



National Institute for Human Resilience (NIHR)

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Special points of interest:

- Directors Corner: THHC subsumed by NIHR
- New Grants Manager: Brooks Robinson
- COVID-19 GRIT Website and Training
- New NIHR Site

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Directors Corner

By Charles Benight, PhD



Hello All! I decided to put the Director's Corner on the front page for this edition of our newsletter for two main reasons.

The most obvious is that we have all been coping with one of the most serious crises of our lifetimes; the COVID-19 pandemic. I wanted to report to all of you what we've been doing to help with the response. Second, we are extremely elated to announce the establishment of the National Institute for Human Resilience. I will start with the new institute!

On March 25th, the Chancellor officially unveiled the new NIHR. The NIHR is launching due to a lead challenge gift of \$8 million from Lyda Hill Philanthropies. We are actively pursuing university fundraising for an additional \$7.75 million in order to receive the \$8 million investment for the project, with a total budget of \$15.75 million.

Back in 2002 when I

launched the Trauma, Health & Hazards Center my goal was to reduce the impact of trauma in our community. For the last 18 years, we have conducted research and community-based education/trainings to help manage extreme events for individuals and large groups across the city, county, and state. We provided web-intervention support following the Bailey Platte Canyon school shooting way back in 2006, the Colorado Wildfires including Waldo Canyon in 2012, and the Planned Parenthood Shooting in 2016. We also deployed for the lead water crisis in Flint Michigan, the Sonoma County Wildfires, Hurricane Ike in Galveston, and for pediatric trauma survivors at the Children's hospital in Columbus Ohio. We have conducted extensive cross-disciplinary research on everything from disaster warnings to coping with the Oklahoma City Bombing. We received funding from the National Science Foundation, Department of Defense, National Institute for Mental Health, and the Substance Abuse and Mental Health Services Agency among others.

In 2014, due to a previous generous gift from Lyda Hill, we launched the clinical arm of the THHC, the Veterans Health and Trauma Clinic. We have now served over 1700 trauma survivors with the majority being Veterans, active duty military and their families. We have provided critical support for first responders starting the peer support program at the

Colorado Springs Fire Department back in the early 2000's. We ran that program for over a decade and most recently are providing trauma treatment for the C.S. Police Department.

It's been a busy 18 years. We now start a new chapter by launching the NIHR which will subsume the Trauma, Health, & Hazards Center. The fundamental mission of the new institute is to advance knowledge of human resilience by pursuing basic science on trauma adaptation, the active discovery of strength-based solutions through innovative and interdisciplinary clinical research, resilience based education, and community resilience engagement. The NIHR will focus on the health and well-being of Veterans, military members, first responders, other trauma survivors, and their family members. It will transform care and change the scientific dialogue from one of illness and disability to one of strength and empowerment. It will be an essential asset to the Pikes Peak Region, the State of Colorado, and the country. A lofty mission no doubt, but so was our original vision over 18 years ago.

I am committed to making this new venture a success. If our current work with the Covid-19 crisis is any example, we are going to make a difference.

Please refer to the back article for more information on what we have recently been doing with the COVID-19 crisis (continued....)

Greater Resilience Intervention Teams (GRIT)

By Charles Benight, PhD



Click on the picture to sign up for GRIT

In late March, we initiated the GRIT program to vastly expand the resilience capacity of our communities related to the COVID-19 pandemic

(www.grit.uccs.edu). The GRIT program is designed to maximize collective and individual

strengths through personal resilience support coaches who are trained in a free 5-hour program through the new National Institute for Human Resilience (NIHR). The 5-hour course was developed by Dr. Benight, Dr. Joe Ruzek, and Ms. Nicole Weis. Dr. Ruzek is a leading expert on disaster mental health and early trauma interventions. Ms. Weis is currently coordinating our peer support programs at the NIHR and is also our crisis response lead. “The unique part of the GRIT program is that it utilizes existing social networks throughout our communities to promote strength and wellness during this difficult time”, said Dr. Benight. The program is being coordinated with the broader community response with State Department of Public Health and Environment, the El Paso

County Public Health Department, the Pikes Peak United Way, and both City and County Emergency Operations. Benight shared “The response to the program has been amazing, not just in Colorado Springs, but around the state. We even have folks from 16 other states who have signed up. We have only just begun to advertise it and we already have over 342 people signed up. We’ve completed our first two classes and are now fully automated with individuals being able to complete the training at a time that is convenient to them. Trained individuals are now out promoting resilience with their friends, family, and colleagues. We are also working on a customized version of GRIT called GRIT4ED to help our schools and families deal with the significant challenges they are facing. The program will include 3 phases: Immediate Need, Summer Planning, and Re-engagement. A targeted training is also planned for youth coaches in order to pre-prepare these important relational resources for children to help promote wellness and resilience. A targeted training is also planned for youth coaches in order to prepare these important relational resources for children to help promote wellness and resilience.

Click here to view our new NIHR site!

<http://nihr.uccs.edu>

Trauma Research with Nonlinear Methods at Datapalooza

By Julie Hurd

Datapalooza is an annual nonlinear data conference that is put on by the Society for Chaos Theory in Psychology & Life Sciences. The conference offers the opportunity for researchers to collaborate with experts in the field of nonlinear methods.

Dr. Charles Benight, Aaron Harwell, Emmeline Taylor, Julie Hurd, and Margaret Morison submitted three proposals that were accepted for this year’s conference. Their proposals incorporated physiological data, facial analysis data, and self-report data from research projects at the National Institute for Human Resilience. After attending the conference, Morison stated “Datapalooza provided a very unique opportunity to work with advanced analysts in the fields of math and physics. With their assistance, we’re now able to look at thoughts, feelings, and behaviors with techniques largely unheard of in psychology.”

The recent focus of Dr. Benight’s lab has been to develop and analyze research questions that use nonlinear methods to further the field of trauma psychology. Dr. Benight and his graduate students are excited to continue their collaborations with experts in the field and to use work from Datapalooza in future publications and presentations. Taylor stated “Datapalooza was one of the best academic and professional experiences I have had to date. I left with preliminary support for my hypothesis, and more importantly, a better understanding of nonlinear techniques and applications.”



Emmeline Taylor, PhD Trauma Psychology Candidate, presenting at the Datapalooza Conference

Sleep and Trauma: What we know and Where We are Headed

By Aaron Harwell

In 2020, it seems as if we are more enlightened than ever about the importance of sleep. Yet, most of us still struggle to get the recommended seven to nine hours of quality rest each night (Hirshkowitz et al., 2015). Growing evidence suggests that chronic sleep deprivation has become widespread throughout society (Rosekind, 2015). For trauma survivors, in particular, trouble sleeping is the most common and long-lasting complaint after experiencing a life-threatening event (Germain, 2013).

This is concerning for many reasons. For one, sleep represents a critical physiological human need, much like food, water, and shelter. Without it, individuals commonly report worse mental health, physical health, and quality of life (Baglioni et al., 2016; Cappuccio et al., 2008; Strine & Chapman, 2005). Additionally, sleep plays a critical role in self-regulation, establishing memories, and manage emotions, all of which commonly become more challenging after enduring a trauma (Germain, 2013). Though not as common, trouble sleeping is also associated with increased suicidality for some individuals.

Despite these concerns, sleep impairment represents what researchers call a modifiable risk factor. Essentially, impaired sleep is not permanent, but rather something that can be changed and improved. Recognition of sleep as a modifiable risk factor has led many researchers to investigate the dynamics of sleep. These investigations have led to an influx of knowledge that we are trying to use to our advantage. As you can imagine or perhaps experienced yourself, the amount of sleep you get varies from day to day. What we've found out more recently is that this variability, average amount day to day change, is related to; younger age, isolation, poor physical health, mental illness, and higher stress levels (Bei, Wiley, Trinder, & Manber, 2016).

The next step is to understand how exactly sleep relates to these factors and what mechanisms maintain their association. My interest is in studying daily sleep



changes and how they may relate to daily changes in an individual's perceived ability to cope with stressors (i.e., coping self-efficacy). I am also interested in investigating how these daily interactions inform long-term mental health outcomes (i.e., depression and posttraumatic stress disorder). Technological advances in how we can measure sleep and mental health (e.g., smartphones, Fitbits, Apple Watches, etc.) allow for more accurate and consistent assessment while reducing research participant burden.

Though the field has moved forward, many questions still remain related to sleep, trauma, and mental health. For example, what is the impact of receiving one hour less of quality sleep compared to two hours less? Are changes in sleep after a trauma more linear or nonlinear in nature? Is sleep related to the experience of posttraumatic growth? If yes, how so? When after a trauma is the most ideal window of time to measure sleep? And for how long? These questions and many more remain to be addressed. Promisingly, our knowledge of sleep dynamics and traumatic recovery is expanding. Future research will hopefully clarify these questions and translate findings into practical and effective trauma interventions.

Directors Corner (Cont.)

By Charles Benight, PhD

If our current work with the COVID-19 crisis is any example, we are going to make a difference. Here is a list of what we have been doing:

- First, we launched a support line in mid-March until early May for faculty and staff at UCCS to promote resilience and help with important mental health referral information during the acute COVID-19 crisis.
- Second, we launched the GRIT program (see website at grit.uccs.edu). GRIT stands for Greater Resilience Intervention Teams (and Greater Resilience Information Toolkit). This now provides the community with important fact sheets and other resource information for Veterans, First Responders, Medical Staff, Families/Youth, and Community Members. It also provides the opportunity to take GRIT training to be a Resilience Support Coach to promote resilience throughout the community. We already have over 342 people from the community signed up.
- Third, we are in coordination with the State Department of Health and the Environment, El Paso County Health Department, the Pikes Peak United Way, the Faith-based community, and the City/County Emergency Response to bring GRIT to the entire state of Colorado. We hope to train thousands across the state and possibly beyond utilizing zoom technology and integrate the system with the state crisis counseling response.
- Fourth, we have now customized the My Disaster Recovery website for the COVID-19 Disaster, You can find the site at Myresiliencehelp.com.
- Last, we launched a global study of burnout and trauma in first responders and health care workers in collaboration with my colleague (and former student), Dr. Andrew Smith, at University of Utah.

The NIHR is making a difference! Thank you for any support you might provide to help us with our matching grant! Each dollar is matched doubling your contribution.

Please Help Us Reach Our Match Grant Goal!

<https://giving.cu.edu/fund/national-institute-human-resilience-fund>

Lori Bryan leaves THHC, Brooks Robinson is Welcomed to the NIHR

By Megan Wendling



Lori Bryan, PhD, former THHC Director of Research Operations

Lori Bryan, former Director of Research Operations at the THHC, has recently left the center after dedicating over 15 years to the University. Lori has moved to Texas to start the next chapter of her life. We are extremely grateful for everything that she has done for the center, and wish her luck in her future endeavors!

The NIHR Welcomes Brooks Robinson, our new Grants Manager. Brooks grew up in Santa Fe, NM. During high school he became fascinated with the brain. Following a brief internship at Los Alamos National Labs, he received a scholarship to attend Colorado College and earned a BA in neuroscience. During this experience he was struck by the frequency that drug and alcohol abuse directly contributed to traumatic events leading to death. He went on to earn a Ph.D. in neuroscience at the University of Texas at Austin where he studied alcohol-related behavior and epigenetic changes using the model system *Drosophila melanogaster* (fruit flies). Brooks then moved to Portland, OR where he did a postdoctoral fellowship and was promoted to Research Assistant Professor at Oregon Health & Science University. During this time, Brooks researched the effects that opioids and psychostimulants had on neuronal excitability. Brooks is married and has a newborn baby girl. He wants to add that yes, he was named after the baseball player and is a fan of the sport, but no he did not play baseball (too much pressure). Welcome to the team, Brooks!



Brooks Robinson, PhD, NIHR Grants Manager