R01 DK090264

**Total Awards Portfolio: \$32,377,566**



This study is exploring the eating habits and behaviors of adopted children, adoptive parents, and birth parents from birth to middle childhood. A study focus is identification of environmental and genetic factors that promote physical growth and healthy weight.

### **Gene–Environment Interplay and the Development of Psychiatric Symptoms in Children**

**Funding period:** 2010–2016

**Principal Investigators:** Leslie Leve, PhD, University of Oregon; Jenae Neiderhiser, PhD, Penn State University

**Funded by:** National Institute of Mental Health

**Grant number:** R01 MH092118

This study is examining the interplay between genetic, prenatal, and postnatal environmental influences on early pathways to various behaviors, including anxiety and depression, by interviewing adoptive parents about child behavior and symptoms between ages 6 and 8 years.

### **Girls-Specific Prevention Program for Substance Use and Delinquency**

**Funding period:** 2015–2017

**Principal Investigator:** Leslie Leve, PhD

**Funded by:** National Institute on Drug Abuse

**Grant number:** R21 DA037455

This program is testing effectiveness of a program for justice-involved girls at risk of escalat-

ing delinquency and substance use. It uses cognitive-behavioral and moral reasoning principles found to be effective for at-risk youths. It emphasizes management of distressing internalizing symptoms, relationship-based scenarios for skill generalization, expanded cognitive restructuring strategies, and parent engagement and skill building.

### **Harvard Frontiers of Innovation**

**Funding period:** 2014–2016

**Principal Investigator:** Philip Fisher, PhD

**Funded by:** Robert Wood Johnson Foundation, Annie E. Casey Foundation, Buffett Early Childhood Fund  
**Subcontract with:** Harvard University

Frontiers of Innovation (FOI), designed to improve child outcomes, brings together researchers, practitioners, and policymakers to codevelop prevention and intervention programs to build caregiver capacities. A centralized database and data management protocol are being created to be used across FOI sites.

### **Hemera Frontiers of Innovation**

**Funding period:** 2015–2016

**Principal Investigator:** Philip Fisher, PhD

Frontiers of Innovation initiative, Harvard Center on the Developing Child

This award supports the Fisher Stress Neurobiology and Preven-

tion Lab's work with the Center on the Developing Child at Harvard University to develop and test intervention programs to improve the lives of children facing adversity, to develop and scale a model for supporting intervention development and implementation for new center sites, and to continue to develop a centralized database library.

### **KEEP-P, a Preventive Intervention for Foster Preschoolers**

**Funding period:** 2013–2018

**Principal Investigator:** Philip Fisher, PhD

**Funded by:** National Institute of Child Health and Human Development

**Grant number:** R01 HD075716

This randomized clinical trial of a low-cost, group-based intervention for foster preschoolers and their caregivers aims to improve parenting, reduce rates of disrupted placements, and improve child outcomes among this population.

### **Parenting to Prevent Substance Use in Late Adolescence**

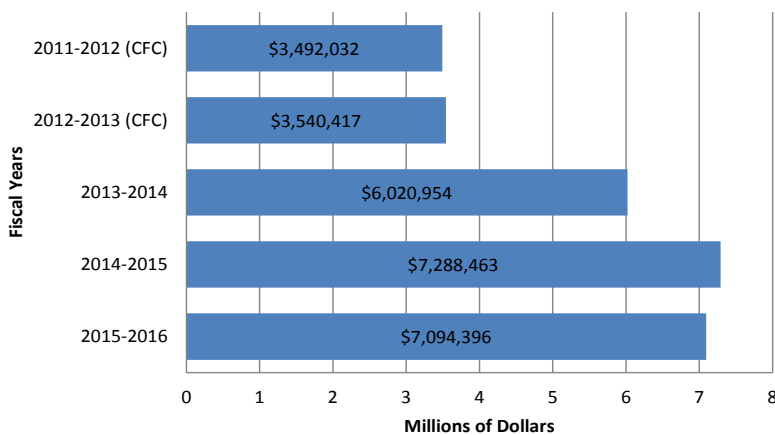
**Funding period:** 2012–2017

**Principal Investigator:** Elizabeth Stormshak, PhD

**Funded by:** National Institute of Child Health and Human Development

**Grant number:** R01 HD075150

Researchers are examining how parent–youth relationships in late adolescence may be protective or may contribute to escalating

**Annual Grant Budgets**

substance use and abuse during the transition to adulthood.

### **Prevention of Substance Use in At-risk Students: A Family-centered Web Program**

Funding period: 2015–2020

Principal Investigators: Elizabeth Stormshak, PhD; John Seeley, PhD

Funded by: National Institute on Drug Abuse

Grant number: R01 DA037628

This study is examining the hypothesis that a brief, tailored, web-based family-centered intervention provided to families of middle school youths can reduce behavioral risk, enhance parenting skills, and improve family climate and child outcomes.

### **Psychometric Investigation of Universal Screening for Social-Emotional Development in Preschool Using Parent and Teacher Informants**

Funding period: 2015–2019

Principal Investigator: Randy Kamphaus, PhD

Grant number: R305A150152

This project is evaluating the psychometric properties of the Behavioral and Emotional Screening System Parenting Rating Scale-Preschool Form (BESS PRS-P), a parent-report screening tool. Parent and teacher data and school records are being used to examine associations between ratings of children's social-behavioral risk and child social and academic outcomes in kindergarten and first grade.

### **An RCT of Parent Training for Preschoolers with Delays**

*Oregon Parent Project (OPP)*

Funding period: 2011–2016

Principal Investigator: Laura Lee McIntyre, PhD

Funded by: National Institute of Child Health and Human Development

Grant number: R01 DA212880

This study is examining effects

of early childhood interventions on children's adaptive behavior, problem behavior, and family well-being among 200 families with preschool children with developmental delays or disabilities.

### **Siblings Reared Apart: A Naturalistic Cross-Fostering Study of Young Children**

Funding period: 2013–2017

Principal Investigator: Leslie Leve, PhD

Funded by: National Institute on Drug Abuse

Grant number: R01 DA035062

This study is examining pathways to development by isolating effects of the rearing environment from effects of genes by assessing sibling pairs in which one sibling was reared from birth by an adoptive family and the other from birth by the biological mother.

### **Tailored Inhibitory Control Training to Reverse EA-linked Deficits in Mid-life**

Funding period: 2014–2016

Principal Investigator: Elliot Berkman, PhD

Funded by: National Institute on Aging  
Grant number: R01 AG048840

A neurally informed model of inhibitory control is being used to test the efficacy of an intervention for mid-life individuals with early adversity that can flexibly and cost effectively address inhibitory control and health-risking behaviors.

### **Targeting Neurobiological and Behavioral Mechanisms of Self-Regulation in High-Risk Families**

*Coaching Alternative Parenting Strategies (CAPS)*

Funding period: 2015–2019

Principal Investigators: Elizabeth Skowron, PhD; Phil Fisher, PhD

Funded by: National Institute on Drug Abuse

Grant number: R01 DA036533

This clinical trial is testing the effects of Parent–Child Interaction Therapy for maltreating families and identifying biobehavioral pathways to positive change in parenting practices and child outcomes. Participating families are assessed for psychological/physical health, behavior, heart rate, brain activity, and reductions in child abuse/neglect.

### **Testing the Efficacy of an Ecological Approach to Family Intervention and Treatment During Early Elementary School to Prevent Problem Behavior and Improve Academic Outcomes**

Funding period: 2014–2018

Principal Investigators: Elizabeth Stormshak, PhD; Laura Lee McIntyre, PhD; Andy Garbacz, PhD

Funded by: Institute of Education Sciences/US Department of Education

Grant number: R305A140189

This study is evaluating the efficacy of the Family Check-Up during

the transition into elementary school by targeting family contextual risks and family management skills; self-regulation, academic learning, and social competence skills; and problem behavior.

### **Translational Drug Abuse Prevention Center (TDAP)**

Funding period: 2013–2018

Principal Investigators: Philip Fisher, PhD, University of Oregon; Patricia Chamberlain, PhD, Oregon Social Learning Center

Funded by: National Institute on Drug Abuse

Grant number: P50 DA035763

To improve outcomes for children and families involved in child welfare systems, targets of this study include mechanisms associated with early life adversity and adolescents' risky decision making, adolescent girls' drug use and engagement in HIV-risk behaviors, and fidelity of implementation of extant evidence-based interventions into CWS settings.

### **Using Online Learning and Coaching to Increase the Competency of Early Childhood Teachers to Impact School Readiness for Children Exposed to Trauma**

Funding period: 2015–2019

Co-Principal Investigators: Philip Fisher, PhD; Melanie Berry, University of Oregon; Bridget Hatfield, Oregon State University

Funded by: Institute of Education Sciences

Grant number: R305A150107

An online course and coaching program is being developed to help early-childhood teachers implement practices to improve academic and social-behavioral outcomes for young children who have experienced trauma, who are often at elevated risk for difficulties in school. A program will be developed to give instruction and individualized coaching to preschool teachers.

### **Utilizing Adoption-Based Research Designs to Examine the Interplay Between Family Relationship Processes and Child Developmental Outcomes**

Funding period: 2015–2016

Principal Investigators: Leslie Leve, PhD, University of Oregon; Gordon Harold, PhD, University of Sussex

Funded by: Economic and Social Research Council, United Kingdom

This project uses a longitudinal U.S. adoption-at-birth sample and a UK sample of children conceived through in vitro fertilization (IVF) to understand the interplay between family interaction patterns, parent mental health, and child symptoms of psychopathology.

## UO Faculty at the Prevention Science Institute



**Nicholas Allen, PhD**, uses a developmental psychopathology approach to understand how children and adolescents are affected by their environments. He focuses on how family interactions and other aspects of the child's environment influence the child's emotional functioning and affect the development of the biological systems associated with these emotions.



**Elliot Berkman, PhD**, studies the motivational and cognitive factors that contribute to success and failure at health goals. His work adopts a translational neuroscience approach by using knowledge of brain function, structure, and connectivity to design and improve interventions for health behavior and well-being.



**Allison Caruthers, PhD**, is interested in adolescent gender and sexual socialization and their relationship to sexual behavior, sexual risk tak-

ing, and emotional well-being in adolescence and adulthood. She is examining the distinction between normal, healthy sexual exploration and truly problematic behavior, as well as possible mechanisms by which intervention services reduce risky sexual behavior.



**Krista Chronister, PhD**, focuses her research on partner violence prevention and community-based intervention, including women survivors' economic and vocational development, community mental health interventions with ethnic minority and immigrant families experiencing partner violence, and young adults at risk for partner violence and substance use.



**Jessica Cronce, PhD**, is interested in how alcohol use and other health-related behaviors overlap and interact to predict risk among young adults and how to prevent or lessen those harms. She is evaluating motivational enhancement-based approaches to reducing harmful drinking among college

students and assessing how marijuana legalization affects young adult cannabis use.



**Brian Danaher, PhD**, is interested in developing and evaluating self-management interventions designed to encourage health behavior change, especially programs delivered using technology. Much of his research has focused on controlled tests of eHealth interventions and related themes, such as recruitment, participant engagement, imputing missing data, and implementation/dissemination issues.



**Dave DeGarmo, PhD**, is interested in substantive evaluation of family stress models and in program evaluation of preventive intervention and treatments for families at risk for compromised parenting. His active research involves a blended group and online intervention for divorced fathers and multimodel comparisons of interventions for military parents. A major focus is on independent and interactive effects of fathering.



**Phil Fisher, PhD**, studies the effects of early adversity on children's neurobiological and psychological development. He designs and evaluates prevention and treatment programs for improving children's functioning in areas such as social-emotional development and peer relationships. He is interested in the brain's plasticity in the context of therapeutic interventions.



**Andy Garbacz, PhD**, is interested in promoting positive social behavior outcomes and supporting learning among children and adolescents by partnering families and educators to create sustainable systems of support. His research examines prevention and intervention programs that support children's learning and behavior within a tiered framework.



**Randy Kamphaus, PhD**, professor and dean of the College of Education, has focused his research on the development of better measures for

assessing and diagnosing child and adolescent mental health disorders. During the past decade his research has shifted to developing measures to improve early detection of mental health risk or subsyndromal psychopathology. He and colleagues are creating and conducting field trials of school-based secondary prevention programs for mitigating risk.



**Atika Khurana, PhD**, is interested in understanding the onset of health risk behaviors during adolescence. She uses an ecological systems approach to examine the interplay of individual and environmental risk and protective factors as they relate to adolescent substance use, risky sexual behaviors, academic disengagement, and mental health problems.



**Leslie Leve, PhD**, associate director of the Prevention Science Institute, focuses her research on interventions to prevent risk behaviors and improve well-being for youths in foster care and youths in the juvenile justice system, and

adoption studies that examine the interplay between biological (genetic, hormonal), family, and contextual influences on development.



**Laura Lee McIntyre, PhD**, is interested in early identification and treatment of childhood developmental and behavioral problems, with an emphasis on the systems of care that support children at risk for negative social, emotional, and behavioral outcomes. Specific research involves parent training, education, and support; transition to kindergarten; and family well-being.



**Kevin Moore, PhD**, has focused his professional and scientific career on the development and implementation of evidence-based and evidence-informed behavioral health treatments for children, youths, and families. He has extensive experience in researching, implementing, clinically supervising, and consulting on evidence-based treatments for externalizing and internalizing

*It is incredibly rewarding to be able to develop, test, and deliver prevention programs that truly work and see their impact on children, families, and schools in our community and nationwide.* Leslie Leve, PhD

disorders across educational, community-based mental health, social welfare, residential, and juvenile justice settings.



**Jennifer Pfeifer, PhD**, is interested in how brain function related to affect, motivation, regulation, self-evaluation,

and social context interact and influence adolescent behavior and studies the development of these phenomena at behavioral and neural levels. She is interested in how functional brain development is related to various endogenous and exogenous factors.



**John Seeley, PhD**, is a professor in special education and clinical sciences. His research interests include emotional and

behavioral disorders, behavioral health intervention, research design and program evaluation, and health-related technology. He is especially interested in school-based screening, prevention, and treatment for internalizing psychopathology.

**Samantha Shune, PhD**, focuses her research on mitigating



the deleterious effects of healthy and of pathologic aging on eating and mealtime processes. Her research and clinical

work as a speech–language pathologist focus on integrating the physiologic components of swallowing with a holistic view of the mealtime process.



**Elizabeth Skowron, PhD**, studies the effects of early adversity on the development of self-regulation skills in

early childhood and how biology and behavior shape parenting processes. Her team delivers evidence-based family interventions that reduce risk of child abuse and neglect and studies the biobehavioral pathways through which interventions result in positive outcomes.



**McKay Moore Sohlberg, PhD, CCC-SLP**, specializes in research to develop and evaluate interventions for

deficits in attention, memory, and executive functions following acquired brain injury. She is

particularly interested in treatments that mitigate cognitive effects for individuals with brain injury in the postacute phase, including those pursuing post-secondary education following brain trauma.



**Beth Stormshak, PhD**, director of the Prevention Science Institute, has expertise in the area of prevention, including

prevention of substance use, problem behavior, and later mental health problems in children and youths. Her research focuses on the development of family-centered, model-driven interventions designed to reduce problem behavior and promote successful developmental transitions. She has served as the principal investigator on multiple grants, including randomized trials that tested the efficacy and effectiveness of family-centered models of prevention to reduce risk behavior in early childhood, in school-age children, and in adolescents, with a primary focus on enhancing parenting skills and behavioral management.

## PSI 2016 Doctoral Students



**Kate Beauchamp, MS**, is a doctoral student in clinical psychology under the mentorship of Philip Fisher, PhD, and Elliot Berkman, PhD. She is a project coordinator on the Training Adolescent Self-Control (TASC) project directed by Dr. Berkman. Her current research interests include investigating how experiences of early life stress affect neurobiological systems (e.g., the stress response system, neural systems underlying executive function) and how this information can be leveraged to design neurobiologically informed interventions to mitigate deleterious effects of early life stress across development.



**Lucia Cardenas, BA**, a doctoral student in counseling psychology working with mentor Beth Stormshak, PhD, is funded by a NIDA diversity supplement. She seeks to evaluate the risk factors that young adolescents face and the best ways to mitigate the developmental trajectory of risky behaviors, especially substance use and abuse. She is engaged in research in a project about

the development and efficacy of an online version of the Family Check-Up.



**Elisa DeVargas, MS**, is a doctoral student in the counseling psychology program under the mentorship of Beth Stormshak, PhD. Her work is funded by an NICHD diversity supplement. She is an investigator on the Parenting to Prevent Substance Use in Late Adolescence project directed by Dr. Stormshak. Her career plans include working with children, adolescents, and families, specifically those living in monolingual Spanish-speaking homes. She is interested in better understanding school and home environments and the experiences of Latino and other ethnic/racial minority children and adolescents in these contexts.



**Jessica Flannery, MS**, is a doctoral student in the clinical psychology program under the co-mentorship of Phillip Fisher, PhD, and Jennifer Pfeifer, PhD. Her research interests broadly focus on how early adverse experiences influence

neuroendocrine pathways and function and their impact on the development of brain structures and connectivity between brain regions specifically associated with social and emotional development.



**John Flournoy, MS**, is a doctoral student in psychology working with mentors Jennifer Pfeifer, PhD, in developmental social neuroscience and Sanjay Srivastava, PhD, in personality psychology. He seeks to characterize cognitive processes underlying the perception of individual differences in the self and in others and to identify how those perceptions influence decision making. His recent research has examined how neural sensitivity to emotional expressions is linked to prosocial behaviors, developmental trends and causes of personality change, and how social context influences risky decision making.



**Kadie Johnson, MA, MS**, is a doctoral student in counseling psychology working under the mentorship of Elizabeth Skowron, PhD. She has had



a graduate research fellowship at PSI since September 2015 and is working as an assessor and interventionist for the Coaching Alternative Parenting Strategies (CAPS) project. Her research interests include processes of change, parenting quality, and child neglect severity. Her career goals include research and clinical work with children and families.



**Rachel Kovensky, BA**, is a doctoral student in counseling psychology working under the mentorship of Leslie Leve,

PhD. Her career goals include research and clinical work with adolescents and young adults. Her research interests include understanding the pathways to health-risking behaviors among adolescent girls and young women with trauma histories and exploring ways to bolster resilience and prevent long-term deleterious effects of trauma.



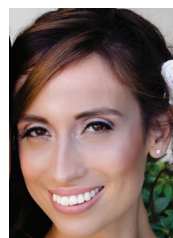
**Arian Mobasser, MS**, is a doctoral student in developmental psychology working under the mentorship of Jennifer Pfeifer, PhD. His research

is focused on self- and socio-emotional development during adolescence and its implications for healthy brain development. Arian's current project uses functional magnetic resonance imaging (fMRI) to better understand the behavioral and neural effects of socioemotional context on adolescent decision making.



**Shannon Peake, Ph.D.**, is a postdoctoral researcher in developmental psychology. His research interests

focus on the influence of social factors on cognitive skills and brain development. He is exploring the effects of social rejection on adolescent risk decisions to determine the extent to which certain adolescents may be more susceptible to making poor choices in social situations. The studies combine behavioral and neuroimaging approaches to explore how the development of social and emotional regions of the adolescent brain contribute to decision making.



**Aleksandria Perez Grabow, MS**, is a doctoral student in counseling psychology working under

the guidance of mentors Atika Khurana, PhD, and Leslie Leve, PhD. Aleksandria was awarded a three-year NIDA diversity supplement grant and is currently involved in Dr. Leve's Early Growth & Development Study. Her research is shaped through a developmental perspective and builds on her interest and experience working with survivors of trauma.



**Emily Reich, MS**, is a doctoral student in the counseling psychology program who is working under the mentorship

of Leslie Leve, PhD. She has completed assessments for the Early Growth and Development Study and other research-related tasks. Her career goals include research and clinical work with children and adolescents, and she is specifically interested in the mental health outcomes of at-risk youths. Her current work focuses on the impact of relational aggression on suicidal ideation of girls in foster care.

## FY 2016 PSI Scientists' Publications (selected from 65)

- Cho, Y. S., & Sohlberg, M. M. (2016). Training adults with brain injury how to help-seek when lost: A pilot study. *Brain Impairment*, 16(2), 90–103.
- Clark, C. A., Skowron, E. A., Giuliano, R. J., & Fisher, P. A. (2016). Intersections between cardiac physiology, emotion regulation and interpersonal warmth in preschoolers: Implications for drug abuse prevention from translational neuroscience. *Drug and Alcohol Dependence*, 163, S60–S69.
- DeGarmo, D. S., Nordahl, K. B., & Fabiano, G. A. (2016). Fathers and coercion dynamics in families: Developmental impact, implications, and intervention. In Dishion, T. J., & Snyder, J. J. (Eds.), *The Oxford handbook of coercive relationship dynamics* (pp. 114–128). New York, NY: Oxford University Press.
- Eli, K., Howell, K. R., Fisher, P. A., & Nowicka, P. (2016). A question of balance: Explaining differences between parental and grandparental perspectives on preschoolers' feeding and physical activity. *Social Science and Medicine*, 154, 28–35.
- Fisher, P. A., Leve, L. D., Delker, B., Roos, L., & Cooper, B. (2016). A developmental psychopathology perspective on foster care research. In D. Cicchetti (Ed.), *Developmental psychopathology* (3rd ed., pp. 513–548.). New York, NY: Wiley.
- Gewirtz, A. H., DeGarmo, D. S., & Zamir, O. (2016). Effects of a military parenting program on parental distress and suicidal ideation: After deployment adaptive parenting tools. *Suicide and Life-Threatening Behavior*, 46, S23–S31.
- Hyde, L., Waller, R., Trentacosta, C., Shaw, D., Neiderhiser, J., Ganiban, J., . . . Leve, L. D. (2016). Heritable and non-heritable pathways to early callous unemotional behaviors. *American Journal of Psychiatry*. Advance online.
- Inzlicht, M., Berkman, E. T., & Elkins-Brown, N. (2016). The neuroscience of "ego depletion" or: How the brain can help us understand why self-control seems limited. In E. Harmon-Jones & M. Inzlicht (Eds.), *Social neuroscience: Biological approaches to social psychology* (pp. 101–123). New York, NY: Psychology Press.
- Khurana, A., Romer, D., Betancourt, L. M., Brodsky, N. L., Giannetta, J. M., & Hurt, H. (2015). Experimentation versus progression in adolescent drug use: A test of an emerging neurobehavioral imbalance model. *Development and Psychopathology*, 27(3), 901–913.
- Khurana, A., Romer, D., Betancourt, L. M., Brodsky, N. L., Giannetta, J. M., & Hurt, H. (2015). Stronger working memory reduces sexual risk taking in adolescents, even after controlling for parental influences. *Child Development*, 86(4), 1125–1141.
- Marceau, K., De Araujo-Greecher, M., Miller, E. S., Massey, S. H., Mayes, L. C., Ganiban, J. M., Reiss, D., Shaw, D. S., Leve, L. D., et al. (2016). The perinatal risk index: Early risks experienced by domestic adoptees in the United States. *PLOS One*, 11(3), e0150486.
- Margolis, K., Fosco, G., & Stormshak, E. A. (2016). Circle of care: Extending beyond primary caregivers to examine collaborative caretaking in adolescent development. *Journal of Family Issues*, 37(9), 1179–1202.
- Moore, K. J., Garbacz, S. A., Gau, J. M., Dishion, T. J., Brown, K. L., Stormshak, E. A., & Seeley, J. R. (2016). Proactive parent engagement in public schools: Using a brief student strengths and needs assessment in a multiple-gating risk management strategy. *Journal of Positive Behavior Interventions*. Advance online.
- Neiderhiser, J. M., Marceau, K., de Araujo-Greecher, M., Ganiban, J. M., Mayes, L. C., Shaw, D. S., . . . Leve, L. D. (2016). Estimating the roles of genetic risk, perinatal risk, and marital hostility on early childhood adjustment: Medical records and self-report. *Behavior Genetics*, 46, 334–352.
- Pfeifer, J. H., & Allen, N. B. (2016). The audacity of specificity: Moving adolescent developmental neuroscience towards more powerful scientific paradigms and translatable models. *Developmental Cognitive Neuroscience*, 17, 131–137.
- Roos, L. E., Beauchamp, K. G., Pears, K. P., Fisher, P. A., Berkman, E. T., & Capaldi, D. (2016). Effects of prenatal substance exposure on neurocognitive correlates of inhibitory control success and failure. *Applied Neuropsychology: Child*. Advance online.
- Roos, L. E., Fisher, P. A., Shaw, D. S., Kim, H. K., Neiderhiser, J. M., Reiss, D., . . . Leve, L. D. (2016). Inherited and environmental influences on a childhood co-occurring symptom phenotype: Evidence from an adoption study. *Developmental Psychopathology*, 28(1), 11–125.
- Shune, S., Moon, J. B., & Goodman, S. S. (2016). The effects of age and pre-oral sensorimotor cues on anticipatory mouth movement during swallowing. *Journal of Speech, Language, and Hearing Research*, 59, 195–205.
- Simmons, J. G., Badcock, P. B. T., Whittle, S., Byrne, M., Mundy, L., Patton, G. C., . . . Allen, N. B. (2016). The lifetime experience of traumatic events is associated with hair cortisol concentrations in community-based children. *Psychoneuroendocrinology*, 63, 276–281.
- Smith, J. D., Woodhouse, S., Clark, C., & Skowron, E. A. (2016). Attachment status and mother-preschooler parasympathetic response to the Strange Situation Procedure. *Biological Psychology*, 114, 39–48.
- Sohlberg, M. M., Kucheria, P., Fickas, S., & Wade, S. L. (2015). Developing brain injury interventions on both ends of the treatment continuum depends upon early research partnerships and feasibility studies. *Journal of Speech, Language, and Hearing Research*, 58(6), S1864–S1870.
- Stormshak, E. A., Brown, K. L., Moore, K. J., Dishion, T. J., Seeley, J., & Smolkowski, K. (2016). Going to scale with family-centered, school-based interventions: Challenges and future directions. In S. Sheridan & E. Kim (Eds.), *Research on family-school partnerships, Vol 3: Family-school partnerships in context*. New York, NY: Springer.
- Tang, Y. Y., & Leve, L. D. (2016). A translational neuroscience perspective on mindfulness meditation as a prevention strategy. *Translational Behavioral Medicine: Practice, Policy and Research*, 6, 63–72.
- Welchons, L. W., & McIntyre, L. L. (2015). The transition to kindergarten: Predicting socio-behavioral outcomes for children with and without disabilities. *Early Childhood Education Journal*. Advance online.

UNIVERSITAS OREGONENSIS  
MENS  
M D C C C L X X V I  
AGITAT MOLEM



# PREVENTION SCIENCE INSTITUTE

1600 Millrace Dr., Suite 106 • 6217 University of Oregon  
Eugene, OR 97403-6217 • [psi.uoregon.edu](http://psi.uoregon.edu) • p: 541.346.3630