



2019-2020
**ANNUAL
REPORT**



NEBRASKA CENTER FOR RESEARCH ON
CHILDREN, YOUTH, FAMILIES & SCHOOLS



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*Julien Teager, son of Seth Teager,
CYFS communications and media manager.*

MESSAGE FROM THE DIRECTOR

Just last year, the Nebraska Center for Research on Children, Youth, Families and Schools marked its 15-year anniversary. As we celebrated, we looked to the year ahead with renewed enthusiasm and optimism.

At the time, no one could have anticipated the challenges 2020 would bring. As the COVID-19 virus rapidly spread and affected millions worldwide, new realities emerged that touched every aspect of life.

But with change comes opportunity. Thanks to our dedicated faculty and diverse partners in research, policy and practice, we are redefining what collaboration looks like; establishing novel ways to make differences for schools, teachers, families and students; and connecting with others – across town and around the world – in new, innovative ways.

Together, with our combined expertise in the social, behavioral and educational sciences, we have strengthened our commitment to impacting lives through research.

This annual report provides a look at some of the research being conducted in partnership with CYFS over the past year in impact areas of early childhood, health equity and wellness, and communities. Prominent projects include enhancing lives and exchanging ideas in Brazil through the Nebraska-Brazil Early Childhood Partnership, better understanding how visually impaired students are being taught to write, determining how the brain processes language, and developing ways to support Extension employees and preschool teachers.

Regardless of what the next year brings, CYFS will continue to foster relationships and partnerships to drive solutions to the thorny challenges facing society.

Susan M. Sheridan



Susan M. Sheridan, Ph.D.

Director, Nebraska Center for Research on Children, Youth, Families & Schools

Associate Dean for Research and Creative Activity, College of Education and Human Sciences

George Holmes University Professor of Educational Psychology

ABOUT CYFS

CYFS was founded in 2004 as an interdisciplinary research center within the College of Education and Human Sciences at the University of Nebraska–Lincoln. CYFS receives support as a UNL Program of Excellence, and its research programs are funded through external grants and contracts.

CYFS conducts, supports and shares research in the following areas:

- Academic intervention and learning
- Early education and development
- Psychosocial development and behavioral health
- Research and evaluation methods
- Rural education



Jeriah Mckie, niece of Matilda Kond, CYFS database developer and analyst.

To impact lives through research that advances learning and development.

Our vision is that all children, youth, families and schools have the opportunity to realize their potential and reach beyond.

We conduct research through grant-funded programs, provide comprehensive research support, and share research findings across audiences and platforms.



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The research projects featured in this report are housed in CYFS. Learn more about our research support services at cyfsgrant.unl.edu

PROJECT VIEW AIMS TO SHARPEN WRITING INSTRUCTION FOR THE VISUALLY IMPAIRED

Nebraska researchers are exploring ways to better understand how students with visual impairments are being taught to write, and how that instruction can be enhanced and tailored to each individual student's needs.

Michael Hebert, associate professor of special education and communication disorders, and Mackenzie Savaiano, assistant professor of practice of special education and communication disorders, are the principal investigators in Project VIEW — Visual Impairments Education in Writing. The four-year study, funded by a grant from the Institute of Education Sciences, focuses on identifying factors that influence teachers' writing instruction practices in an effort to improve outcomes among visually impaired students.

The Project VIEW team aims to study the modifications and accommodations teachers make with their

A student writes a paper at the Nebraska Center for the Education of Children who are Blind or Visually Impaired in Nebraska City.



We expect to find some great collaboration between teachers of visually impaired students (TVIs) and general education teachers that create innovative writing instruction methods.



From left: Mackenzie Savaiano, co-principal investigator, and Michael Hebert, principal investigator

writing instruction for visually impaired students, as well as the collaboration among teachers of visually impaired students (TVIs) and their general education counterparts. They also will examine how various factors may influence student success, such as teachers' preparation to teach writing, preparation to teach students with visual impairments, and beliefs and expectations.

"We want to learn about what teachers are doing, and identify things we can shape in the future to help them further support students with visual impairments and empower them to express themselves through writing," Hebert said.

Hebert and Savaiano are recruiting 50 TVIs over four years — about 80% of those trained in Nebraska. For each TVI, they plan to recruit five general education teachers and five visually impaired students. The first year's study cohort will comprise eight TVIs, 40 general education teachers and 40 students with visual impairments. A different cohort will participate each year.

Students will include those who write using paper and pencil or Braille, and others with multiple disabilities who may use other writing alternatives.

Throughout the project, the team will gather data through interviews, surveys and classroom observations of the teachers. There will also be student assessments that include writing samples to examine whether teacher practices predict writing outcomes.

Data analysis will begin in the second year.

After the surveys and interviews were developed and validated, Hebert and Savaiano began working with Iowa teachers on a three-month pilot to test and modify the measures.

Hebert and Savaiano are eager to learn how teachers collaborate throughout the project.

In analyzing how teachers interact and work together to support students, they hope to pinpoint the most effective writing instruction methods and determine which professional development opportunities would most benefit teachers.

"We are hoping to find pockets of really great things

that are happening in schools across the state — things we think we can replicate," Hebert said. "We expect to find some great collaboration between TVIs and general education teachers that create innovative writing instruction methods."

Hebert recalls one such innovation that arose during a previous study. After they were asked to collect writing samples from students, many teachers working with visually impaired children — or children with multiple disabilities — reported that they were not doing writing instruction.

One TVI, however, submitted a writing sample after working with a student using a smart board with large-print words, on which the student moved words to construct sentences.

"That teacher was amazed," Hebert said. "It was the first time the student had ever written anything to communicate. The student couldn't write in Braille or use a pencil, but was able to write in a way that made sense to him using that technology. So now, I think there is probably a lot of writing happening with that child that wasn't happening before."

Hebert's goal is to expand perspectives on writing.

"Whether writing with paper and pencil, Braille, or dictating and orally constructing stories for other people to write, it's still writing to communicate," he said. "Speech-to-text software, moving words on a smart board — it can come in many forms. But it leads to the same result: allowing the student to record his or her thoughts in a form that can be read."

To learn more about Project VIEW, visit projectview.unl.edu.

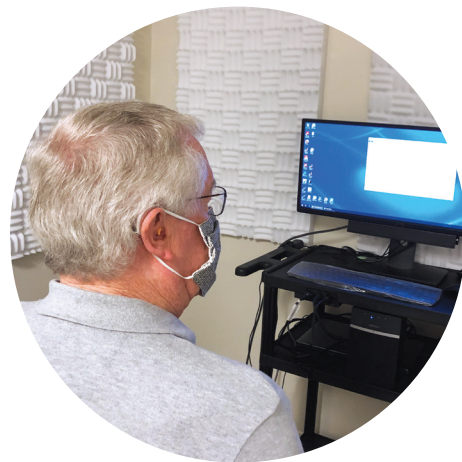
The project is funded by a grant from the Institute of Education Sciences.

BRAIN IMAGING HELPS BRING PREDICTORS FOR COCHLEAR IMPLANTATION SUCCESS

For someone with hearing loss, a successful cochlear implant can change their world.

But because results vary among implant recipients, it is crucial to determine strong candidates for whom an implant will likely be successful.

A cochlear implant (CI) is a complex electronic device that can effectively restore hearing in individuals with severe to profound hearing loss. While the CI does not restore normal hearing and differs from hearing aids, which amplify sounds, it does provide a useful representation of sounds by directly stimulating the auditory nerve. The CI's success depends on how well the auditory nerve functions.



A study participant visits the Neuroimaging for Language, Literacy & Learning Lab after his surgery. His visit included fNIRS scans (right) to measure brain activity.

Yingying Wang, assistant professor of special education and communication disorders, is collaborating with the University of Nebraska Medical Center on a National Institutes of Health-funded, three-year study designed to identify factors to determine the best candidates for successful CI procedures, and to explore relationships between the brain and speech perception outcomes (SPOs) — the process by which language is heard, interpreted and understood.

“We want to identify brain factors to better understand and predict potential for future hearing improvements among CI candidates,” said Wang, the project’s principal investigator.

Central to Wang’s research is learning how brain reorganization occurs before and after cochlear implantation. Brain images will be used to identify pre-surgical neural predictors that may provide a more comprehensive understanding of individual



variability in CI outcomes, and therefore generate a more reliable prognosis.

Researchers plan to recruit 16 adults with post-lingual, severe-to-profound sensorineural hearing loss who are candidates for cochlear implantation.

Before the surgical procedure, brain activity is measured by functional magnetic resonance imaging (fMRI) and functional near-infrared spectroscopy (fNIRS), and white matter integrity is measured by diffusion weighted imaging (DWI). This can reveal the initial functional areas in the brain responding to speech sounds, and whether the auditory nerve is intact before surgery.

After implantation, only fNIRS will be used to measure changes in brain activity together with changes in speech perception at three- and six-month follow-up visits. Post-implantation brain activity may clarify why some recipients have better speech perception.

The implantation procedure typically requires a one-day

hospital stay to monitor potential complications. Recipients must also return a month after surgery to activate and adjust the device to suit each individual.

“It’s not like getting a pair of eyeglasses,” Wang said. “There is a recovery and rehabilitation period for the brain to adapt to the implant.”

Wang is also interested in the brain’s neuroplasticity — its ability to change.

“We want to see how the brain adapts,” she said. “When someone has profound hearing loss, they have limited auditory stimulation. After the implant, they will have a lot of stimulation. We’re interested to learn how the brain adapts to that.”

Since 1984, CIs have benefited almost 325,000 individuals worldwide who are deaf or severely hard of hearing. There are approximately 96,000 CI users in the United States.

Wang said that because the CI procedure is invasive and costly, patients need a good understanding of what to expect, rather than simply receiving the CI and hoping for the best.

So far, Wang’s biggest challenge has been finding participants from Nebraska’s small pool of pre-surgical CI candidates. Dr. Jonathan Hatch, an otolaryngologist and assistant professor at UNMC who performs the CI procedure, has worked with area Veterans Affairs hospitals to recruit participants who experienced hearing damage during their military service.

Findings may help doctors form a better prognosis for CI candidates, which will enable the patient to decide whether a CI is beneficial enough for them to proceed, or whether they should consider alternative options.



We want to identify brain factors to better understand and predict potential for future hearing improvements among cochlear implant (CI) candidates.

The project is funded by the National Institute on Deafness and Other Communication Disorders. Along with Wang and Hatch, the research team also includes Hongying (Daisy) Dai, professor and acting associate dean, College of Public Health, UNMC; Michelle Hughes, associate professor of special education and communication disorders; and Josh Sevier, assistant professor of practice in special education and communication disorders.



Yingying Wang, principal investigator



Volunteers help flood recovery efforts in Verdigre, Nebraska.

EXPLORING WAYS TO HELP THOSE WHO HELP OTHERS

In March 2019, 81 of Nebraska’s 93 counties were declared states of emergency due to significant flooding and blizzards. Nebraska Extension provided vital assistance to communities during the state’s disaster response and recovery, and continues to offer a lifeline for many struggling to cope.

More than a year later, as the ripple effects of the crisis continue, stress levels for frontline caregiving professionals remain elevated. Additionally, the COVID-19 pandemic has increased the pressure.

Extension employees have a wide array of tools with which to help communities after natural disasters such as wildfires, tornadoes and other severe weather events. But the resources and tools they have to address their own mental health after such events are far fewer.

A group of Nebraska researchers is working to change that for Extension personnel throughout the United States.

Holly Hatton-Bowers, assistant professor of child, youth and family studies, is the program director of the project, which focuses on identifying ways to support the psychological wellness of Extension employees following a natural disaster. She and her team are developing an online platform to help the broader Extension community learn practical coping strategies and assess their wellness.

“Sometimes you forget about the caregiver,” Hatton-Bowers said. “They need ways to support their well-being, too.”

Because natural disasters usually occur with little warning, they can leave a trail of destruction that results in significant financial and material losses to individuals and communities. People exposed to such hardship often experience psychosocial problems such as post-traumatic stress disorder (PTSD), depression and anxiety.

Extension personnel are not immune from the same mental health challenges. They invest long hours working directly with distressed and traumatized people, spend less time with their own families and friends, and sometimes are affected personally by the disaster.

With the help of the CYFS communications team, an interactive, web-based Reach Out for Wellness course and a Disaster Recovery Self-Assessment are being developed as part of a sustainable resource toolkit to combat Extension employee burnout, compassion fatigue and turnover while enhancing workplace engagement.

After using the resources, Hatton-Bowers said, Extension employees are expected to better understand their own wellness and the natural disaster’s impact on them, and how to use their support system to cope with related stress.

“In our society, we are sometimes hesitant to reach

out for the support of others,” said Gilbert Parra, associate professor of child, youth and family studies and co-program director. “One of our goals is to develop a module that covers the importance of support and effectively using support.”

Lorey Wheeler, CYFS research associate professor and co-PD, said the team is conducting needs assessments, and using focus groups to talk to administrators and Extension responders who work in disaster-affected communities. These focus groups will also include questions about Extension employee wellness during the COVID-19 pandemic.

Top row from left, clockwise: Gilbert Parra, Michelle Krehbiel, Jared Stevens, Holly Hatton-Bowers and Lorey Wheeler.

Researchers will conduct about 20 focus groups consisting of Extension personnel from all levels, from Nebraska and other states. Most participants have identified the need for information and training on extreme stress and self-care practices during disaster response.

This project is funded by the U.S. Department of Agriculture. Along with Hatton-Bowers, Parra and Wheeler, the research team includes Soni Cochran, Extension associate; Lynn DeVries, Extension educator; Carrie Gottschalk, Extension educator and engagement zone coordinator; Susan Harris, Extension educator; Kayla Hinrichs, Extension lead educator; Michelle Krehbiel, youth development specialist and associate professor for Nebraska Extension’s 4-H Youth Development; Kathleen Lodi, associate dean and state 4-H program leader; and Brandy VanDeWalle, Extension lead educator.



Sometimes you forget about the caregiver. They need ways to support their well-being, too.



EARLY LANGUAGE SKILLS PREDICT KINDERGARTEN READINESS



We know language skills are important, but most of the research on reading has not focused on language, but on other components of literacy.

Early language development is considered crucial for children's school readiness and, ultimately, their reading success. But there are gaps in understanding what classroom features best support children's language skills as they transition to school.

Researchers have struggled to design and implement instructional practices that support children's language gains in early childhood classrooms. Growing evidence suggests current classroom language supports may be less than ideal.

Rachel Schachter, assistant professor of child, youth and family studies, is working with researchers from The Ohio State University to explore how prekindergarten children's early language gains predict their kindergarten readiness and later reading outcomes, as well as which early childhood classroom factors and practices enhance those gains.

The project is part of a collaborative, multi-institution

research initiative funded by the Institute of Education Sciences.

"We know language skills are important, but most of the research on reading has not focused on language, but on other components of literacy," Schachter said. "We're trying to understand how these language skills predict their kindergarten readiness and reading outcomes, then think about that in contrast to other emergent literacy skills."

Researchers are using a novel approach to investigate malleable language practices. The project comprises five interrelated studies, using a variety of quantitative and qualitative methods.

This includes reanalyzing an existing IES-funded

Owen, an emerging reader, enjoys a book with his sister, Iris.

dataset collected from a sample of about 2,000 children in 490 Ohio early childhood classrooms. This will be complemented with additional data collected during the project.

"Understanding how early childhood teachers engage in their practices is important for understanding what

Rachel Schachter, principal investigator

they do and how they work with children and help them learn," Schachter said.

The first study uses data gathered from kindergarten readiness scores, classroom observations and various prekindergarten child assessments to determine how language scores contribute to long-term reading outcomes. In a second round of studies, classroom data will be examined to identify factors associated with children's language gains.

For the study's final stage, Schachter will partner with the Ruth Staples Child Development Lab, the UNL Children's Center, and Educare Lincoln and

Winnebago to recruit a new sample of teachers whose children have made above-average language gains. Additional data will be gathered through educator interviews and classroom observations.

Schachter and the team aim to pinpoint the unique set of language skills children acquire in kindergarten and third grade classrooms, and explore what happens in the classroom that supports those language gains.

"There are a multitude of factors that could be affecting practice," she said. "We are taking a comprehensive look to inform the field of what matters for supporting children's language in early childhood classrooms."

Schachter noted that until third grade, children learn how to read. After third grade, children begin reading to learn.

"You have to be able to understand your social studies or science text to be able to learn the content of the social studies or science instruction," she said.

Schachter expects the study to enhance understanding of early childhood classrooms and factors that can support language development.

She also believes the project will help generate better mechanisms for studying classrooms and language, and crafting language supports within early childhood classrooms.

"The goal is to improve outcomes for children," she said. "This can come from developing effective interventions, professional development opportunities, and policy and systematic initiatives to support improved language and long-term reading outcomes."

The project is funded by the Institute of Education Sciences, with UNL's portion coming through a subcontract from The Ohio State University.



Helping early childhood teachers cope with stressors is crucial to ensuring high-quality learning for their students.

LEVERAGING TECHNOLOGY TO ASSESS PRESCHOOL TEACHERS' RESILIENCE

In a typical preschool classroom with as many as two-dozen children, there are bound to be times of elevated stress for the teacher — and sometimes the students.

Along with meeting the needs of several children, teachers juggle many emotional and physical demands in their daily work, often with limited resources. Following an early childhood curriculum or philosophy, engaging families, maintaining a safe environment and dealing with interpersonal conflicts are just some of their daily classroom tasks.

An ongoing Nebraska study is exploring ways to help preschool teachers identify and tame their stressors to ensure high-quality learning for their students.

The two-year project, funded by the National Institutes of Health, will evaluate the impact of various stressors on early childhood teachers' well-being and caregiving behavior, and on children's cognitive and behavioral self-regulation.

"We place this huge onus on teachers to create self-regulated spaces and support children's regulation, but we don't take into account the stress in teachers' lives," said Carrie Clark, assistant professor of educational psychology and the project's principal investigator. "But often, teachers are not highly paid, and their job can seem thankless and even unstable at times."

In the United States, 64% of children ages 3 to 5 spend an average of 36 hours a week in non-relative care. Research shows sensitive, responsive caregiving experiences are essential to help children meet their developmental potential, which leads to academic readiness, socio-emotional competence and improved health.

Although early childhood teachers frequently experience high occupational and psychosocial stress, surprisingly little is known about the mechanisms that link those stressors to teachers' caregiving behavior — or to children's self-regulation.

Clark and Co-PI Holly Hatton-Bowers, assistant professor of child, youth and family studies, are working with other Nebraska researchers to test a model that conceptualizes emotion regulation, mindfulness, compassion and physiological regulation as key factors in managing stress and fostering well-being. Examining these factors may generate innovative strategies that promote preschool teachers' emotional well-being and adaptive, healthy self-regulation for young children.

"This time in preschool really is critical for children's development; this is when self-regulation skills are coming online," Clark said. "But there is generally a lack of focus on teachers' indicators for well-being. We want to identify supports we can put in place to help teachers avoid burning out, and how we even define 'burning out.'"

For the project, researchers will recruit 80 Nebraska preschool teachers with varied experience levels and about 240 preschool children and their parents. Teachers will complete self-assessments and provide biofeedback through cortisol samples and monitored heart rate variability (HRV) — a measure of the brain's capacity to modulate emotional and interpersonal responses via the parasympathetic nervous system — to assess their occupational, psychosocial and physical stressors and supports, as well as their emotion regulation, mindfulness and compassion.

For three consecutive workdays in their classrooms, teachers will wear an Actiheart — a compact, chest-worn monitoring device that records HRV.



Carrie Clark, principal investigator



Holly Hatton-Bowers, co-principal investigator

"These measurements of heart rate variability really get to the moment-to-moment fluctuations of teacher stress, and how teachers are coping with emotion," Clark said.

Participating preschoolers will complete 15-minute iPad assessments developed for their age group to measure their executive function skills, such as the ability to shift their attention from one task to another, and their behavior will be observed to determine how settled and well-regulated they are in the classroom.

This study builds upon the team's evaluation of the Cultivating Healthy Intentional Mindful Educators program (CHIME), which Hatton-Bowers co-founded in 2017. The evaluation demonstrated that practicing mindfulness and reflection slowed depletion of teachers' cortisol and decreased emotion dysregulation as they progressed through the workday.

"We want teachers to be more present, responsive and sensitive, and able to scaffold children's learning, which we hope supports children's self-regulation," Hatton-Bowers said.

The project is funded by a grant from the National Institutes of Health—National Institute of Child Health and Human Development. Along with Clark and Hatton-Bowers, co-investigators include Jessica Calvi, research assistant professor at the Center for Brain, Biology and Behavior; Gilbert Parra, associate professor of child, youth and family studies; Lorey Wheeler, CYFS research associate professor; and Kimberly Tyler, Willa Cather Professor and graduate chair in sociology.



NEBRASKA-BRAZIL PARTNERSHIP FOSTERS EARLY CHILDHOOD RESEARCH & INNOVATION

Researchers from the University of Nebraska–Lincoln and several institutions in Brazil continue to collaborate to address critical early childhood challenges.

The Nebraska-Brazil Early Childhood Partnership, launched in 2016 with support from UNL and the Maria Cecilia Souto Vidigal Foundation, led to three pilot impact projects conducted jointly in the United States and Brazil. Research focused on priority areas with important implications for children’s health, well-being and development — and ultimately, their future success.

Junior scientists and preschool teacher Amelia Roseto, third from left, investigate a leaf at EMEI Ignacio in São Paulo.

Principal investigators Natalie Williams and Soo-Young Hong, associate professors of child, youth and family studies, and Natalie Koziol, CYFS research assistant professor, and their Brazilian colleagues completed the first phase of research in 2019 and are working to move the descriptive work into real-life practice.

The pilot work created a bridge to establish additional collaborative projects that expand to more communities in Brazil and address children’s needs across all stages of development.

Cody Hollist, associate professor of child, youth and family studies, is continuing work to improve outcomes for vulnerable youth and families, and is using a U.S. Fulbright award to study Brazil’s youth suicide epidemic. Holly Hatton-Bowers, assistant professor of child, youth and family studies, is adapting compassion- and mindfulness-based programs developed in the U.S. to support early childhood programs in Brazil. Renata T.M. Gomes, CYFS graduate student, is preparing to bring the Teachers and Parents as Partners (TAPP) intervention to Brazil and evaluate ways to tailor it to Brazilian culture.

The overall partnership has yielded data from all five regions of Brazil, with study sites in Recife, São Paulo and Porto Alegre, as well as Nebraska, and momentum continues to build for future cross-cultural collaboration.

To learn more and explore videos, photos and other resources, visit cyfs.unl.edu/brazil.

EMPOWERING PRESCHOOL TEACHERS TO REFLECT, TALK ABOUT SCIENCE

Tucked away from the busy city streets of São Paulo, Brazil, preschoolers are exploring a colorful garden with spades, magnifying glasses and other tools. They gather around their teacher, who is holding a freshly dug worm in her hands. They observe the wriggling creature. After the excited shrieks subside, the teacher begins to ask them questions. Their curiosity leads to a conversation — an opportunity to learn about science.

“A powerful way to improve children’s learning is by engaging in science talk and exploration,” said Soo-Young Hong, associate professor of child, youth and family studies. “However, in both the U.S. and Brazil, science concepts aren’t usually integrated in preschool classrooms and many preschool teachers are reluctant to talk about science with young children.”

This has important implications for children’s future learning and development, Hong said.

To help address this challenge, Hong partnered with Gisela Wajskop, a researcher at the Pontifical Catholic University of São Paulo and director of Escola do Bairro, to implement PreSTAR — Preschool Science Talk in Action and Reflection. The program uses strategies that encourage teachers to reflect deeply on their science teaching practices and what they notice about children’s interactions with science-related materials in the classroom.

Data were collected over three years from eight preschool classrooms — four classrooms each in Lincoln, Nebraska, and São Paulo. More than 160 children ages 4 and 5 participated in the study.

Research found that in both countries, teachers’ reflective practice may strengthen confidence in science instruction, Hong said.

Between the U.S. and Brazil, researchers found more similarities in how teachers plan for science activities than differences. In the U.S., teachers provided more opportunities for children to explore science materials on their own with limited guidance. In Brazil, more large-group, teacher-directed interactions were prevalent.

Overall, teachers’ attitudes toward teaching science in the classroom were positive, and some improved during their participation in the project. Most believed it was important to include science in the classroom to support learning and development, but were unsure how to initiate and sustain scientific investigation while providing rich, meaningful learning experiences.



Teacher Elizinete Natália Queiroz de Araújo Souza, left, shows a worm to Renata T.M. Gomes, CYFS graduate student, center, and young students at EMEI Ignacio in São Paulo.

Some teachers noticed fewer challenging behaviors in their classrooms, indicating that engaging science activities may help children stay focused.

To strengthen science teaching and learning in preschool, Hong recommends preschool programs prioritize adding new, open-ended science-related materials to the classroom and provide time for teachers to closely observe what children do with them.

“This research has potential to improve teacher training programs and foster children’s science learning early on — which will have far-reaching impacts,” Hong said.

STUDY REVEALS MENTAL HEALTH CHALLENGES OF ZIKA-AFFECTED CAREGIVERS

Natalie Williams, associate professor of child, youth and family studies, partnered with Brazilian researchers to examine the psychological well-being of caregivers to infants and toddlers affected by the Zika virus during Brazil's 2015-16 outbreak.

Congenital Zika syndrome (CZS), spread by mosquitoes, is a neurological condition associated with a range of cognitive and physical disabilities, the most obvious being microcephaly.

"Emerging research shows that caregivers to young children with CZS have elevated symptoms of anxiety and depression," Williams said. "When we initiated the project in 2016, very little was known about the psychological experiences of this particular population."

The results of the three-year project highlight the need to focus on the mental health and resiliency of caregivers to Zika-affected children, whose needs will continue to change, Williams said.

Williams worked with Pompéia Villachan-Lyra, professor at Brazil's Federal Rural University of Pernambuco, or UFPRE, to identify caregivers and children at risk for poor functioning and developmental outcomes, and to clarify gaps in existing early intervention programs.

Villachan-Lyra and her team in Recife, Pernambuco, a coastal city deeply impacted by the Zika outbreak, collected data on caregivers' resources, coping

strategies, perceptions of intervention services, and levels of anxiety, depression and parenting stress.

Nebraska researchers Cody Hollist and Holly Hatton-Bowers, child, youth and family studies, helped identify strengths and stressors among Brazilian families and early childhood educators affected by the outbreak. The team also included Christine Marvin, emeritus professor of special education and communication disorders.

The study revealed that a significant number of caregivers — as many as 40% — had symptoms of depression that were in the clinical range.

"We also discovered that personal distress stemming from feelings of isolation, lack of social support, relationship stress and role restriction contributed to overall parenting stress more than their child's attributes or the parent-child relationship," Williams said.

Research also found that parents who perceived having more family-centered programming reported lower parenting stress.

Moving forward, the team recommends that new and existing intervention programs prioritize caregivers' mental health concerns, specifically depression and parenting stress, and encourage

parents to take an active role in their child's care and developmental progress.

As the estimated 3,700 Zika-affected children in Brazil get older, and many enter school, the pool of caregivers needing support will grow.

Williams aims to expand this research to different settings in Brazil and the U.S., including schools, hospitals and clinics.



NEW TOOL USES CULTURAL LENS TO EVALUATE YOUNG CHILDREN'S DEVELOPMENT IN BRAZIL



The prevalence of children with developmental delays worldwide is estimated to be up to 18%. However, fewer than one-third are identified by their health care provider. This is significant because children whose delays are not addressed early are at risk for adverse outcomes, including emotional, behavioral and health problems later in life.

Until recently, Brazilians lacked a formal means to effectively monitor children's developmental trajectories and flag those with possible delays.

A global collaboration among early childhood researchers is closing this critical assessment gap by building a robust, multidimensional screening tool to evaluate children's development across Brazil. And it is now ready to be put into pediatric practice.

The Dimensional Inventory for Child Development Assessment (Inventário Dimensional de Avaliação do Desenvolvimento Infantil), or IDADI (eh-dah-gee), is the first such tool to be developed and standardized specifically for use with children living in Brazil, taking into account the unique culture and experiences of the target population.

Denise Ruschel Bandeira, a professor at Brazil's Universidade Federal do Rio Grande do Sul, created the instrument and partnered with Natalie Koziol, CYFS research assistant professor, to fine-tune it. Former CYFS methodologist Leslie Hawley also contributed to the pilot project.

The collaboration yielded developmental norms for IDADI — key benchmarks to compare children in a given context — that bring into focus what is developmentally normal for young children in Brazil.

"If you're a practitioner in Brazil you want to know how a child is developing relative to other children living in Brazil — not relative to children living in the United States, the U.K. or Australia, who may have very different experiences," Koziol said. "We made a conscious effort to ensure that each item is culturally relevant."

To develop the tool, Brazilian researchers surveyed mothers of more than 2,100 children, birth to age 6, from throughout Brazil.

Researchers gathered information about children's cognitive and motor skills, communication and language, social-emotional development and adaptive behavior, accounting for variables such as age, developmental diagnosis and maternal education.

Their analyses found strong reliability and validity evidence to support the use of IDADI scores to evaluate young children's development.

The tool is ready for widespread use in clinical settings to help identify those who might have developmental delays or disabilities — which the researchers hope will lead to earlier interventions and better outcomes.

BUILDING A STRONG FOUNDATION FOR CROSS-CAMPUS COLLABORATION ON EXECUTIVE FUNCTION RESEARCH



Construction is underway on the foundation of a collaborative network of Nebraska researchers who are pooling their talent and resources to expand early childhood executive function research.

Carrie Clark, assistant professor of educational psychology, and Jenna Finch, assistant professor of psychology, are leading the effort with an initiative designed to foster cross-campus research collaboration.

“The plan is to bring together a group of people from across disciplines and campuses who have a common interest in executive function development in early childhood and develop a set of two or three projects we’re interested in pursuing,” Finch said.

Executive function refers to brain functions that activate, organize, integrate and manage other functions. In early childhood, executive functioning is primarily self-regulation of children’s attention behaviors. It enables them to plan ahead and meet goals, display self-control, follow directions and stay focused despite distractions — critical skills for life learning.

It is important for children to develop these skills in

the early years to be successful in school and at home, and continue to strengthen them into adulthood.

Clark and Finch aim to help develop Nebraska into a nationally recognized hub for research on early childhood executive function. They are focused on developing ambitious, multidisciplinary federal funding applications to keep the state at the forefront of groundbreaking early childhood research.

The grant funds four researcher collaboration retreats, pays travel expenses to meet with potential community partners throughout Nebraska and covers expenses for a future trip to Washington, D.C., to meet with funding agency representatives.

Clark said there is an abundance of early childhood research talent at the University of Nebraska, and a rich variety of expertise.

“We have people with a shared interest in executive function who are experts at many things, but they’re dispersed across the NU system,” she said. “The goal is to pull together people from across the system.”

Members of the cross-campus research collaboration team meet to discuss next steps.

Finch noted that early childhood executive function is crucial to development beyond a child’s early years.

“Executive functions predict health, social and emotional skills, and are linked to academic outcomes,” she said. “That’s the exciting part: If we can improve children’s executive functions, we can support them early and set them up for a lifetime of success.”

The project is funded by a University of Nebraska Collaboration Initiative Planning Grant. Along with Clark and Finch, members of the collaboration infrastructure team include Danae Dinkel, assistant professor of health promotion, social and behavior health, UNO; Kathleen Gallagher, director of research and evaluation, Buffett Early Childhood Institute; Marc Goodrich, assistant professor of special education and communication disorders, UNL; Jolene Johnson, project director, Munroe-Meyer Institute; Philip Lai, assistant professor of communication disorders, UNK; Anne Schutte, associate professor of psychology, UNL; and Amanda Witte, CYFS research assistant professor.

STUDY REVEALS CHILDREN’S EARLY ADVERSITY, NEIGHBORHOOD HAVE LASTING IMPACTS

For children, the neighborhood in which they grow up can significantly affect their healthy development in later years, according to findings from a recent University of Nebraska–Lincoln research project.

Jeong-Kyun (Evan) Choi, associate professor of child, youth and family studies, analyzed data from communities across the United States over time to better understand factors that influence children’s life trajectory.

Choi identified clusters of respondents within specific neighborhoods using a combination of national longitudinal survey datasets and U.S. Census data that followed children over 15 years to examine factors and mechanisms underlying home, school and neighborhood environments — and how those factors relate to children’s developmental outcomes.

His analyses revealed that children’s experiences up to age 5 impact their lives at age 15.

“Adverse events and activities, and neighborhood disadvantages, can generate long-term impacts,” Choi said.

Using public and restricted U.S. Census data, and findings from Princeton University’s “Fragile Families and Child Well-being” study, Choi explored the effects of neighborhood disadvantage on family processes and child development. The longitudinal cohort

study included nearly 4,900 newborn children, three-quarters of whom were born to unmarried parents, and conducted six waves of parent surveys and in-home observations — at birth, and at ages 1, 3, 5, 9 and 15.

Choi also examined adverse childhood experiences, or ACEs — a set of 10 potentially traumatic events in childhood, including abuse, neglect and other household dysfunction. He found exposure to ACEs was one of the most salient factors in determining whether children experience depression as they get older.

Data revealed that children living in low-income neighborhoods were more likely to experience more ACEs, including peer bullying and victimization — experiences related to teenage depression.

“Screening ACEs during early childhood might be a good indicator of future depression, so we can be more mindful and cautious about kids with many ACEs in early life,” Choi said.

Choi said findings highlight the need to invest time and resources in low-income neighborhoods and their children, such as prevention and intervention programs for peer bullying and victimization.

The project is funded by a UNL Office of Research and Economic Development Faculty Seed Grant. Along with Choi, the research team includes doctoral student Dan Wang.



Jeong-Kyun (Evan) Choi, principal investigator

SEEDS PROGRAM PROMOTES HEALING AMONG WOMEN WITH PAST ADDICTION, VICTIMIZATION

For many, home is a sanctuary from busy schedules and hectic lives. But for women participating in the Support, Education, Empowerment and Directions (SEEDs) program, home can be a life-saver.



Katie Edwards,
principal investigator

Katie Edwards, associate professor, CYFS and educational psychology, is leading research to better understand the features of successful sober-living safe homes that promote recovery among women with histories of addiction and sexual and/or domestic violence victimization.

Her project aims to document the extent to which women living at three SEEDs homes — in Chandler, Mesa and Phoenix, Arizona — report positive outcomes over time, such as maintaining sobriety, promoting psychological and emotional wellness, reducing rates of sexual and domestic violence revictimization, abstaining from criminal offending, preventing unemployment and, when applicable, regaining or maintaining custody of children.

Established in 2003 to address unmet needs of women with histories of addiction and victimization, SEEDs is a gender-responsive, trauma-informed recovery program that provides safe, sober housing to women whose lives have been affected by substance abuse and violence.

“It’s an exciting program that focuses on holistic recovery and the role of family and community supports,” Edwards said. “This project aims to identify ways SEEDs is working and why, as well as to pinpoint some challenges and ways to enhance survivors’ outcomes.”

Edwards’ mixed-methods study follows women in SEEDs for a year. Researchers are looking for indicators of recovery, such as continued sobriety, a reduction in depression or post-traumatic stress disorder symptoms, and reporting more stability in finances and housing situations.

Preliminary findings from the pilot project show that for many participants, SEEDs was instrumental to their recovery.

“For many women, it was the first time they felt like they had a family,” Edwards said. “The women in SEEDs are helping one another and promoting recovery.”

One of the program’s most innovative elements is the Cup O’ Karma coffee shop. Located in the Chandler Public Library, the shop is run by SEEDs participants — current residents and alums. They develop job skills, such as budget management and customer service, and enhance their work history.

The core strength of SEEDs, Edwards said, is that it is resident-driven. Women living in the homes help create house rules, manage household responsibilities, cook and eat together, and continually share emotional support.

“A lot of women come into the program believing they somehow deserve what happened to them,” Edwards said. “SEEDs helps women understand that they are worthy, and have a purpose in this world.”

Additionally, participants are welcome to return if they experience a relapse.

The study’s findings will be used to bolster the impact of SEEDs and provide a model for other communities wishing to implement a similar program.

This project is a subcontract from the University of New Hampshire, funded by a grant from the U.S. Department of Justice—Office on Violence Against Women.

SMILE PROJECT BENEFITS FROM COVID-19 RAPID RESPONSE GRANT

In early 2020, Jenna Finch, assistant professor of psychology, began a pilot project to identify which non-academic factors help predict a successful transition from second grade to third grade.

Third grade presents significant new challenges for students, including the onset of standardized testing, increased behavioral expectations to work independently and the transition from learning to read to reading to learn.

Finch’s project, Self-regulation and Motivation In Learning Environments (SMILE), examines children as they move from second to third grade, and how their self-regulation, motivation and interactions with teachers, parents and peers work together to impact their classroom behavior.

Participating second-graders and their parents were asked to visit the Department of Psychology’s Learning and Research Development Group laboratory to complete various tasks and questionnaires related to executive functioning — cognitive skills that support the self-regulation of children’s behaviors and attention — and to assess their motivation and self-esteem. Parents also completed questionnaires about home life, parenting practices, mental health and demographics.

But by March, after only 19 children and their parents had visited the lab to provide crucial data, the lab had to shut down due to the COVID-19 pandemic. Young children and their families faced unprecedented changes as students had to shift out of their classrooms and into remote learning programs. Additionally, Nebraskans have experienced record levels of job loss, reduced social connection and increased mental health challenges because of the spread of coronavirus.

“The pandemic not only forced children to leave their classrooms, but also caused stress among their families about finances, child care and other issues,” Finch said. “I knew I would need the COVID-19 data to use with the other data I was collecting to know what’s going on in these homes.”

With additional funding, Finch was able to recruit low-income families hard hit by the pandemic to complete surveys on how their lives have been affected. Data gathered from the surveys will be integrated into the SMILE project.



During the pandemic, students have shifted to remote learning.

Participating parents completed a survey between May and July to help researchers better understand which pandemic experiences are likely to dramatically impact their children’s development. Finch aims to recruit most of the families that participated in the COVID-19 surveys to be part of the ongoing study.

“We’re finding about half the parents surveyed are clinically depressed,” Finch said. “It has been traumatic for many of these families, and many of these parents of young school-aged children are struggling.”

This project is supplemented by a grant from the UNL Office of Research and Economic Development COVID-19 Rapid Response Grant.

2019-2020 LAYMAN AWARDS

Funded by the University of Nebraska–Lincoln’s Office of Research and Economic Development, Layman Awards provide seed money to untenured faculty and support researchers pursuing external funding.

The following Layman Awards are housed in CYFS.



PATTY KUO

Assistant Professor, Child, Youth and Family Studies

“Key Factors Influencing Infant Attachment Security with Mothers and Fathers”

Infant-parent attachment security is critical to understanding child development; secure attachment during infancy predicts beneficial socioemotional outcomes throughout one’s life. Likewise, insecure attachment predicts maladaptive developmental outcomes for children.

Kuo aims to identify key factors influencing attachment to provide a foundation for improving children’s outcomes, and to increase understanding of how attachment configurations are formed based on variations in parental sensitivity and availability, such as accessibility to the infant.

Her pilot data will be used for a proposed study to the National Institute of Child Health and Human Development (NICHD) which will establish both predictors and outcomes of attachment to mothers and fathers.



KEVIN PITT

Assistant Professor, Special Education and Communication Disorders

“Toward P300-Based Brain-Computer Interface Access for Those with Severe Physical Impairments”

For those with severe physical impairments (SPIs) due to diagnoses such as amyotrophic lateral sclerosis (ALS), conventional forms of communication may be ineffective or inefficient. The lack of a reliable communication method has a devastating effect on the quality of life for those with SPIs.

Brain-computer interface access to augmentative and alternative communication devices (BCI-AAC) may overcome communication barriers by allowing communication device control without requiring reliable physical movements. However, while BCI-AAC technology is advancing, the translation of laboratory research to clinical practice is lagging.

Pitt’s research will pilot clinically based evaluation tools and assessment frameworks for BCI-AAC. His findings will help expedite BCI-AAC translation by supporting the integration of BCI into existing clinical frameworks.



RAY REICHENBERG

Research Assistant Professor, Nebraska Center for Research on Children, Youth, Families and Schools

“An Exploratory Study to Improve Measurement of School Climate for Online Learners”

Positive school climate is associated with an increase in students’ motivation, self-esteem and altruistic behavior; a decrease in dropout, truancy and absenteeism rates; and an increase in academic outcomes.

There has not yet been an investigation of the nature or effect of school climate in an online-only, K–12 setting. One barrier to conducting this research is the lack of a measure of school climate that has been validated for use with online students.

As a first step toward the development of such a measure, Reichenberg will investigate the appropriateness of a widely used measure of school climate for use with online-only high school students.

Results will inform an externally funded effort to develop a new or refined measure of school climate validated specifically for online-only learners.



YONGJUN WANG

Research Assistant Professor, Nutrition and Health Sciences

“Role of REV-ERB β in Exosome Biogenesis and Release”

Exosomes are small particles that are released naturally from cells. Although biologists have known for more than 20 years that exosomes exist, they still know little about what exosomes do.

Biologists recently have recognized that exosomes play a role in communication among and within cells in the body. Because cellular communication is part of cancer development and progression, the lack of knowledge about exosome release is a barrier to cancer research.

Nuclear receptors are proteins that help turn genes “on” or “off.” They play a role in every aspect of development, physiology and disease. REV-ERB β is one of many nuclear receptors.

This project is designed to help advance knowledge of how REV-ERB β regulates or gives instructions to exosomes for their release. Research will provide pilot data for a proposed study of the regulation of exosome content by nuclear receptors and its effect on sensitivity of cancer cells to chemotherapy.



HYEONJIN YOON

Research Assistant Professor, Nebraska Center for Research on Children, Youth, Families and Schools

“Improving Evaluation Methods for Targeted Educational Interventions”

Regression discontinuity design (RDD) has great utility for evaluating cut-score-based educational interventions because it allows educators and policymakers to target students most in need, as well as make a robust causal inference for intervention impact. However, a key limitation of the basic RDD is that its causal inference is only warranted to the area near a cutoff, which is seldom of research or policy interest.

The study examines the utility and statistical validity of a new evaluation method for targeted educational intervention for students at risk – RDD with covariate matching (RDD-CM).

Using kindergarten math intervention data, Yoon aims to demonstrate the analysis, interpretation and application of the RDD-CM to identify causal effects beyond the treatment cutoff, and to examine the extent to which an RDD-CM yields unbiased and precise estimates comparable to those from a randomized controlled trial (RCT) design.

LANDSCAPE OF SUPPORT

Snapshot of Cumulative CYFS Grant Activity

Support for the Nebraska Center for Research on Children, Youth, Families and Schools is generated primarily through external grants. The graphic below highlights grant activity since the center's inception in 2004.

Internal grants funded

\$1,167,615

External grants funded

\$93,079,611



Research Impact

The figures below show indicators of cumulative research impact for CYFS.

701 Total grants submitted

273 Total grants funded

41% Grant submission success rate (based on known decisions)

\$22.18

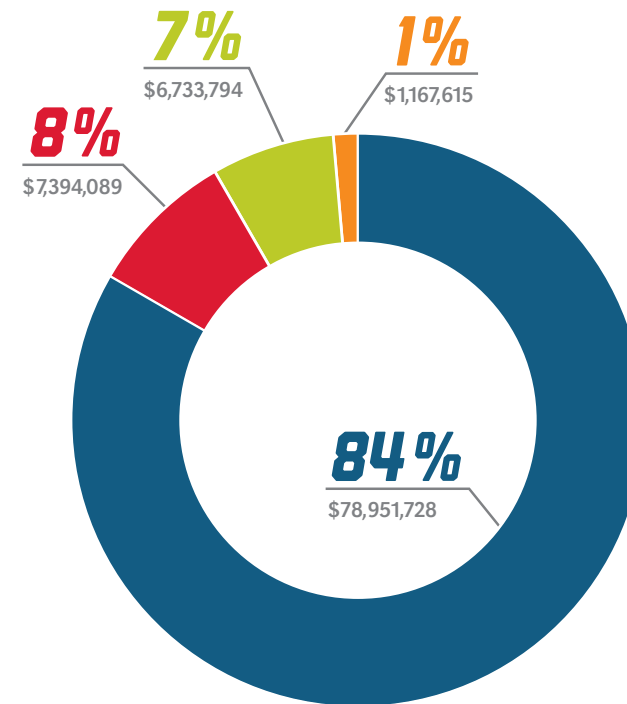
Return rate to the University of Nebraska-Lincoln for every \$1 invested

Sources of Funding

The chart below shows the cumulative dollar amounts and proportions of funding that CYFS researchers have garnered from federal, state, foundation and internal (i.e., University of Nebraska) sources.

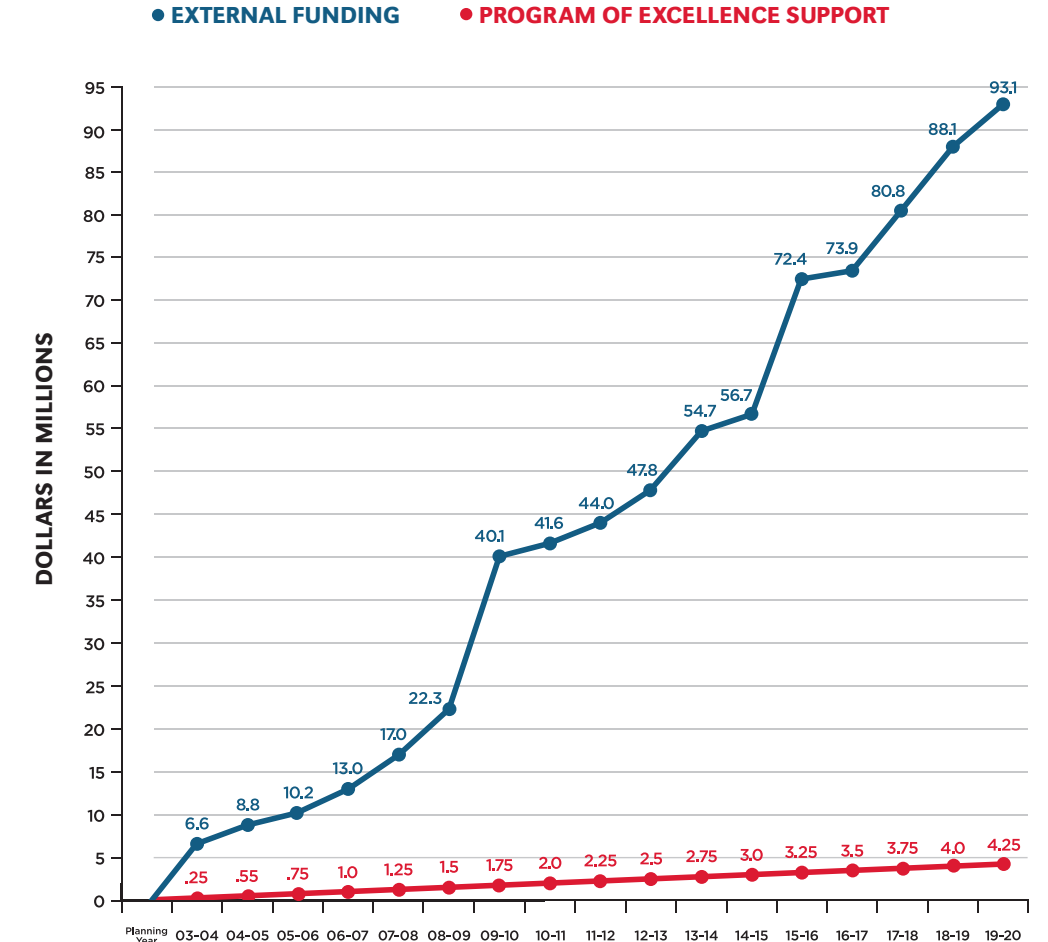
- Federal (107 grants)
- State (39 grants)
- Foundation (69 grants)
- Internal (58 grants)

Percentages rounded to nearest 1%



Cumulative External Grant Dollars & Program of Excellence Support

The line graph below depicts the center's cumulative external funding (i.e., federal, state and foundation) relative to Program of Excellence support from the University of Nebraska.



ACTIVE GRANTS & CONTRACTS

The following grants and contracts received new or ongoing funding during 2019–2020.

Federal Awards (\$29,528,189)

Administration for Children and Families

Getting Ready 0–3 (GR03): Supporting the Development of Infants/Toddlers Through an Integrated Parent-Teacher Relationship-Based Approach

PIs: Lisa Knoche, Susan Sheridan

Getting Ready Preschool Development Grant (PDG) (subaward through Nebraska Children and Families Foundation)

PI: Lisa Knoche

Go NAP SACC Online Tool and Evaluation (subaward through the Nebraska Department of Health & Human Services)

PI: Dipti Dev

Learning Social and Emotional Skills in Head Start: Influence of Familial Risk Factors and Classroom Characteristics

PIs: David Hansen, Kelsey McCoy

Ready Rosie – Nebraska Children (subaward through Nebraska Children and Families Foundation)

PI: Helen Raikes

Centers for Disease Control

Evaluating Practice-Based Sexual Violence Primary Prevention Approaches from CDC’s Rape Prevention

PI: Katie Edwards

Prevention at the Outer Layers of the Ecology: GreenDot to Build Collective Efficacy and Change Injunctive Norms (subaward through Rutgers University)

PI: Katie Edwards

Environmental Protection Agency

Evidence-Based Interactions Between Indoor Environmental Factors and Their Effects on K–12 Student Achievement

PIs: Lily Wang, James Bovaird, Josephine Lau, Clarence Waters

National Institutes of Health

Determining the Overlap between Latent Behavioral and Neural Changes in Executive Control in Middle School

PI: Carrie Clark

Development and Pilot Trial of an Intervention to Reduce Disclosure Recipients’ Negative Social Reactions and Victims’ Psychological Distress and Problem Drinking

PI: Katie Edwards

Estimating Mediation Effects in Prevention Studies (subaward through Arizona State University)

PI: Matt Fritz

Evaluating Psychophysiological Mechanisms of Early Childhood Teachers’ Stress Resilience and Their Relevance for Preschoolers’ Self-Regulation

PIs: Carrie Clark, Holly Hatton-Bowers, Gilbert Parra, Lorey Wheeler

Evaluation of the Efficacy of a Physical Therapy Intervention Targeting Sitting and Reaching for Young Children with Cerebral Palsy (subaward through University of Southern California)

PIs: Natalie Koziol, James Bovaird

Help Me Grow (subaward through Children’s Hospital & Medical Center)

PI: Lorey Wheeler

HOME C2OOKING: Creative Culinary Opportunities Offering Kids Inquiry-Based Nutritional Genius (subaward through the University of South Carolina)

PI: Kelley Buchheister

Neural Predictors of Speech Perception Outcomes in Adults with Cochlear Implants

PIs: Yingying Wang, Michelle Hughes

National Science Foundation

Analysis of Effective Science Coaching: What, Why and How

PI: Gwen Nugent

Equity in Engineering: Understanding and Promoting All Elementary School Children’s Knowledge of and Motivation to Engage in Engineering (subaward through Arizona State University)

PI: Lorey Wheeler

Maker Fridays: Engaging Rural and Under-Represented High School Students in Pre-Engineering Design and Creativity (subaward through Northeast Community College)

PI: Raymond Reichenberg

Nebraska STEM: Supporting Elementary Rural Teacher Leadership

PIs: Amanda Thomas, Guy Trainin, Wendy Smith

The Role of Stigma in Partner Violence

PI: Katie Edwards

U.S. Department of Agriculture

Impact of Natural Environments on Symptom Expression in Children with Autism

(subaward through Georgia State University)

PIs: Julia Torquati, Anne Schutte

Resource Toolkit to Support the Wellness of Extension Employees Following a Natural Disaster

PIs: Holly Hatton-Bowers, Gilbert Parra, Michelle Krehbiel, Lorey Wheeler

Team Nutrition Training Grant in Nebraska (subaward through the Nebraska Department of Education)

PI: Dipti Dev

Youth Civic Engagement Using Simulations and Design Thinking

PIs: Jeong-Kyun Choi, Maria Rosario de Guzman, Surin Kim

U.S. Department of Education

A Missing Link to a Better Tomorrow: Developing Health Literacy in Transition-age Youth with High Incidence Disabilities

PIs: Alexandra Torkelson-Trout, Kristin Duppong Hurley

A Randomized Trial of Conjoint Behavioral Consultation (CBC) with Latino Students: A Replication Study

PIs: Susan Sheridan, James Bovaird, Lorey Wheeler

Early Learning Network Lead

PIs: Susan Sheridan, Lisa Knoche

Efficacy of the START-Play Program for Infants with Neuromotor Disorders (subaward through Duquesne University)

PI: James Bovaird

Language Gains during Early Childhood: Prediction of Later Outcomes and Multiple-Methods Exploration of Relevant Classroom Factors (subaward through The Ohio State University)

PI: Rachel Schachter

Learning Frontiers: Pre-K to Grade 3

PIs: Susan Sheridan, Lisa Knoche, James Bovaird

Project VIEW: Visual Impairments Education in Writing

PIs: Michael Hebert, Mackenzie Savaiano

School Psychology Specialization in Concussion/Mild Traumatic Brain Injury (mTBI)

PI: Scott Napolitano

School Psychology Specialization in Toddlers with Autism Spectrum Disorders

PIs: Edward Daly III, Therese Mathews

Testing the Efficacy of INSIGHTS for Promoting Positive Learning Environments and Academic Achievement in Nebraska: A Replication Study

PIs: Gwen Nugent, Susan Sheridan, James Bovaird

U.S. Department of Justice

A Process and Outcome Evaluation of a Transitional Living Program for Women with Histories of Substance Use Disorders and Sexual and/or Domestic Violence (SEEDs)

PI: Katie Edwards

State Awards (\$2,108,210)

Nebraska Department of Education

21st CCLC Observation Rubric Development (subaward through UNMC)

PI: Michelle Howell Smith

Assessing Special Education Teacher Pre-Service Programs and In-Service Supports Available in Nebraska

PIs: Amanda Witte, Susan Sheridan

Getting Ready—Part C NDE

PI: Lisa Knoche

NDE Home Visit Study (subaward through UNMC)

PI: Lisa Knoche

Nebraska Multi-tiered System of Support Implementation Support Team

PI: Amanda Witte

Nebraska’s ELO Design Challenge: Designing AQuESTT-Aligned ELO Programs Supporting School Districts Across Nebraska (subaward through Beatrice Public Schools)

PI: Michelle Howell Smith

Foundation/Other Awards (\$3,998,641)

4-H Common Measures

Funding Source: National 4-H Council

PI: Raymond Reichenberg

Advancing Measurement of Spanish-Speaking Students’ Mathematics Achievement: A Novel Approach for Controlling Selection Bias in Evaluation of DIF

Funding Source: American Educational Research Association

PIs: Natalie Koziol, Marc Goodrich

Building the Infrastructure for Early Childhood Executive Function Research in Nebraska

Funding Source: NU Collaboration Initiative

PIs: Carrie Clark, Jenna Finch

Dental Wars: Arming Immigrants with the Tools to Combat Poor Dental Health and Stigma

Funding Source: UNL Layman Award

PI: Cynthia Willis-Esqueda

Developing Bio-Behavioral Mixed Methods Research Designs for Equine-Facilitated Learning Interventions

Funding Source: Horses for Healing Equine Therapy and Research Center

PI: Michelle Howell Smith

Development and Preliminary Test of the Empowering Networks to Eliminate Trans Stigma (E-NETS) Intervention

Funding Source: UNL Layman Award

PI: Elliot Tebbe

Early Childhood Plan Evaluation

Funding Source: W.K. Kellogg Foundation

PI: Greg Welch

Early Head Start University Partnership

Funding Source: ICF International

PI: Lisa Knoche

Early Steps to School Success

Funding Source: Save the Children Foundation

PI: Helen Raikes

Educare Evaluation 2018–2019

Funding Source: Buffett Early Childhood Fund

PIs: Helen Raikes, Dawn Davis

Examining Elementary Teachers’ Enactment of Digital Instructional Materials for Mathematics

Funding Source: UNL Layman Award

PI: Amanda Thomas

Lens on Science Evaluation—Lincoln

Funding Source: Buffett Early Childhood Fund

(subaward through University of Miami)

PI: Helen Raikes

Math Early On II

Funding Source: Buffett Early Childhood Fund

PIs: Victoria Molfese, Ruth Heaton, Jennifer Leeper-Miller

Mindfulness and Mastery

Funding Source: Buffett Early Childhood Fund

(subaward through UNMC)

PI: Helen Raikes

Neighborhood Socioeconomic Disadvantage and Child Development Trajectory: Longitudinal Approach Merging National Surveys and Census Datasets

Funding Source: UNL Research Council

PI: Jeong-Kyun Choi

Pursuing Causal Inferences with Complex Survey Data

Funding Source: UNL Layman Award

PI: Natalie Koziol

Reading and Writing Profiles of Students with Intellectual and Developmental Disabilities

Funding Source: UNL Research Council

PIs: Derek Rodgers, Susan Loveall

Ready Rosie

Funding Source: Buffett Early Childhood Fund

PI: Helen Raikes

Starting School Socially and Behaviorally Ready: The Impacts of Malleable Home-Based Relationships and Community Setting

Funding Source: Society for the Study of School Psychology

PIs: Rachel Schumacher, Susan Sheridan

Strengthening Nebraska’s Communities and Cultivating Better Teachers through Arts-Based Education

Funding Source: Humanities Nebraska

PI: Theresa Catalano

Superintendents’ Early Childhood Plan Evaluation

Funding Source: Buffett Early Childhood Institute

PIs: Lisa Knoche, Greg Welch, Helen Raikes

Take Flight Farms/St. Monica’s Equine Assisted Therapy

Funding Source: Take Flight Farms

PI: Michelle Howell Smith

Teachers and Parents as Partners-Vertical (TAPP-V): Supporting Students with ADHD Across Grade-Level Transitions

Funding Source: UNL Layman Award

PI: Matthew Gormley

The Effectiveness of Conjoint Behavioral Consultation on Student Outcomes in Rural Communities: A Follow-Up Study

Funding Source: Society for the Study of School Psychology

PIs: Henry Bass, Susan Sheridan

The Effects of COVID-19 on Education in Nebraska and the Potential for Recovery

Funding Source: UNL Office of Research and Economic Development,

Rapid Recovery Grant Program

PIs: Susan Sheridan, Amanda Witte, Gwen Nugent, Lisa Knoche

The Efficacy of Technology-Delivered Mental Health Services in Rural Nebraska: Addressing the Needs of Students, Families and Schools

Funding Source: UNL Layman Award

PI: Amanda Witte

The Roles of Community Health Workers in Addressing Adolescent Maternal Mental Health in a Kenyan Refugee Camp

Funding Source: UNL Layman Award

PI: Julie Tipples

AFFILIATES & PERSONNEL

CYFS Research Affiliates

Research affiliates make up a network of more than 100 diverse faculty from across the University of Nebraska system who make significant contributions to Nebraska's interdisciplinary research community in the social, behavioral and educational sciences. Research affiliates are actively engaged with CYFS and are integral to our mission. Through their formal connection to the center, they also have opportunities to engage in valuable research exchanges, professional development, technical assistance and networking events, along with communications support to make their CYFS-housed work highly visible and accessible.

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Munroe-Meyer Institute

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Nursing
Therese Mathews

Psychology
Brandy Clarke

College of Public Health

Department of Health Promotion & Behavior
Abbie Raikes

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Cooperative Extension Division
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College of Education & Human Sciences

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Lorey Wheeler
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Kailee Groshans
Erin Hamel
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Samantha Kesselring
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Rachel Schumacher
Jasmin Smith
Cody Solesbee
Cassidy Spradlin
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Matthew Fritz
Assistant Professor

Michelle Howell Smith
Research Assistant Professor

Lisa Knoche
Associate Director for Research; Director, Nebraska Academy for Early Childhood Research; Research Associate Professor

Natalie Koziol
Research Assistant Professor

Kejin Lee
Research Assistant Professor

Gwen Nugent
Research Professor

Raymond Reichenberg
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Susan Sheridan
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Lorey Wheeler
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Amanda Witte
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