

PREVENTION SCIENCE INSTITUTE



ANNUAL REPORT 2017



UNIVERSITY OF OREGON

Table of Contents

Welcome From the Director.....	1
Understanding Brain Plasticity	2
PSI Researchers Join National Initiative.....	3
PSI Tests Family Check-Up Online.....	4
Summer Interns: The Future of Research	5
Grant-Funded Research at PSI.....	6
UO Faculty at PSI	11
PSI 2017 Trainees.....	14
PSI Publications.....	16

Photo Credits

Cover, *Left to Right*: family planting flowers, ©Shannon Fagan, Dreamstime.com; teenage girls using phone, ©Monkey Business Images Ltd, Dreamstime.com; mother and child playing in park, ©Sandy Kobaykov, Dreamstime.com. *Inside Front Cover*: family looking down into camera, ©Monkey Business Images Ltd, Dreamstime.com; *Page 2*: brain, ©Sergey Shenderovskiy, Dreamstime.com; *Page 3*: family growing together, ©Rido, Dreamstime.com; *Page 4*, African-American couple at the computer, ©Isaiahlove, Dreamstime.com. *Page 10*, iStockphoto.com/Morgan Lane Studios.



Welcome to Our Annual Report for Fiscal Year 2017

The Prevention Science Institute is now in its fifth year at the University of Oregon. This solid foundation readies us and steadies us for continuing to build a successful future in research, in training future scientists, and progressing in our work to improve the lives of children, families, and adults through science and discovery. As a collective faculty, our research seeks to understand prevention from multiple perspectives by integrating basic research that identifies intervention targets, develops effective intervention programs, and disseminates these programs into community and school settings.

The stories in this annual report highlight some of our ongoing research projects and research training activities. Our Center for Translational Neuroscience continues to gain ground at the interface of cognitive neuroscience, psychology, and education through studies of the human brain and identifying how to maximize study findings to improve positive behavioral change. PSI's participation in the groundbreaking NIH collaborative Environmental Influences On Child Health Outcomes program underscores the critical importance of Dr. Leslie Leve's Early Growth and Development study, which has been distinguishing the role of environmental exposures from heritable influences in children's health outcomes. Our third story describes the development and evaluation of our most recent implementation of the Family Check-Up—an online version that will enable families to more easily access and learn family management skills and support them as they address their children's behavioral problems and guide them toward success. And finally, we present this year's undergraduate interns, who were funded by the National Institute on Drug Abuse to join us for the summer to learn about how research is conducted, from recruitment and assessment all the way through to writing about research for publication in peer-reviewed journals.

A description of the robust extent to which grant-funded research continued through Fiscal Year 2017 gives readers of this annual report a look at the broad range of scientific exploration that is occurring at PSI. The knowledge gained, the results disseminated, and the interventions designed and implemented set a remarkable pace toward serving individuals, families, and society as a whole.

Our commitment to training, education, and science is integrated into our organizational structure and research model. In this report you will meet our scientists and the many graduate students who contribute their valuable efforts to our scientific studies. New faculty hires during the past few years have expanded our research focus in health promotion, translational neuroscience, and online intervention development and dissemination. And through their experience at PSI, our graduate students are poised to enter the field of education and research, fully trained and ready to make a mark on the world. As a whole, in the coming years at PSI we anticipate that we will continue to successfully expand our research activities through new hires and collaborations with colleagues across campus and beyond to improve the lives of families everywhere.

Center for Translational Neuroscience

Understanding Brain Plasticity

The past decade has seen a dramatic growth of knowledge about brain science. New and rapidly emerging technologies are enabling researchers to conduct groundbreaking investigations, from identifying the functions of individual neurons to understanding complex networks of interrelated brain regions involved in learning and memory, emotions, well-being, and psychological disorders. Exciting linkages are also being made between the brain and other biological systems involved in physical health and illness. Extensive progress is also being made in understanding the interplay between genetic and environmental influences on well-being throughout the lifespan. However, in the face of this scientific progress, there has been relatively limited application of the emerging knowledge from neuroscience to develop innovative scalable and marketable strategies to improve health and well-being at the population level. This approach, known as *translational neuroscience*, has the potential to produce transformative breakthroughs that increase health and well-being at the individual and societal level. Researchers at the Prevention Science Institute's Center for Translational Neuroscience (CTN) are determined to achieve this goal.

Working at the interface of cognitive neuroscience; clinical, developmental, and social psychology; and education, CTN researchers are leveraging scientific knowledge to address key issues, such as how to buffer infants and children from the effects of poverty on learning and achievement, how to reduce the likelihood of health-risking behavior in adolescents, and how to increase motivation for adults with addictions, such as smoking, substance abuse, and overeating, to instead engage in healthy behaviors. This work capitalizes on our increasing understanding of the plasticity of the brain across the lifespan and what can be done to maximize the likelihood of positive changes in individuals and our society and around

the globe. The efforts of CTN scientists are entrepreneurial in nature and have already produced evidence-based programs for disadvantaged children and families that are being implemented at sites across the United States, Canada, and Europe.

A new project led by CTN researcher Dr. Elliot Berkman illustrates this approach. The goals of this research are to understand which treatment works best for whom in helping overweight and obese individuals change their eating patterns. To do this, Dr. Berkman and his team will measure activity in a region of their study participants' brains called the ventromedial prefrontal cortex (vmPFC), which is involved in calculating the value people place on foods. Activity in this brain region when people look at food images is predictive of whether they later eat the food. One of three active interventions will target activation in this region for change, but each operates through a different pathway. For example, one uses behavioral responses to generate change in valuation, and another uses cognitive restructuring. The fact that the interventions are qualitatively different enables the researchers to compare their respective influence on vmPFC activity both across subjects and as a function of subject-specific characteristics, such as baseline motivation levels. A key hypothesis is that the interventions will be differentially effective for people, depending on these characteristics.

Dr. Berkman has partnered with UO experts in machine learning to build software that can identify which treatments are best suited for a given individual. Thus, an innovative deliverable from this project could be a validated tool that clinicians can use to match a person to a treatment based on a profile of measures.



Environmental Influences on Child Health Outcomes Program PSI Researchers Chosen to Join National Initiative

What if we discovered how to improve conditions during the earliest stages of our development—from conception through early childhood—to give our children the best chance for a healthy future? We could then achieve the mission of the Environmental Influences on Child Health Outcomes (ECHO) program: to enhance the health of children for generations to come.

The scientific goal of ECHO, a research program launched by the National Institutes of Health, is to understand the effects of early environmental influences on child health and development. ECHO uses information from existing longitudinal research projects (cohorts) that will include more than 50,000 children from diverse backgrounds across the United States. Together, these cohorts follow participants from before they are born through childhood and adolescence. ECHO also supports a 17-state clinical trials network to test prevention and treatment strategies among children from rural and medically underserved backgrounds. ECHO brings together more than 1,200 scientists and their institutions from 44 states, Puerto Rico, and the District of Columbia.

The ECHO project launched in September 2016, and PSI scientist Dr. Leslie Leve's study, The Early Growth and Development Study (EGDS), is 1 of 35 projects across the United States selected to participate. EGDS started as a nationwide, longitudinal study designed to learn more about child development. From 2003 to 2009, our Oregon team worked with collaborators at Penn State University and George Washington University to recruit a sample of adoptive families and biological parents from 45 domestic adoption agencies across 15 states. All families have been assessed since pregnancy into middle childhood and adolescence.

As part of the ECHO program, EGDS uses a “dual-family” adoption design and includes more than 1,200 children, some of whom were adopted at birth and are not genetically related

to their rearing parents, and others who are the biological children of the rearing parents. The total sample of children comprises more than 800 sibling pairs; some siblings live in the same household and some live in separate households (adoptive family home vs. biological parent home). This design can help us disentangle the effects of environmental exposures on child development from heritable influences and help clarify how the two work together.



In studies in which children are reared by biological parents, it is difficult to separate the role of the social environment from that of genetic influences. The dual-family design addresses this fundamental confound. This design has unique power to estimate the impact of children's heritable characteristics on their sensitivity to environmental influences, assess the role of these characteristics in evoking and selecting environments, separate prenatal and postnatal environmental effects, and clarify the magnitude and mechanisms by which large socioeconomic differences in families produce health disparities, by comparing genetically related siblings growing up in strikingly different economic circumstances. When combined with the other ECHO pediatric projects, the data generated and analyses conducted in the EGDS study will improve future prevention efforts to offset inherited risks and maximize inherited strengths to promote healthy development.

Web-based help for parents PSI Tests FCU-Online

In 2015 PSI scientists Drs. Beth Stormshak, John Seeley, and Brian Danaher were awarded a grant from the National Institute on Drug Abuse (NIDA) to develop and experimentally evaluate the effectiveness of a web-based version of the Family Check-Up (FCU) for at-risk families of early adolescents (ages 11–14). The FCU is a school-based, family-centered intervention that has been developed during the past 20 years and tested with diverse populations. It enhances parenting skills and family management in early adolescence and has been shown to be highly effective for reducing adolescent problem behavior, achievement problems, depression, and substance use.

In the original FCU, parents complete an assessment that evaluates family strengths and challenges. They then meet face-to-face with a family consultant to receive feedback, and they decide together which child behaviors they most want to see change. The consultant then works with parents to enhance relevant parenting and family management skills.

In this research study, an online version of the FCU was developed for parents of middle school youth to help schools implement the intervention with less demand on school resources. The FCU-Online incorporates the successful

components of the original FCU in an online package that can be accessed by parents at a time and location convenient to them.

The website begins with an online parent assessment followed by immediate computer-generated feedback about parenting strengths and challenges. On the basis of assessment results, users are then directed through sessions designed to enhance parenting skills in four critical areas: positive parenting, limit setting, monitoring, and open communication. A web host provides an overview of the module, highlights its relevance to parents' lives, and motivates parents to continue. Parents are then led through a series of videos, animations, tips, and interactive tools that give users immediate feedback about their comprehension of the material. The website also includes a resource library for parents, a text-messaging option so parents can receive encouragement and reminders via text to practice new strategies, and tools that enable parents to track how often they are using strategies and any observed changes in child behavior or family functioning.

In February 2017 research staff began recruiting a sample of 300 middle school families from six



schools in urban, suburban, and rural areas of Oregon to test the FCU-Online's ability to improve key parenting skills. Although research has shown that in-person contact enhances outcomes most effectively, programs that require no in-person coaching are more cost effective, easier for schools to deliver, and have greater reach. The PSI study is evaluating the relative effectiveness of a web-only version versus a web + coach condition.

Study participants are being randomly assigned to one of three research conditions: web-only, web + coach, or a waitlist-control group that receives middle school services as usual for 12 months before receiving access to the web-only FCU. All parents and youth will complete surveys at baseline and then intermittently for one year to evaluate change in parenting and child behaviors over time. When data collection is complete, school personnel will be given the FCU-Online to use in their communities and will be trained in both versions (web + coach and web-only) so uptake in a real-world setting can be examined.

Students present independent projects at PSI

Summer Interns: The Future of Research

PSI welcomed four visiting undergraduate interns in summer 2017. These students were assigned to PSI by the National Institute on Drug Abuse, which routinely places underrepresented undergraduate students at research institutions across the country each summer for an eight-week research internship. Three students were assigned to PSI's Eugene location and one to its Portland base of operations. Khyesha McCall, Jon McEwen, and Alice Rhodes joined Dr. Leslie Leve's research team in Eugene to learn about her study, Preventing Drug Use and HIV-Risk Behaviors in CWS-Involved Adolescent Girls (SHARP). Emily Gardner joined Dr. Allison Caruthers in Portland, where she assisted with three research studies involving the Family Check-Up, including the FCU-Online project funded by NIDA (Stormshak & Seeley, MPiS).

Khyesha McCall, a senior at the University of Arkansas in Fayetteville, is working toward a bachelor's degree in psychology and criminal justice, with a minor in sociology. She plans to pursue a master's in social work after completing her undergraduate coursework.

Jon McEwen received a bachelor's degree in psychology with a minor in Spanish from the University of Alabama in Tuscaloosa, in spring 2017. He is now studying for the MCAT and plans to enroll in a medical program with a focus in psychiatry.

Alice Rhodes received a bachelor's degree in psychology from Southern University at New Orleans, Louisiana, in May 2017. She is currently attending a master's program at Florida A&M University to pursue a degree in community psychology.

Emily Gardner is a junior studying psychology

at Colorado College in Colorado Springs. She is interested in adolescence and school settings and is considering graduate training in school psychology after graduation.

In the SHARP study, Khyesha, Jon, and Alice became familiar with the various aspects of a research study, such as recruitment and assessment, human subjects research approval, data management, intervention protocols, and manuscript development. The Eugene interns reviewed and discussed study articles, assisted with data entry and court record coding, and participated in team meetings. Each

student completed an independent research project for which they designed a research question, analyzed data, and presented their findings to the research team. These projects are The Effects of Family Discipline

and Socioeconomic Status on Substance Abuse in Adolescent Girls (McCall), STD Knowledge & Prevention in Adolescents & Correlations with Impulsivity and Substance Use (McEwen), and The Relationship Between Peer and Partner Deviant Behavior and Substance Use Amongst Adolescent Girls (Rhodes).

Emily's internship in Portland exposed her to longitudinal research, motivational interviewing, and preventive interventions. Because she worked on three projects in very different stages of completion, she experienced many elements of the research process, including applying for funding; recruiting and retaining participants; collecting, coding, and analyzing data; manuscript writing; and providing peer review of others' work. At the end of her internship she presented her independent research project on early adolescent predictors of criminal behavior in early adulthood.



Emily Gardner, Alice Rhodes, Jon McEwen, Khyesha McCall

Grant-Funded Research in FY 2017 at PSI

Behavioral Effects of Teen Exposure to Multiple Risk Behaviors in Media

Funding period: 2014–2016
Subaward PI: Dr. Atika Khurana; Univ. Penn. PI: Dr. Amy Bleakley

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 of adolescent health risk behaviors.

Brief Alcohol Screening and Intervention for College Students

Funding period: 2016–2018
Subaward PI: Dr. Jessica Cronce; Univ. Wash. PI: Dr. Christine Lee
Funded by: National Institute on Alcohol Abuse and Alcoholism
Grant number: R34 AA023047

This intervention is being adapted 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.

CEEDAR Technical Assistance

Funding period: 2016–2017
PI: Dr. Randy Kamphaus; MPI: Dr. Dianna Carrizales-Engelmann
Funded by: Oregon Department of Education
Grant number: ODE264341

Oregon stakeholders' goals in CEEDAR Center efforts to improve professional learning

systems center on equity, culturally responsive practices, and improving educational outcomes by revising the preparation of general and special education practitioners.

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

Funding period: 2014–2019
Subaward PI: Dr. David DeGarmo; Univ. Minn. PI: Dr. Abigail Gewirtz
Funded by: United States 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. The web-enhanced, group-based After Deployment Adaptive Parenting Tools intervention is being evaluated as an individualized web-facilitated/telehealth intervention.

The Early Growth and Development Study Pediatric Cohort

Funding period: 2016–2018
UO PI: Dr. Leslie Leve; Geo. Wash. Univ. MPI: Dr. Jody Ganiban; Penn State MPI: Dr. Jena Neiderhiser
Funded by: National Institutes of Health Office of the Director
Grant number: UG3 OD023389

In collaboration with 83 other projects in the United States that together form the Environmental Influences on Child Health Outcomes initiative to study early environmental influences on child health and development, this

study uses a dual-family adoption design to distinguish the role of environmental exposures from that of heritable influences and identify how each affects children's health outcomes.

eHealth Coping Skills Training and Coach Support for Women Whose Partner Has a Drinking Problem

Funding period: 2016–2021
PI: Dr. Brian Danaher; Univ. Buffalo SUNY MPI: Dr. Robert Rychtarik
Funded by: National Institute on Alcohol Abuse and Alcoholism
Grant number: R01 AA024118

This project involves the development of a web version of Stop-SpinningMyWheels (SSMW), a coping skills program for women living with a partner who has an alcohol use disorder (AUD). Four hundred and fifty women with an AUD partner have been randomly assigned to Web SSMW + coach support calls, Web SSMW, or an information website.

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

Funding period: 2015–2017
Principal Investigator: Dr. Elizabeth Stormshak
Funded by: Ford Family Foundation
Grant number: 20150294

The Family Check-Up Online for middle school youth and their family uses multimedia and technology, including a user-friendly web program, to support effective family management and behav-

ioral change. The FCU Online has been piloted and tested with schools and families in rural southern Oregon.

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

Funding period: 2014–2017

Principal Investigator: Dr. Leslie Leve
Funded by: National Institute of Child Health and Human Development
Grant number: R56 HD042608

This adoption study aims to disentangle inherited influences from social–environmental influences on youth behavior and competencies during the transition to middle school. It is examining how children change and develop over time, how inherited risks can be overcome by positive family environments, 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

UO PI: Dr. David DeGarmo; IRIS Media MPI: Dr. Neil Caraway
Funded by: National Institute of Child Health and Human Development
Grant number: R44 HD075499

This project is testing effectiveness of the FTC on fathers' parenting skills, coparenting conflict reduction, and cooperation. Participants are engaged in group-based learning and in individualized interactive instruction online.

Gene–Environment Interplay and Childhood Obesity: An Adoption Study

Funding period: 2013–2017

Subaward PI: Dr. Leslie Leve; Geo. Wash. Univ. PI: Dr. Jody Ganiban
Funded by: National Institute of Diabetes and Digestive and Kidney Diseases
Grant number: R01 DK090264

This study is exploring the eating behaviors of adopted children, adoptive parents, and birth parents from birth to middle childhood. Family dietary habits, physical activities, and child growth patterns are examined when children are age 7–9 years. A particular study focus is identification of environmental and genetic factors that promote physical growth and healthy weight.

Girls-Specific Prevention Program for Substance Use and Delinquency

Funding period: 2015–2017

Subaward PI: Dr. Leslie Leve; Univ. Wash. PI: Dr. Sarah Walker
Funded by: National Institute on Drug Abuse
Grant number: R21 DA037455

This program is testing effectiveness of a strategy for justice-involved girls at risk of escalating delinquency and substance use. It uses cognitive-behavioral

and moral reasoning principles found to be effective for at-risk youth. 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: 2014–2017

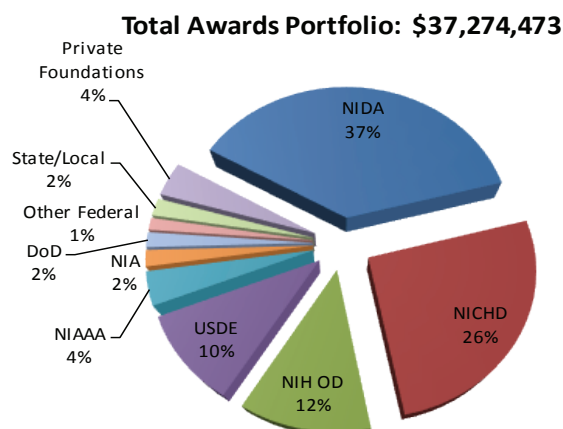
Principal Investigator: Dr. Philip Fisher
Funded by: Subawards from Harvard University

Frontiers of Innovation, designed to improve child outcomes, brings together researchers, practitioners, and policymakers from several sites to codevelop prevention and intervention programs to build caregiver capacities.

KEEP-P, a Prevention Intervention for Foster Preschoolers

Funding period: 2013–2018

Principal Investigator: Dr. Philip Fisher
Funded by: National Institute of Child Health and Human Development
Grant number: R01 HD075716



This randomized clinical trial, which includes foster preschoolers and their caregivers, aims to improve parenting, reduce rates of disrupted placements, and improve child outcomes among this population. It includes weekly support group sessions and a video coaching program to reinforce and strengthen supportive caregiver-child interactions.

Parenting to Prevent Substance Use in Late Adolescence

Funding period: 2012–2017

Principal Investigator: Dr. Elizabeth Stormshak

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 substance use and abuse during the transition to adulthood. Targets are reduced substance use, parent-youth relationships that foster independent living, fewer peer relationships and activities that promote drug use, and healthy adult outcomes.

Prevention of Substance Use in At-Risk Students: A Family-Centered Web Program

Funding period: 2015–2020

Principal Investigators: Drs. Elizabeth Stormshak & John Seeley

Funded by: National Institute on Drug Abuse

Grant number: R01 DA037628

This study is examining the

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

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

Funding period: 2015–2019

Subaward PI: Dr. Randy Kamphaus; Univ. So. Carolina MPIs: Drs. Christine DiStefano, Fred Greer

Funded by: Institute of Education Sciences

Grant number: R305A150152

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

RULE Project: Read Understand Learn & Excel

Funding period: 2016–2018

Principal Investigator: Dr. McKay Moore Sohlberg

Funded by: National Science Foundation

Grant number: 1640492

This project is building a com-

puterized tool that dynamically assesses and supports reading comprehension in postsecondary students with cognitive impairments. The project is developing an ecological assessment of reading comprehension that includes automated evaluation of retention and comprehension and reading strategy use using expository text.

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

Funding period: 2013–2018

Principal Investigator: Dr. Leslie Leve
Funded by: National Institute on Drug Abuse

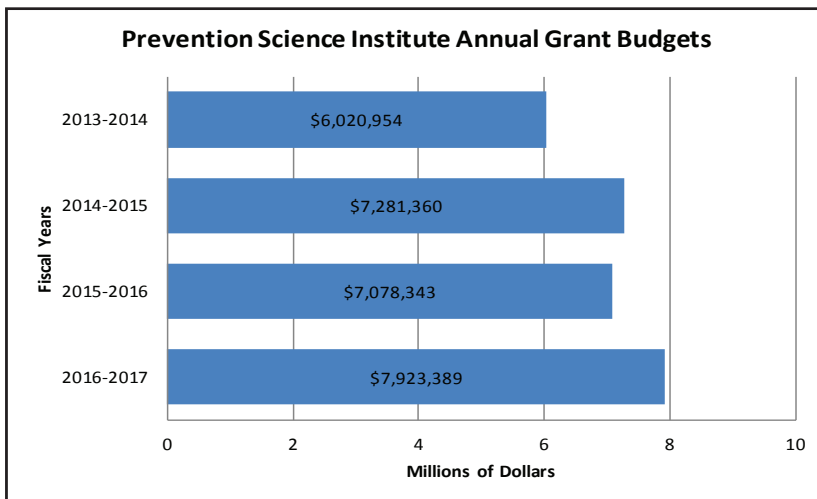
Grant number: R01 DA035062

A naturalistic human cross-fostering design is being used to examine childhood pathways to development by identifying nuances in the rearing environment associated with specific child risk behaviors and competencies. To isolate effects of the rearing environment from effects of genes shared between parent and child, researchers are assessing 7-year-old sibling pairs in which one sibling was reared from birth by an adoptive family and the other was reared from birth by their biological mother.

SMART Optimization of a Parenting Program for Active-Duty Families

Funding period: 2016–2020

Subaward PI: Dr. David DeGarmo; Univ. Minn. PI: Dr. Abigail Gewirtz



Funded by: United States Department of Defense

Grant number: W81XWH-16-1-0407

The objective of this study is to provide ways to meet the needs of military families experiencing deployments by testing various programs to strengthen parenting and family resilience (i.e., children's well-being, parents' adjustment, and marital relationships).

Social Norms and Skills Training: Motivating Campus Change

Funding period: 2016–2018

Subaward PI: Dr. Jessica Crounce; Univ. Wash. PI: Dr. Mary Larimer

Funded by: National Institute on Alcohol Abuse and Alcoholism

Grant number: R56 AA12547

This project is developing initial prototypes of a web-based personalized feedback intervention (PFI) and text-message intervention boosters that target high-risk events, including personalization algorithms, and then testing their usability and feasibility along

with two methods of objective measurement of alcohol use in a small sample of college students.

Tailored Inhibitory Control Training to Reverse EA-Linked Deficits in Mid-Life

Funding period: 2014–2017

Principal Investigator: Dr. Elliot Berkman

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

Funding period: 2015–2019

Principal Investigators: Drs. Elizabeth Skowron & Philip Fisher

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: 2013–2017

Principal Investigator: Dr. Elizabeth Stormshak

Funded by: Institute of Education Sciences

Grant number: R305A140189

This study is evaluating the efficacy of implementing the Family Check-Up during the transition into elementary school. Target domains include family contextual risks, family management skills, self-regulation skills, academic learning skills, social competence skills, and problem behavior.

Transition to Scalability (Motivational Boost at Scale, Phase I)

Funding period: 2017–2018

Subaward PI: Dr. Elliot Berkman; Harvard Univ. PI: Dr. Jack Shonkoff

Funded by: Bezos Family Foundation
Grant number: 170410

In past work, a brief online and mobile program has been developed to increase parents' motivation to engage in parenting classes. This grant has funded the next step in that line of work by expanding the reach of the program to several additional sites, developing the underlying technology to deliver the intervention, and creating a business plan to make the program self-sustaining.

Translational Drug Abuse Prevention Center (TDAP)

Funding period: 2013–2018

Subaward PIs: Drs. Philip Fisher, Leslie Leve, David DeGarmo; OSLC MPI: Dr. Patricia Chamberlain

Funded by: National Institute on Drug Abuse

Grant number: P50 DA035763

The TDAP aims to improve outcomes for children and families involved in U.S. child welfare systems (CWS). Targets include (a) mechanisms and processes associated with high levels of early life adversity and risky decision making during early adolescence, (b) high rates of drug use and engagement in HIV-risk behaviors in adolescent girls, and (c) implementation of evidence-based interventions into real-world CWS settings with fidelity and empirical measurement of implementation success/failure.

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

PIs: Drs. Philip Fisher, Melanie Berry; Ore. State Univ. MPIs: Drs. Shannon Lipscomb, Bridget Hatfield

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.

Rural Oregon School Participates in PSI Childhood Obesity Study

In the United States, children's generally poor eating habits are a primary contributor to obesity. Children in rural regions report worse eating habits than their urban and suburban peers do and are consequently more susceptible to obesity and chronic disease.

Research has shown that just a single bout of 20 minutes of moderate physical exercise promotes significant improvements in the eating behaviors of adults. PSI scientist **Dr. Nichole Kelly** and other members of the Researching Eating and Nutrition to Enhance Wellness (RENEW) lab are recruiting young children in rural Oregon to observe their eating behaviors following a brief walk on a treadmill. If they see improvements in participants' eating behaviors, Dr. Kelly and her team will implement an intervention in which school-age children engage in structured physical activity immediately before going to lunch.



Starting in fall 2017, a participating rural Oregon elementary school moved its recess from immediately after to immediately before lunch, an intervention that the Centers for Disease Control says could have significant implications for the daily dietary habits of young children at high risk for obesity. Data collected from interviews with these school children will elucidate the barriers and facilitators to rescheduling recess, and data from the study will create a rich pool of information to inform the development of a preliminary effectiveness trial to evaluate effects of recess on children's eating behaviors.

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 associated biological systems.

their influence on physical activity and healthy eating among communities with heightened risk for chronic diseases.



Allison Caruthers, PhD, is interested in adolescent gender and sexual socialization and their relationship to

sexual behavior, sexual risk taking, and emotional well-being in adolescence and adulthood, and possible mechanisms by which intervention services reduce risky sexual behavior.



prevent or lessen those harms, including use of individual-focused motivational enhancement approaches.

Brian Danaher, PhD, develops and evaluates self-management programs designed to encourage health



behavior change, especially eHealth interventions delivered using technology. In addition to outcomes, his research has examined recruitment, participant engagement, abandonment, imputing missing data, and implementation/dissemination.



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.



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.



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 research involves an intervention for divorced fathers and multimodel comparisons of interventions for military parents.



Elizabeth Budd, PhD, MPH, studies early chronic disease prevention among youth and adolescents, with a particular

interest in middle school-age girls. Her work examines social and physical environments and

Jessica Cronce, PhD, researches how alcohol use and other health-related behaviors overlap and interact to predict risk among young adults and how to

Welcome to Our Newest Scientists at PSI!

Todd Darlington, PhD, Research Associate, Department of Psychology

Stephanie Shire, PhD, Assistant Professor, Special Education and Clinical Sciences, College of Education

Emily Tanner-Smith, PhD, Associate Professor, Counseling Psychology and Human Services, College of Education



Philip Fisher, PhD, studies the effects of early adversity on children’s neurobiological and psychological development and the brain’s plasticity relevant to therapeutic interventions. He designs and evaluates prevention and treatment programs for improving children’s functioning in areas such as social–emotional development and peer relationships.



Nicole Giuliani, PhD, studies emotion, self-regulation, health behaviors, and family dynamics. She uses multiple methods, including neuroimaging, ecological momentary assessment, and behavioral coding, to understand basic processes and improve interventions using a translational neuroscience approach.



Randy Kamphaus, PhD, professor and dean of the College of Education, has focused his research on developing measures for assessing and diagnosing child and adolescent mental health disorders and recently, on developing measures

to improve early detection of mental health risk or subsyndromal psychopathology.



Nichole Kelly, PhD, studies eating behaviors and health. She uses experimental paradigms to identify mechanisms for poor eating decisions and develops and evaluates novel strategies for promoting healthier dietary habits. Her work also considers the role of cognitive functions, emotions, and sociocultural influences in eating behaviors.

to improve early detection of mental health risk or subsyndromal psychopathology.



Atika Khurana, PhD, uses a developmental-ecological approach to understanding and preventing unhealthy risk behavior outcomes in adolescence (e.g., substance abuse), with an emphasis on the neuropsychological predictors of adolescent risk-taking such as executive control and reward sensitivity.

to improve early detection of mental health risk or subsyndromal psychopathology.



Leslie Leve, PhD, focuses her research on interventions to prevent risk behaviors and

improve well-being for youth in foster care and youth 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, focuses on early identification and treatment of childhood developmental

and behavioral problems and particularly, the systems of care that support children at risk for negative social, emotional, and behavioral outcomes. Her research emphasizes parental support, transition to kindergarten, and family well-being.



Kevin Moore, PhD, has focused on the development and implementation of evidence-based and evidence-in-

formed behavioral health treatments for children, youths, and families. He has extensive experience in evidence-based treatments across educational, community-based mental health, social welfare, residential, and juvenile justice settings.

I love being at the intersection of university faculty and community agencies, behavioral science and clinical practice, and researcher and participant communication. It's highly rewarding to test research models and help at-risk individuals gain access to evidence-based interventions. Allison Caruthers, PhD



Jennifer Pfeifer, PhD, is interested in how social, affective, motivational, and regulatory processes interact and influence adolescent behavior. She studies the development of these phenomena at behavioral and neural levels, including their relationships with puberty, mental health, and health-risking behavior.



Fred Sabb, PhD, focuses on elucidating the neurobiology of cognitive control and its maturational trajectory throughout adolescence to develop novel therapeutic targets for intervention. He uses functional magnetic resonance imaging and behavioral assessment to examine processes of cognitive control and their interaction and change.



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, researches the effects of aging on swallowing and the mealtime process. She is particularly interested in better understanding the shared mealtime and food-related activities as opportunities to therapeutically target improved mortality and quality of life for older adults, healthy and otherwise.



Elizabeth Skowron, PhD, studies the effects of adversity on the development of self-regulation skills in early childhood and how biology and behavior shape parenting. Her research team delivers evidence-based family interventions that reduce risk of child abuse and neglect and studies how interventions produce positive outcomes.

Tasia Smith, PhD, is interested in obesity-related health disparities among marginalized communities. Her specific research examines determinants of health, culture-specific factors,



and the interplay of physical and mental health. She also designs, implements, and evaluates community-based health promotion programs among underserved populations.



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.



Beth Stormshak, PhD, specializes in prevention, including prevention of substance use, problem behavior, and later mental health problems in children and youths. She focuses on development of family-centered, model-driven interventions to reduce problem behavior and promote health and well-being throughout the lifespan.

PSI 2017 Doctoral Students



Kate Beauchamp, MS, is a doctoral student in clinical psychology who uses neuroscience to inform intervention development for high-risk families.



Danielle Cosme, MS, is interested in the development of self-regulation and its relationship to health and well-being during adolescence and early adulthood.



Kadie Johnson, MA, MS, is an assessor/interventionist for the CAPS project who is interested in therapy with families and researching parenting quality and change.

Maira Birrueta, BS, is interested in the bidirectional relationship between parent behavior and child behavior.



John Flournoy, MS, studies the impact of social motivations on decision making in adolescence.



Matt Jones, BA, is interested in identifying and/or creating approaches that address racial and health-related disparities among ethnically diverse adolescents.



Lucia Cardenas, BA, is an investigator on the Family Check-Up Online: Support for Middle School Families in Rural Oregon project.



Ryan Giuliano, PhD, is interested in the effects of early life stress on neural, physiological, and behavioral correlates of selective attention, working memory, and inhibitory control.



Rachel Kovensky, MS, a counseling psychology doctoral student, is interested in trauma, health-risking behaviors, and resilience promotion among adolescent girls and young women.

Camille Cioffi, BS, a student in the prevention science doctoral program, studies the development of healthy regulatory development throughout early childhood.



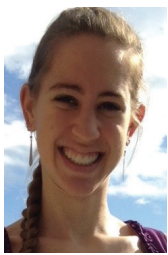
Sarah Horn, MS, is a doctoral student who is studying the impact of early adversity on immunological mechanisms.



Carrie Lapsey, MEd, works on the Coaching Alternative Parenting Strategies project and is



interested in parent–child relationships and self-regulation in child welfare–involved families.



Anna McWhirter, MEd., a school psychology doctoral student and coding supervisor for PSI,

is interested in parenting and parent–teacher relationships.

Arian Mobasser, MS, focuses his research on self- and socio-emotional development during adolescence and its implications for healthy brain development.



Kelsey Nolan, BA, a doctoral student in the school psychology program, is interested in early interven-

tion, family–school partnerships, and postsecondary school transitions.



Laura Noll, MSc, focuses her work on the intergenerational transmission of child maltreatment and the design of strengths-based support programs for at-risk families.

Aleksandria Perez Grabow, MS, focuses her research on the effects of trauma and violence and the influences of an individual's ecology.



Kelcie Rodriguez, MEd, is interested in understanding the impact of sense of belonging on academic

engagement and educational experience of minority and underrepresented students.

Leslie Roos, MS, is completing her clinical internship after which she plans to research the



effects of acute and chronic stress on cognition.



Margaret Rosencrans, MS, QMHP, currently works with schools and families, and her research is fo-

cused on coparenting quality in families of children with developmental delays.

Sylvia Shaykis, MS, is especially interested in working with diverse populations, including immigrants and refugees, and with young children with neurodevelopmental differences.



Kyndl Woodlee, BA, a second-year counseling psychology student interested in IPV prevention, is

working in Dr. Elizabeth Skowron's CAPS lab.

2016–2017 PSI Scientists' Publications (selected from 170)

- Berkman, E. T.** (in press). Value-based choice: An integrative, neuroscience-informed model of health goals. *Psychology & Health*.
- Berkman, E. T., Hutcherson, C. A., Livingston, J. L., Kahn, L. E., & Inzlicht, M.** (in press). Self-control as value-based choice. *Current Directions in Psychological Science*.
- Berkman, E. T., Livingston, J. L., & Kahn, L. E.** (in press). Finding the “self” in self-regulation: The identity-value model. *Psychological Inquiry*.
- Cho, Y. S., Sohlberg, M. M., Albin, R., Bullis, M., Diller, L., & Horner, R.** (2017). Training adults with acquired brain injury how to help-seek when wayfinding: An understudied critical life skill. *Neuropsychological Rehabilitation*. Online first.
- Cronce, J. M., Bittinger, J. N., Di Lodovico, C. M., & Liu, J.** (2017). Independent versus co-occurring substance use in relation to gambling outcomes in older adolescents and young adults. *Journal of Adolescent Health, 60*(5), 528–533.
- Cronce, J. M., Bedard-Gilligan, M. A., Zimmerman, L., Hodge, K. A., & Kaysen, D.** (2017). Alcohol and binge eating as mediators between posttraumatic stress disorder symptom severity and body mass index. *Obesity, 25*(4), 801–806.
- Davies, B., & Allen, N. B.** (2017). Trauma and homelessness in youth: Psychopathology and intervention. *Clinical Psychology Review, 54*, 17–28.
- Fisher, P. A., Frenkel, T. I., Noll, L. K., Berry, M., & Yockelson, M.** (2016). Promoting healthy child development via a two-generation translational neuroscience framework: The Filming Interactions to Nurture Development video coaching program. *Child Development Perspectives, 4*, 251–256.
- Fisher, P. A., & Skowron, E.** (2017). Social-learning parenting intervention research in the era of translational neuroscience. *Current Opinion in Psychology, 15*, 168–173.
- Garbacz, S. A., Zerr, A. A., Dishion, T. J., Seeley, J. R., & Stormshak, E. A.** (2017). Parent educational involvement in middle school: Longitudinal influences on student outcomes. *Journal of Early Adolescence*. Online first.
- Grabow, A. P., Khurana, A., Natsuaki, M. N., Neiderhiser, J. M., Harold, G. T., Shaw, D. S., . . . Leve, L. D.** (in press). Using an adoption-biological family design to examine associations between maternal trauma, maternal depressive symptoms, and child internalizing and externalizing behaviors. *Development and Psychopathology*.
- Harold, G. T., Leve, L. D., & Sellers, R.** (2017). How can genetically informed research help inform the next generation of interparental and parenting interventions? *Child Development, 88*(2), 446–458.
- Kelly, N. R., Cotter, E. W., Lydecker, J. A., & Mazzeo, S. E.** (2017). Missing and discrepant data on the Eating Disorder Examination Questionnaire (EDE-Q): Quantity, quality, and implications. *Eating Behaviors, 24*, 1–6.
- Kelly, N. R., Tanofsky-Kraff, M., Vannucci, A., Altschul, A., Schvey, N. A., . . . Yanovski, J. A.** (2016). Emotion dysregulation and loss-of-control eating in children and adolescents. *Health Psychology, 35*(10), 1110–1119.
- Khurana, A., Romer, D., Betancourt, L., & Hurt, H.** (2017). Working memory ability and early drug use progression as predictors of adolescent substance use disorders. *Addiction*. Online first.
- Lee, C. M., Cronce, J. M., Baldwin, S. A., Fairlie, A. M., Atkins, D. C., Patrick, M. E., . . . Leigh, B. C.** (2017). Psychometric analysis and validity of the daily alcohol-related consequences and evaluations measure for young adults. *Psychological Assessment, 29*(3), 253–263.
- Leve, L. D., Neiderhiser, J. M., Harold, G. T., Natsuaki, M. N., Bohannon, B. J. M., & Cresko, W. A.** (2017). Naturalistic experimental designs as tools for understanding the role of genes and the environment in prevention research. *Prevention Science*. Online first.
- McIntyre, L. L., Pelham, W. E., III, Kim, M. H., Dishion, T. J., Shaw, D., & Wilson, M.** (2017). A brief measure of language skills at age three and special education use in middle childhood. *Journal of Pediatrics, 181*, 189–194.
- McIntyre, L. L., & Brown, M. A.** (2016). Utilization and usefulness of social support for families with children with autism spectrum disorder. *Journal of Intellectual & Developmental Disability*.
- McIntyre, L. L., & Zemantic, P.** (2016). Predictors of early childhood special education services for children with autism spectrum disorder. *Early Childhood Education Journal*.
- 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, 18*(4), 230–240.
- Nolan, S. E. M., Tucker, C. M., Flenar, D. J., Arthur, T. M., & Smith, T. M.** (2016). Motivators of and barriers to engagement in healthy eating behaviors among non-Hispanic Black adults. *Journal of Racial and Ethnic Health Disparities, 3*, 473–483.
- Roos, L. E., Knight, E. L., Beauchamp, K. G., Berkman, E. T., Faraday, K., Hyslop, K., & Fisher, P. A.** (2017). Acute stress impairs inhibitory control based on individual differences in parasympathetic nervous system activity. *Biological Psychology, 125*, 58–63.
- Seeley, J. R., Small, J. W., Feil, E. G., Frey, A. J., Walker, H. M., Golly, A., & Forness, S. R.** (in press). Effects of the First Step to Success intervention on preschoolers with disruptive behavior and comorbid anxiety problems. *School Mental Health*.
- Shune, S., & Foster, K.** (2017). Goal-directed drinking behaviors can be modified through behavioral mimicry. *Journal of Speech, Language, and Hearing Research, 60*, 1535–1544.
- Shune, S., & Moon, J. B.** (2016). The effects of age and non-oropharyngeal proprioceptive and exteroceptive sensation on the magnitude of anticipatory mouth opening during eating. *Journal of Oral Rehabilitation, 43*(9), 662–669.
- Smith, T. M., Tucker, C. M., Arthur, T. M., Wippold, G. M., & Tran, S.** (2017). Frequency of visits to a health care provider, health promoting behaviors, and perceived health status among African American women. *Women & Health, 57*, 583–598.
- Stormshak, E. A., DeVargas, E., & Cardenas, L.** (in press). Parenting practices and the development of problem behavior across the lifespan. In J. E. Lochman & W. Matthys (Eds.), *The Wiley handbook of disruptive and impulse-control disorders*. New York, NY: Wiley.
- Teresi, J. A., Burnes, D. P. R., Skowron, E. A., Dutton, M. A., Mosqueda, L., & Lachs, M.** (2016). State-of-the-science on prevention of elder abuse and lessons learned from child abuse and domestic violence prevention: Toward a conceptual framework for research. *Journal of Elder Abuse & Neglect*.





PREVENTION SCIENCE INSTITUTE

1600 Millrace Dr., Suite 106 • 6217 University of Oregon
Eugene, OR 97403-6217 • psi.uoregon.edu • p: 541.346.3630

