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Collaborating with SC CTSI biostatistician rewards researchers with major research grant

- Researchers Stacey Finley, PhD, and Nick Graham, PhD, were awarded an NIH grant to develop optimal CAR-NK cells for treating multiple myeloma. The research aims to engineer a powerful new receptor for NK cell surfaces, offering a potentially safer and less complex alternative to current CAR-T cell therapy for multiple myeloma. Throughout the grant proposal process, Finley and Graham recognized the need for robust statistical analysis to compare various CAR designs effectively. Leveraging resources available at SC CTSI, they collaborated with Melissa L. Wilson, MPH, PhD, a member of the Biostatistics, Epidemiology, and Research Design (BERD) group at SC CTSI, whose expertise proved invaluable in refining the study design and addressing reviewers' concerns. With Dr. Wilson's guidance, the team developed a comprehensive approach to assess the effectiveness of different CAR designs in combating tumor cells.
- "Melissa helped us think about how we could improve our proposed study so it could better answer our research questions." -Stacey Finley, PhD
- "From our discussions with Melissa, we realized that we needed to increase the number of samples and be clearer in the comparisons we would make." -Stacey Finley, PhD



Stacey Finley, PhD



Nick Graham, PhD



Melissa L. Wilson, MPH, PhD



SC CTSI mentee wins career development award to improve diversity participation in pediatric clinical trials

- Mallory Chavannes, MD, MHSc, FRCPC, FAAP, a pediatric gastroenterologist at Children's Hospital Los Angeles (CHLA), was honored with the Robert A. Winn Diversity in Clinical Trials: Career Development Award due to her groundbreaking research on non-invasive methods for diagnosing and monitoring inflammatory bowel disease (IBD) in children. This recognition underscores the importance of inclusive clinical trial enrollment. Dr. Chavannes' pioneering research, supported by the KL2 program of SC CTSI, highlights ultrasound imaging as a promising tool for early detection of pediatric IBD, potentially expediting treatment interventions. Her work challenges the prevailing focus on European-descendant and Caucasian populations in IBD trials, advocating for greater diversity for more generalizable outcomes.
- "This grant will help us develop a framework on how to approach patients and propose the best projects that would ensure that a diverse population enrolls at the start so that we can see more representation within clinical trials and more generalizable results." -Mallory Chavannes, MD, MHSc, FRCPC, FAAP
- "The SC CTSI staff and the KL2 program have been instrumental in helping me develop a framework for conducting reproducible research." -Mallory Chavannes, MD, MHSc, FRCPC, FAAP





Mallory Chavannes, MD, MHSc, FRCPC, FAAP

SC CTSI project inspires filmmakers to create award-winning documentary on getting vaccinated

"Vaccinate Watts," directed by Michael
v. Greene, stands as a testament to the
impactful collaboration between SC
CTSI and local stakeholders in
addressing the challenges brought forth
by the COVID-19 pandemic and
promoting vaccination efforts.
Recognized with the Best Short
Documentary award at the Santa Clarita
International Film Festival 2022 and
selected for the American Public Health
Association Film Festival 2022,

"Vaccinate Watts" underscores the pivotal role of storytelling in public health initiatives. Through insightful interviews with healthcare professionals and community members, the film not only advocates for vaccination but also highlights the importance of equitable healthcare access and community involvement. Sean McBride, co-writer and producer of the film, applauds the positive outcomes of the SC CTSI-driven project, citing a notable 30% increase in vaccination rates within targeted areas.



SC CTSI Senior Director Allison Orechwa and filmmaker Sean McBride



Photo courtesy Michael Greene



Scientists probe how surfing could help chronic pain

- Supported by a multidisciplinary pilot grant provided by SC CTSI, Jason Kutch, PhD, alongside his colleagues, James Finley, PhD, and Heather Culbertson, PhD, explore the impact of surfing on individuals with chronic pain, utilizing both real-world ocean experiences and immersive virtual reality simulations. Through collaborations with USC Viterbi School of Engineering and USC Division of Biokinesiology and Physical Therapy, the team aims to analyze the neural effects of surfing before and after sessions, utilizing EEG headbands and advanced brain imaging techniques. The research team plans to create a fully immersive virtual reality experience, complete with realistic sensations such as the feeling of waves and ocean breezes. aiming to provide users with a calming and authentic 'surfer's high'. Their study holds promise for understanding how immersive experiences like surfing can positively impact brain signaling and offer relief to individuals suffering from persistent pain conditions.
- "The idea is that the really dynamic environment of surfing might force the brain to focus outside the body and restore a better signaling balance." - Jason Kutch, PhD





Jason Kutch, PhD



James Finley, PhD



Heather Culbertson, PhD

David G. Armstrong recognized as the recipient of the 2023 ACTS Distinguished Investigator Award for translation from proof of concept to widespread clinical practice

- David G. Armstrong, PhD, DPM, a leading figure at the Keck School of Medicine of USC, received the prestigious 2023 ACTS Distinguished Investigator Award. Recognized for his groundbreaking work in preventing amputations among diabetic patients, Dr. Armstrong's leadership as Professor of Surgery and Director of the Southwestern Academic Limb Salvage Alliance (SALSA) and President of the American Limb Preservation Society (ALPS) has had a profound impact on limb preservation worldwide. Presented by the Association for Clinical and Translational Science (ACTS) during Translational Science 2023, this award acknowledges individuals who excel in translating research from concept to widespread clinical practice. Dr. Armstrong's remarkable contributions exemplify ACTS's commitment to advancing diversity, inclusion, and health equity in translational science.
- "The ACTS awards recognize talented investigators who translate their findings ultimately from the bench to the community. Awardees are in all phases of studies and disciplines throughout the workforce which includes investigators, trainees, educators, and research teams as well as the advancement of diversity, inclusion and health equity." -ACTS President Linda B Cottler, PhD, MPH, FACE







SC CTSI-linked biostatistician saves research project about risk factors in surgeries for congenital heart disease

- Dr. Molly Weisert, a pediatric cardiologist at Children's Hospital Los Angeles (CHLA), conducted a study exploring risk factors for children in surgeries for single ventricle congenital heart disease (SV-CHD). Dr. Molly Weisert's study aimed to address the pressing need to identify children at higher risk of adverse outcomes and the importance of considering multiple risk factors together in treatment decisions. Despite encountering setbacks during the statistical review process, her project was revived by the expertise of Ramon Durazo-Arvizu, PhD, faculty director of Biostatistics at The Saban Research Institute and a member of the Biostatistics, Epidemiology, and Research Design (BERD) group at SC CTSI. With Durazo-Arvizu's invaluable assistance, Weisert successfully addressed reviewers' concerns and advanced her study toward publication.
- "Ramon helped me respond to the reviewer comments and rewrite the statistics section in a way that the reviewers accepted. He didn't change the model, and we still included all four variables, and that was crucial." -Molly Weisert, MD
- "It's best if investigators come to us before the study is designed. That way, we can put the research question in a statistical framework. We discuss which data, variables or information they may need to answer their question." -Ramon Durazo-Arvizu, PhD



Molly Weisert, MD





