
Rocky Mountain Prevention Research Center (RMPRC)



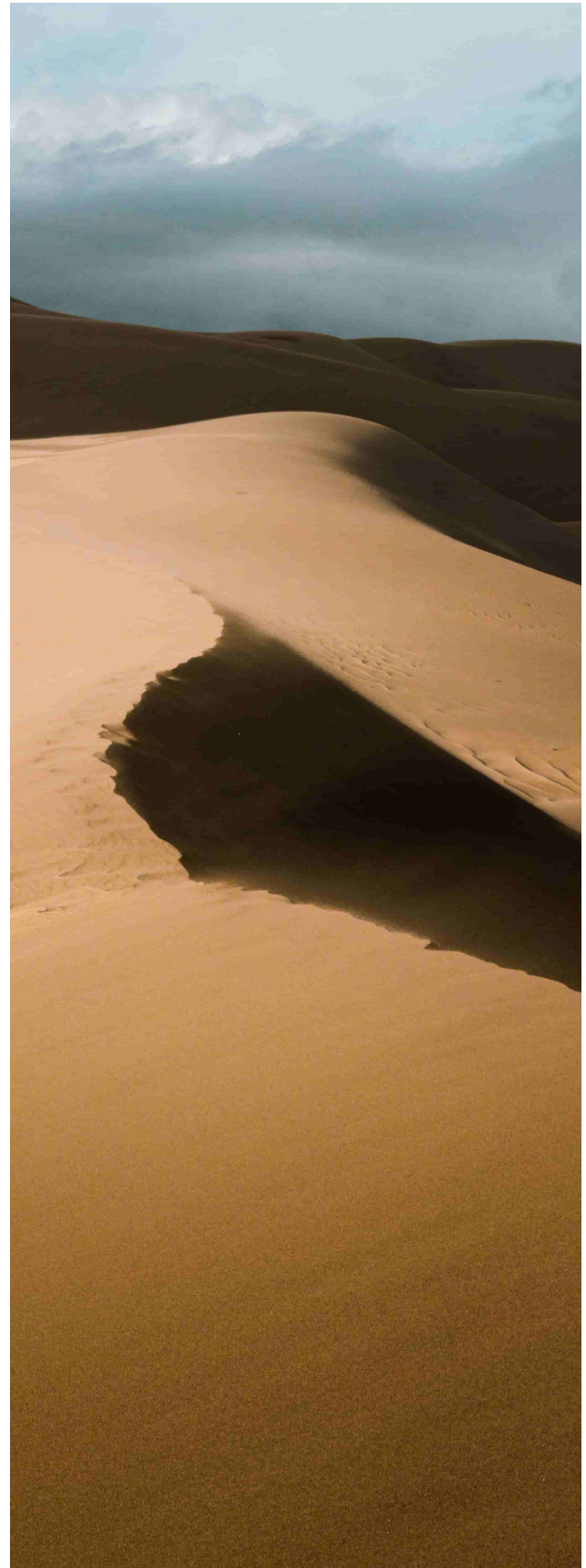
**Rocky Mountain
Prevention Research Center**
colorado school of public health

History of RMPRC

Since 1998, the RMPRC at the Colorado School of Public Health has focused on advancing healthy lifestyles and preventing chronic disease among residents and communities in the Rocky Mountain region by conducting, disseminating, and serving as a resource for community based research and policy.

The success of the RMPRC has been the result of a core partnership between researchers from the University of Colorado Anschutz Medical Campus and community members of the San Luis Valley (SLV), an impoverished, majority Hispanic area located in the south central Colorado Rocky Mountains. The RMPRC has partnered with a SLV community advisory board for over 20 years to conduct community-based participatory research. Through active collaboration, we build local capacity to execute evidence-based public health practice.

One of the RMPRC's current research projects focuses on the prevention of the intergenerational transmission of adverse childhood experiences (ACEs). We worked with the SLV CAB to develop the research design for this 5-year multi-level, community-based study that couples implementation of evidence-based strategies while leveraging extant community infrastructure and resources. While it originated directly from the community, this priority also aligns closely with national public health priorities, including the Center for Disease Control's (CDC) Health Impact in 5 years initiative.



A CDC–Funded Prevention Research Center

The RMPRC is one of twenty five CDC–funded Prevention Research Center (PRC) in the U.S. The national network of PRCs work together to identify public health problems and focus on the development, testing and evaluation of public health interventions that can be applied widely, particularly in underserved communities.



Mission and Vision

The RMPRC's **mission** is to conduct community-engaged research with schools and communities across the Rocky Mountain region to achieve health equity by optimizing social-emotional, mental, and physical health.

Our **vision** is that children and families live in communities that optimize health and well-being.

Our **approach** includes:

- Building and sustaining long-term partnerships with early child learning centers, schools, and communities to enhance child health and well-being.
- Conducting community-engaged research to improve social-emotional development and well-being with children and families in under-served communities.
- Using a multi-level approach to connect families to evidence-based programs and multi-sector partnerships to strengthen community capacity.

The RMPRC's 5-year goals are to:

- 1) Establish and complete a 5-year center research and translation agenda to promote family and child health and well-being, thriving communities, and health equity in the Rocky Mountain Region.
- 2) Develop and strengthen community partnerships to bridge research to public health practice.
- 3) Develop and sustain translation efforts across Colorado.
- 4) Communicate and disseminate findings across Colorado and Region 8.
- 5) Train public health and medical practitioners, students and multisector practitioners across Colorado and Region 8.

Directors



Jenn Leiferman, PhD; Director; PI; Co-Chair, CDC PRC Mental Health Workgroup



Jini Puma, PhD; Associate Director; PI; CDC PRC Evaluations Committee Member

Core Directors



Glen Mays, PhD



Betsy Risendal, PhD; PI



Elaine Scallan Walter, PhD, MA

Affiliated Faculty



Danielle Varda, PhD



Beth McManus, PhD



Lori Crane, PhD, MPH; PI



Charlotte Farewell, PhD, MPH; PI

Deputy Director



Stephanie Baker, MS; Co-Chair, CDC PRC Operations Committee, Co-Chair, Mental Health Workgroup

SLV Research Team



Veronica Cisneros; Early Childhood Education (ECE) Coach



Angela Haynie; Professional Research Assistant (PRA)



Mara Hsu, ECE Coach



Marylana Martinez, PRA



Sherri Valdez, Executive Director, Early Childhood Council; SLV CAB Member

Denver Team



Dave LaRocca, MS; PRA



JoDee Relph; Center Administrator



Sharon Scarbro, MS; Biostatistician; Senior PRA

RMPRC – Community Partnerships

State National Advisory Committee

- Catherine Ayoub*, RN, EdD; Associate Professor, Harvard Medical School
- Ross Brownson, PhD; Bernard Becker Professor of Public Health, School of Medicine and Social Work; Director, Prevention Research Center in St. Louis, Washington, University in St. Louis
- Carrie Cortiglio; Division Director, Prevention Services Division; Colorado Department of Public Health & Environment
- John Douglas Jr., MD; Executive Director, Tri-County Health Department
- Hiram Fitzgerald*, PhD, MA; Associate Provost; University Distinguished Professor, Department of Psychology, Michigan State University
- Geneva Hallett, MAEd; Director, Pyramid Plus Colorado Center for Social Emotional Competence and Inclusion/Healthy Child Care Colorado (HCCC)
- David Olds, PhD; Professor; Director, Prevention Research Center for Family and Child Health; Founder, Nurse Family Partnership, Pediatrics, School of Medicine, University of Colorado
- Amy Payton, PhD; Executive Director Early Childhood Council Leadership Alliance (ECCLA)
- Elaine Scallan Walter, PhD; Director, Rocky Mountain Public Health Training Center, Colorado School of Public Health, University of Colorado
- Michael Seid, PhD; Professor of Pediatrics, University of Cincinnati, Cincinnati Children's Hospital Medical Center
- Mary Anne Snyder; Director, Office of Early Childhood Colorado Department of Human Services

*National advisors

Academic Partners



ACCORDS

ADULT AND CHILD CONSORTIUM FOR HEALTH OUTCOMES
RESEARCH AND DELIVERY SCIENCE

UNIVERSITY OF COLORADO | CHILDREN'S HOSPITAL COLORADO



**University of Colorado
Cancer Center**



College of Nursing

UNIVERSITY OF COLORADO
ANSCHUTZ MEDICAL CAMPUS



**Center for Bioethics
and Humanities**

UNIVERSITY OF COLORADO
ANSCHUTZ MEDICAL CAMPUS



OB-GYN

UNIVERSITY OF COLORADO

**Program for Injury Prevention,
Education & Research (PIPER)**

colorado school of public health



SCHOOL OF MEDICINE

Department of Family Medicine

UNIVERSITY OF COLORADO | **ANSCHUTZ MEDICAL CAMPUS**



Department of Psychiatry

SCHOOL OF MEDICINE

UNIVERSITY OF COLORADO **ANSCHUTZ MEDICAL CAMPUS**

The Kempe Center



BRAIN HEALTH for all, for life.



National Mental Health Innovation Center

UNIVERSITY OF COLORADO **ANSCHUTZ MEDICAL CAMPUS**



San Luis Valley

Cradled between the Sangre de Cristo and San Juan mountains at the headwaters of the Rio Grande, lies the San Luis Valley. This vastness, coupled with a diversity of geologic and geographic features ranging from lush river bottoms to an inland ocean of sand to craggy summits reaching elevations over 14,000 feet, has enticed and enthralled people since the times of Ice Age hunters. [1]

The San Luis Valley is an extensive high-altitude depositional basin of approximately 8,000 square miles with an average elevation of 7,664 feet above sea level. The valley is a section of the Rio Grande Rift and is drained to the south by the Rio Grande, which rises in the San Juan Mountains to the west of the valley and flows south into New Mexico. The valley is approximately 122 miles long and 74 miles wide, extending from the Continental Divide on the northwest rim into New Mexico on the south. [2]

The first descriptions of this homeland of nomadic hunters, including Apache, Kiowa, Navajo and Yutah (Ute) tribal people, came from Spanish governors before there was a United States. During ensuing decades, explorers, pioneers, homesteaders, land speculators, prospectors, and travel writers were attracted to the Valley's riches—freely flowing clean water, comforting hot springs, verdant wetlands teeming with birds, fish, and wild game, expanses of natural grass hay, majestic mountain vistas, forests and upland meadows, plus Mother Lode deposits of silver and gold. Today, as you travel any of the routes into the San Luis Valley, you will be struck by the expansive landscapes, rugged mountains, and endless blue skies. [1]

By the 1850s, Hispanic settlers from New Mexico had migrated into the San Luis Valley to establish small plazas within land grants issued by the Mexican governor in Santa Fe. These pioneers gave birth to the permanent settling of Colorado. Soon after, people from a variety of backgrounds seeking mineral wealth, free land, or frontier experiences joined the progression. The Valley gave Colorado its first national wildlife area and its first national monument. [1]

The Summitville gold rush rivaled the fame of Pike's Peak. Colorado's richest silver mines lured an even broader array of migrants into the cultural mix. Rail towns, farm towns, and supply towns emerged as the railroad spread into the mountains and across the Valley floor. Agriculture finally became the sustaining foundation for the Valley's economy. Today center pivots irrigate crop circles of potatoes, barley, wheat, alfalfa, plus a variety of other crops. [1]

1. "San Luis Valley: The Cradle of Colorado". San Luis Valley Museum Association. (2018)

2. "San Luis Valley." Wikipedia, The Free Encyclopedia. Wikipedia, The Free Encyclopedia (2020)



“

A journey through the San Luis Valley reveals the influences of Native Americans, Hispano pioneers, Mormon settlers, and Amish Homesteaders, as well as ranchers, farmers, and prospectors. These groups converged within the Valley prior to the 20th century. Each brought a unique set of cultural traditions, many of which endure to this day. [1]

”

SLV Community Advisory Board (CAB)



Helen Lester, SLV CAB Chair, Retired Hospice Del Valle



Theresa Rudder, Retired State Health/
President Federation for Women's Club



Courtney Arthur, Rio Grande County
Victim's Advocate



Antonio Sandoval, Retired Educator



Della Cox-Vieira, Alamosa County Public
Health Director



Helen Sigmond, Alamosa County
Commissioner



Julie Geiser, Retired Director of Public Health

Not pictured:

Suzanne DeVore, Decisions Support Analyst,
Valley Wide Health Systems

Mary Lambert, Registered PLAY Therapist

Lisa Lucero, Director, Implementation SLV
Area Health Education Center

Tammie Obie, Emergency Supervisor, SLV
Behavioral Health Group



Don Hanna, PALS La Puente Director; CDC
PRC Community Committee Member

STANCE (Linking Systems Io address ACEs iN Childhood Early on)

The RMPRC's core research project is designed to reduce the intergenerational transmission of adverse childhood experiences (ACEs) in the San Luis Valley (SLV) of Colorado, which are modifiable risk factors that have a profound and lasting effect on a person's health. To accomplish this, a community-engaged, stakeholder-driven, multi-level intervention, entitled STANCE is being implemented.

The STANCE intervention has three primary components:

- 1) Universal assessment of ACEs for all children aged zero to five and their primary caregivers;
- 2) Implementation of an evidence-based program to promote positive social-emotional development; and
- 3) A community-level social network analysis to leverage and strengthen the system of care to better meet the needs of children and families struggling with a high number of ACEs and associated downstream health outcomes.

The primary effectiveness outcomes will be evaluated using a stepped wedge cluster randomized design conducted in ~15 Early Childhood Education (ECE) centers (~730 children). A systems change approach that marries preschools, community organizations, government agencies, policy-makers, and researchers, will increase the chances for success for vulnerable children prior to the compounding effects of health problems caused by ACEs.

PI: Drs. Jenn Leiferman & Jini Puma

Funding Source: CDC 1U48DP006399



CDC-Funded Special Interest Projects

Cancer RESULTS (Resources, Engagement, and Support for the Use of Lifetime Tailored Cancer Prevention Services) (2019-2024)

The unique focus and contribution of the Colorado site to the Cancer Prevention and Control Research Network is to increase the impact of cancer screening and the health of cancer survivors by accelerating the use and dissemination of evidence-based strategies in high-risk individuals.

This research project engages key stakeholders to identify gaps in meeting current evidence-based guidelines for risk-appropriate care, and to develop and disseminate an implementation intervention to increase their use in communities with a high cancer burden including rural, minority, and the medically underserved.

PI: Dr. Betsy Risendal

Funding Source: CDC 1U48DP006399

Validation of Self- Reported Vaccination Status among Adult Patients in Private, Public and Managed Care Health Care Settings (2020-2022)

The overall goal of this project is to estimate measures of validity in self-reported vaccine status for eight vaccines (influenza; pneumococcal; herpes zoster; tetanus-diphtheria [Td]; tetanus-diphtheria-pertussis [Tdap]; human papillomavirus [HPV]; hepatitis A; and hepatitis B) within demographic and disease risk groups. These measures include sensitivity, specificity, and net bias. These measures will then be used to adjust estimates produced by self-report surveys, resulting in better information on which to base programmatic decisions and efforts to increase the uptake of vaccines throughout the U.S.

These estimates of validity must be vaccine specific and specific to demographic and risk factor groups, because some groups may be able to more accurately report their vaccine status than others. We will also conduct an in-depth examination of alternative non-survey sources for estimating vaccine coverage and produce a White Paper on this issue.

PI: Dr. Lori Crane

Funding Source: CDC 1U48DP006399

“

*He who has health has
hope; and he who has
hope, has everything.*

-Arabian Proverb

”

My Baby, My Move+

My Baby, My Move+ (MBMM+, 2019-2021) is a peer-led wellness intervention which aims to reduce excessive gestational weight gain (EGWG) by targeting prenatal physical activity, mood, and sleep quality. Up to 50% of pregnant women in the U.S. gain weight in excess of the Institute of Medicine guidelines. EGWG leads to poor maternal and child outcomes. It also sets the stage for long-term overweight/obesity for both mother and child.

A pilot, randomized controlled 2 arm trial (MBMM+ intervention; Baby Basics program) will be conducted. Up to 100 pregnant women (50 intervention arm, 50 control arm) will be recruited from the Denver Metro and surrounding areas. Women in the intervention arm will participate in the 12-week MBMM+ intervention. The intervention will be offered both virtually and in-person. The overall goal of the MBMM+ intervention is to instill healthy habits (e.g., physical activity, good sleep hygiene, stress management) during and beyond pregnancy. Findings from this study will be used to inform a future, larger randomized trial.

PI: Dr. Jenn Leiferman

Funding Source: NICHD R21HD097450



Integrated Nutrition Education Program (INEP)

INEP is a creative and fun way for kids to learn about healthy eating in their classroom and to share what they learn with their families. Each lesson includes a hands-on cooking activity that teaches students how to prepare and taste new fruits and vegetables. INEP is funded by Supplemental Nutrition Assistance Program Education (SNAP-Ed) and conducted through partnerships with the University of Colorado and various school districts and schools from around the state.

INEP's goal is to instill life-long nutrition behaviors to prevent obesity, type 2 diabetes, cancer, and heart disease. To accomplish this goal, INEP targets increased fruit and vegetable consumption, overall healthy eating, children's willingness to try new foods and increased physical activity.

INEP reaches approximately 10,000 elementary school children with its programming every year.

PI: Dr. Jini Puma

Funding Source: SNAP-Ed, IHEA, 202000013809



Culture of Wellness in Preschools (COWP)

Childhood obesity has more than doubled in the past thirty years (Ogden, Carroll, Kit, & Flegal, 2014) with low-income and ethnic minority children being disproportionately affected (Wang & Beydoun, 2007). Early childhood is a critical time to combat the childhood obesity epidemic for two reasons: 1) early development of basic motor skills, which are linked to later physical activity levels (Goodway, Robinson, & Crowe, 2010), begin in early childhood; and 2) food- and nutrition-related attitudes, preferences, and behaviors are developed during these formative years (Birch & Sullivan, 1991). Children who are obese in their preschool years are more likely to be obese in adolescence and adulthood (Sharma et al., 2009) and to develop diabetes, hypertension, hyperlipidemia, asthma, and sleep apnea (Krebs et al., 2007). As such, prevention and early intervention are key and are a public health priority (Larson, Ward, Neelon, & Story, 2011). COWP is a comprehensive and collaborative early childhood obesity program, which aims to promote a “culture of wellness” in preschool settings by increasing fruit and vegetable consumption and physical activity levels. This is accomplished by bringing the following to preschool sites throughout Colorado:

- Classroom-based nutrition education
- Preschool physical activity professional development program
- Parent wellness workshop series
- Staff workplace wellness program
- A strategic planning process to make health-promoting policy, system and environment changes

All program components are evidence-based or promising practices. From its inception, COWP has reached 40,000 students, parents and teachers, 150 low-income preschools and early childhood education centers, and 14 Colorado counties.

PI: Dr. Jini Puma

Funding Source: SNAP-Ed, IHEA, 202000013809



Text2LiveHealthy (T2LH)

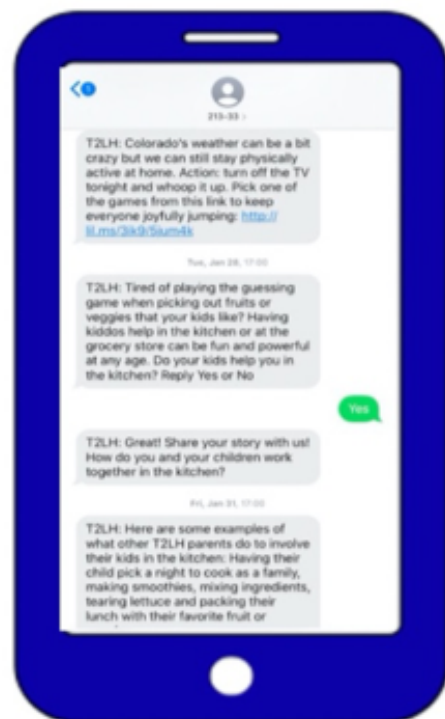
Text2LiveHealthy is a nutrition and physical activity digital health outreach effort that links existing INEP and COWP youth nutrition and physical activity education provided in the classrooms to the home via text messaging in order to influence behavior change for SNAP-eligible families across Colorado.

This program was created based on the Theory of Planned Behavior. Subscribers receive 2-3 text messages per week, sent in English or Spanish, depending on the language preference on the following core themes: increasing consumption of fruits and vegetables, increasing physical activity, increasing consumption of water and decreasing consumption of sugar-sweetened beverages. Each messaging cycle consists of 30 core messages and supplemental local messages. After each theme, evaluation questions are sent out via text to determine the impact of the texts on subscribers' goal setting and health behaviors. Quantitative and qualitative evaluation results demonstrate a positive impact of subscribers, with a significantly greater impact on Spanish-speaking subscribers.

T2LH is currently in Year 3 of implementation, with a reach of over 3,000 participants. There are several partnerships underway to adapt Text2LiveHealthy for the older adults and their caregivers, the Lakota tribal community, Colorado refugee and tribal communities, as well as partnerships with states and agencies receiving SNAP-Ed funding.

PI: Dr. Jini Puma

Funding Source: SNAP-Ed, IHEA, 202000013809



Text2LiveHealthy

Enhancing Patient-Provider Communication: Identification and Treatment of Perinatal Mood Disorders

Utilizing online technology to improve provider-patient communication on prenatal mood disorders

Prenatal depression is associated with numerous, deleterious maternal and child health outcomes. Pregnant women have expressed a need for help in identifying and treating their depressive symptoms. Healthcare providers play a significant role in managing (i.e. identifying and treating/referring to care) prenatal depression as they are often the sole exposure to mental health resources for women. However, many providers may not be meeting these recommendations. Identifying women who are exhibiting depressive symptomatology and providing guidance based on evidence-based practices and/or utilizing linkages to mental health specialists are all integral to providing optimal patient-centered care. This study will conduct a randomized-controlled trial to test the effects of an online training with a diverse group of providers from Colorado and Virginia on the management of prenatal depression.

Our online training provides an overview of the harmful effects of prenatal depression on numerous maternal and child outcomes, as well as provides a framework that uses the 5As model (i.e. Assess, Advise, Agree, Assist and Arrange) to teach providers how to 1) assess for depression, 2) advise the patient on treatment options, 3) agree on a treatment plan, 4) assist patient in any problem solving related to obtaining treatment, and 5) arrange for supports for the patient (e.g. link patients to mental health resources in the community).

PI: Dr. Jenn Leiferman

Funding source: AHRQ R03HS26015-01A1

Fostering Resilience in Early Education (FREE) Program

Working in early childhood education (ECE) settings is a stressful profession and ECE teachers face significant challenges including low pay and poor working conditions. ECE teachers are also disproportionately impacted by mental and physical health outcomes. For example, the rates of depression with ECE teachers is three times the national average. The Fostering Resilience in Early Education (FREE) program is a two-generation, two-component ECE center-based intervention focused on ensuring that ECE teachers have access to workplace supports that improve their well-being, in turn promoting high-quality relationships with the children in their care and fostering resilience. Two evidence-based strategies will be implemented:

FREE Component 1: ECE Teacher-Focused Intervention

Teachers will have the opportunity to participate in an evidence-based strategic planning process to implement policy, system, and environment (PSE) changes that promote ECE teacher well-being in their workplaces. An example of a systems-level change is hosting a center-specific Adverse Childhood Experiences (ACEs) training to understand the impact of teachers' own experiences and self-awareness on their teaching practice.

FREE Component 2: ECE Child-Focused Intervention

FREE classroom activities and coaching sessions are designed to promote caregiver and child wellbeing, and provide an opportunity for staff wellness practices to be incorporated into daily classroom routines. These activities have been adapted from an evidence-based mindfulness tool for preschool teachers and the children in their care. Evidence suggests that the implementation of mindfulness activities results in improvements in caregiver wellbeing and multiple domains of child development.

PI: Drs. Charlotte Farewell & Jini Puma

Funding Sources:

AWD-202819

AWD-205032PRE

CU Foundation, 0223375



Fostering Resilience Among Mothers Early (FRAME)

Past research suggests that maternal depression during the pre- and post-natal periods is positively associated with obesity in early and middle childhood; however, the findings vary by timing and duration of exposure. Additionally, not all mothers suffering from depression will experience the same detrimental maternal and child health outcomes. Internal and external factors foster resilience, or positive adaptation to adversity, and can promote maternal mental health during these early critical periods. Consideration of the determinants of obesity within a broader multi-level framework emphasize the upstream influences of maternal mental health and resilience beginning very early in the life course.

The FRAME project will have significant impacts on women's health. If accumulation of maternal depression from the prenatal period through five-years of age is more predictive of childhood development outcomes compared to exposure solely during the prenatal period, the Life Course Health Development model can be used to explicate the ways in which adversity and resilience may aggregate over time and affect the intergenerational transmission of poor mental health. Additionally, findings may strengthen and expand evidence-based research related to mental health by targeting internal and external resilience supports for mothers.

PI: Charlotte Farewell

Funding Source: Lorna Grindlay Moore Junior Faculty Launch Award program

Prevention of Adverse Childhood Experiences (ACEs)

The Colorado Department of Health and Environment (CDPHE) Positive Activities Lead to Success (PALS), and the Rocky Mountain Prevention Research Center (RMPRC) are collaborating to reduce the impact of ACEs and mental health illnesses in the San Luis Valley. PALS is a licensed after-school and summer children program for children ages 5 to 10 combating instability in their home.

The mission of PALS is to provide children who have experienced trauma and ACEs a structured environment. The environment of PALS supports social-emotional learning, creativity, exploration, and nurture.

This collaboration between CDPHE, PALS, and the RMPRC aims to achieve three main goals. First, PALS will provide a modified, intense version of their program. This intensified version will provide increased one-on-one time for the children with a PALS's staffer. Second, PALS will host monthly workshops for parents in the San Luis Valley with each focused on different topics including parenting knowledge, skillsets, competence, and emotional regulations. Third, PALS will connect parents who experienced high ACEs/mental health illnesses to behavioral health telemedicine at The Children's Hospital in Aurora, Colorado. While PALS will be implementing these three goals, the RMPRC will conduct a program evaluation where the team will evaluate both the intensified program and monthly workshops, as well as evaluating the impact of the behavioral telehealth medicine on the parents.

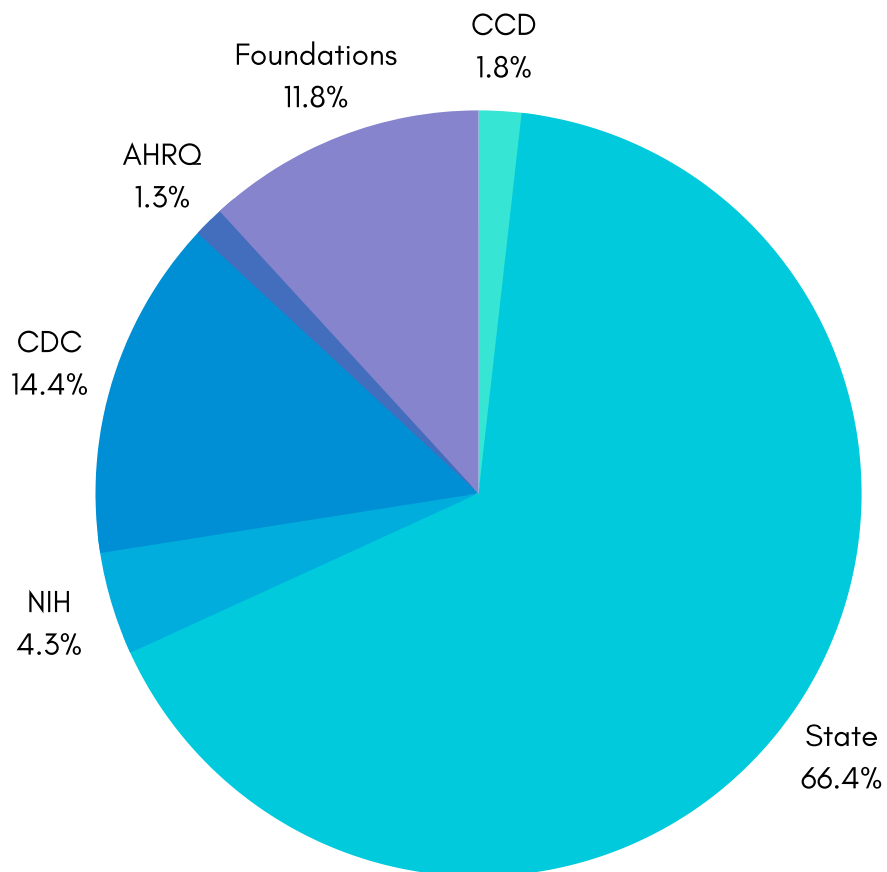
PI: Dr. Jenn Leiferman

Funding Source: CDPHE, 2021*2007

FY 2020 Funding

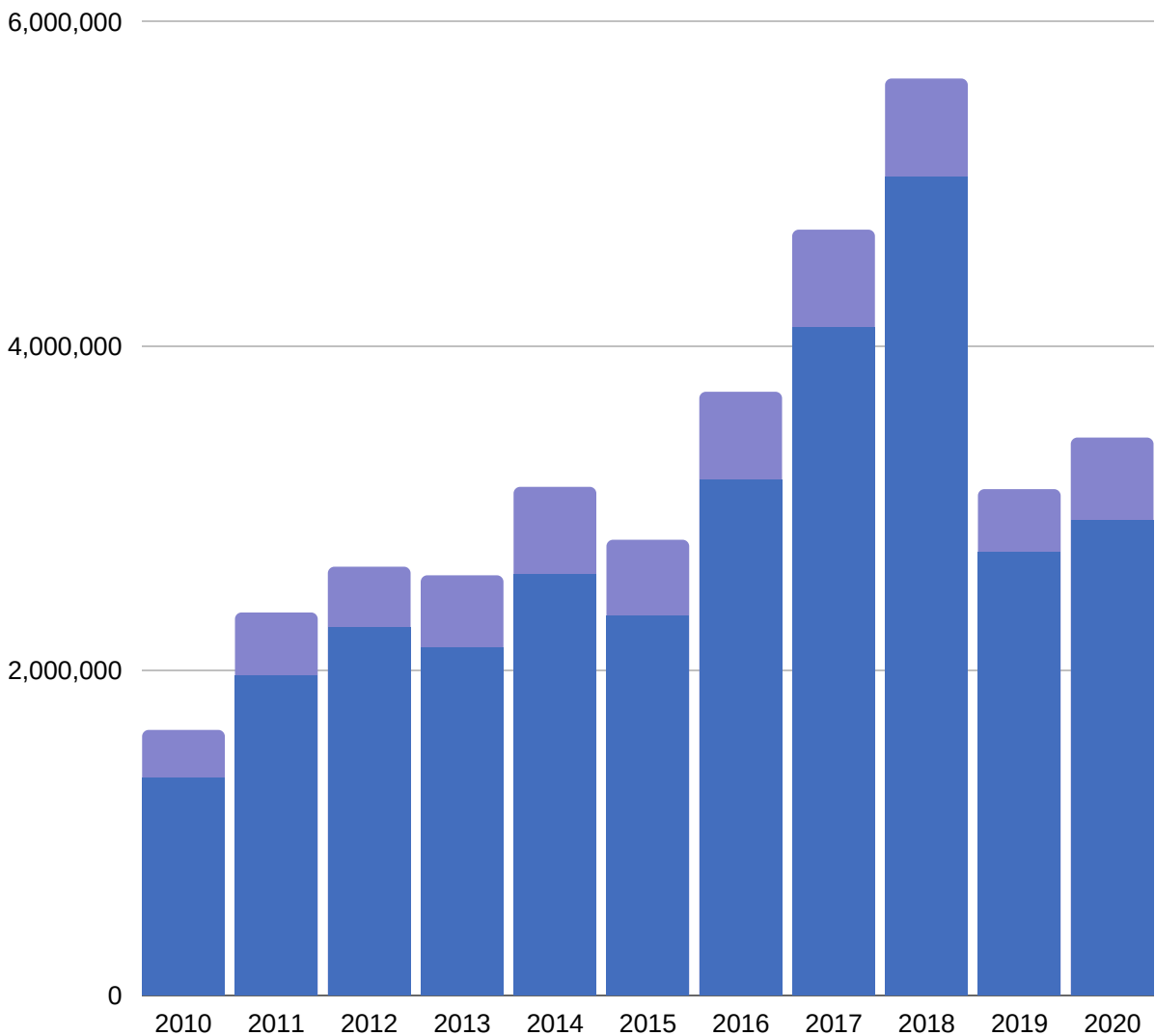
The RMPRC had a diverse funding portfolio in FY 2020. Direct and Indirect costs are included in the numbers below.

State	\$2,277,339
Center for Disease Control (CDC)	\$493,254
Foundations	\$405,270
National Institute of Health (NIH)	\$149,057
City and County of Denver	\$61,726
Agency for Healthcare Research and Quality (AHRQ)	\$44,388



Funding History

The RMPRC continues to have a strong funding portfolio to support its faculty in preventing disease and promoting health.



- Directs
- Indirects

Igniting action for healthy schools and communities



Contact Us

RMPRC Website: <https://coloradosph.cuanschutz.edu/research-and-practice/centers-programs/rmprc>

Join our mailing list: <https://coloradosph.cuanschutz.edu/research-and-practice/centers-programs/rmprc/about-us/2-contact-us>

Check us out on Twitter: www.twitter.com/rmprc

Check us out on Facebook:

www.facebook.com/rockymountainpreventionresearchcenter



For questions on how you can support the RMPRC, please contact Stephanie Baker, stephanie.j.baker@cuanschutz.edu.
