

services, including newly developed interventions. Understanding how that individuals in these lay roles approach their interactions with clients may help to inform their future selection and training in order to support T3-T4 translation. **METHODS/STUDY POPULATION:** We examined the strategies and perspectives of Peer Mentors in an HIV/STI prevention intervention (Passport to Wellness, PtW) designed to encourage regular screening for HIV and sexually transmitted infections and the use of HIV biomedical prevention (pre- and post-exposure prophylaxis). Fifteen men were trained to serve as Mentors for this novel PtW intervention for Black sexual minority men (SMM) that was being tested in Los Angeles County. Surveys were conducted at the start of their training and both surveys and semi-structured qualitative interviews were conducted after the Mentors had provided peer services for several months. Thematic analysis was conducted on interview transcripts for the 10 men who actually served as program Mentors during the pilot study and small randomized trial of the intervention. **RESULTS/ANTICIPATED RESULTS:** Peer Mentors described trust, rapport, accountability, encouragement, and flexibility as key characteristics of successful mentor-mentee relationships. The Mentors, their peers, and the mentor training and intervention design facilitated these dynamics. Mentors established trust, rapport, and accountability in the first 1-2 sessions with mentees through self-disclosure, reassurance, non-judgement, and discussion of roles and expectations. They also reviewed the goals and referrals developed at baseline with each mentee and used this plan as an accountability tool throughout their sessions. Participants had also viewed an introductory video and read a short mentor biography prior to their first mentor meeting – a step mentors felt increased participants' enthusiasm and willingness to engage. **DISCUSSION/SIGNIFICANCE:** Despite similar histories and demographics that made them peers, the mentors had progressed beyond those they served and often approached interactions with mentees in a manner similar to that of academic mentors. Mentors' expertise and life progress elevates their roles; additional tools from academic mentoring may aid their training and support.

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### Association of Parity and Previous Birth Outcome With Brachial Plexus Birth Injury Risk

Mary Claire Manske<sup>1</sup>, Machel D. Wilson<sup>2</sup>, Barton L. Wise<sup>3</sup>, Michelle A. James<sup>4</sup>, Joy Melnikow<sup>5</sup>, Herman L. Hedriana<sup>6</sup> and Daniel J. Tancredi<sup>7</sup>

<sup>1</sup>University of California Davis; <sup>2</sup>Principal Biostatistician, Clinical and Translational Science Center, Department of Public Health, Sciences, Division of Biostatistics, University of California Davis, Sacramento, California, United States; <sup>3</sup>Department of Internal Medicine, University of California Davis, Sacramento, California, United States; <sup>4</sup>Department of Orthopaedic Surgery, University of California Davis, Sacramento, California, United States; <sup>5</sup>Department of Orthopaedic Surgery, Shriners Hospitals for Children Northern California, Sacramento, California, United States; <sup>6</sup>Department of Family and Community Medicine, University of California Davis, Sacramento, California, United States; <sup>7</sup>Department of Obstetrics and Gynecology, Division of Maternal-Fetal Medicine, University of California Davis, Sacramento, California, United States and <sup>7</sup>Department of Pediatrics, University of California Davis, Sacramento, California, United States

**OBJECTIVES/GOALS:** To evaluate the association of maternal delivery history with a brachial plexus birth injury (BPBI) risk in

subsequent deliveries, and to estimate the effect of subsequent delivery method on BPBI risk. **METHODS/STUDY POPULATION:** We conducted a retrospective cohort study of all livebirth deliveries occurring in California-licensed hospitals from 1996-2012. The primary outcome was recurrent BPBI in a subsequent pregnancy. The exposure was prior delivery history (parity, shoulder dystocia in a previous delivery, or previously delivering an infant with BPBI). Multiple logistic regression was used to model adjusted associations of prior delivery history with BPBI in a subsequent pregnancy. The adjusted risk (AR) and adjusted risk difference (ARD) for BPBI between vaginal and cesarean delivery in subsequent pregnancies were determined, stratified by prior delivery history, and the number of cesarean deliveries needed to prevent one BPBI was determined. **RESULTS/ANTICIPATED RESULTS:** Of 6,286,324 infants delivered by 4,104,825 individuals, 7,762 (0.12%) were diagnosed with a BPBI. Higher parity was associated with a 5.7% decrease in BPBI risk with each subsequent delivery (aOR 0.94, 95%CI 0.92, 0.97). Previous shoulder dystocia or BPBI were associated with 5-fold (aOR=5.39, 95%CI 4.10, 7.08) and 17-fold increases (aOR=17.22, 95%CI 13.31, 22.27) in BPBI risk, respectively. Among individuals with a history of delivering an infant with a BPBI, cesarean delivery was associated with a 73.0% decrease in BPBI risk (aOR=0.27, 95%CI 0.13, 0.55), compared with an 87.9% decrease in BPBI risk (aOR=0.12, 95%CI 0.10, 0.15) in individuals without this history. Among individuals with a previous history of BPBI, 48.1 cesarean deliveries are needed to prevent one BPBI. **DISCUSSION/SIGNIFICANCE:** Parity, previous shoulder dystocia, and previously delivering a BPBI infant are associated with future BPBI risk. These factors are identifiable prenatally and can inform discussions with pregnant individuals regarding BPBI risk and planned mode of delivery.

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### Community-Campus Research Incubator (CCRI) Grant Program: 13 years of partnerships improving community health

Robynn Zender and Dara Sorkin  
University of California, Irvine

**OBJECTIVES/GOALS:** With the knowledge that population health will not improve without including community voices in research, analysis of the UCI Institute for Clinical and Translational Science (ICTS) Community-Campus Research Incubator (CCRI) grants awarded since 2010 provides the foundation for understanding research partnerships impact on community health. **METHODS/STUDY POPULATION:** Over the past 13 years, the UCI ICTS CCRI program has funded 63 partnered research pilot or capacity-building projects, providing up to \$30K annually to academic-community partnerships. Each year since 2010, between 3 and 7 projects were funded up to \$5,000 annually for capacity-building activities and up to \$10,000 annually for pilot research activities. Additionally, during the COVID-19 pandemic, a collaboration between the UCI ICTS and the local Healthcare Agency provided up to \$20,000 to research partnership teams to study impact and interventions related to the pandemic, where 10 CCRI awards were given out. Evaluations of these research teams was completed at the end of the project, and at years 2 and 3 after the project ended. Analysis of the projects and partnerships aim to reveal the impact of these projects. **RESULTS/ANTICIPATED RESULTS:** In 2023, we compiled all evaluation data collected from 2010 – 2023 from the CCRI partnership grants, including traditional metrics of

publications, subsequent grant applications submitted & awarded, presentations given, and return on investment for ICTS granted funds. Less traditional metrics include number of students trained, new tools or databases created, knowledge disseminated, and advances in clinical care. Since 2020, Translational Science Benefit Model metrics have been collected on community, policy, economic, and clinical domains. Since 2015, data on each CCRI partnership has been collected at the start and end of each project, with questions about attributes of each partner, trust, community engagement principles, and anticipated/actual impact of each project. **DISCUSSION/SIGNIFICANCE:** Organizing outcomes from the data collected will provide deep understanding of important components, functioning, and types and reach of partnered health research. This understanding will inform future action of the CCRI program in terms of what can be accomplished with a given amount of funding, and the constitution of successful partnerships.

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### **Couples' Daily Health in Breast Cancer Survivorship: Dyadic Associations in Psychological, Physical, and Relational Health**

Rosie Shrout<sup>1</sup>, Elliot Friedman<sup>1</sup>, Kathy Miller<sup>2</sup> and James Tisdale<sup>1</sup>  
<sup>1</sup>Purdue University and <sup>2</sup>Indiana University School of Medicine and Comprehensive Cancer Center

**OBJECTIVES/GOALS:** Breast cancer survivors who experience psychological and physical symptoms after treatment ends have an increased risk for comorbid disease development, reduced quality of life, and premature mortality. However, survivors in satisfying marriages report lower stress and better health than those in dissatisfying marriages. **METHODS/STUDY POPULATION:** Research is needed to identify how survivors' marriages provide these health benefits across the cancer continuum. Including both survivors and their partners' perspectives can identify key pathways connecting relationships to better health. This study examined survivors' and their partners' psychological, physical, and relational health. Breast cancer survivors (stage 0-III) and their partners (n=34 individuals, 17 couples) completed a baseline online survey followed by a 7-day diary study with three ecological momentary assessments across the day. Questionnaires assessed their cancer-related communication, relationship distress, and psychological and physical symptoms. **RESULTS/ANTICIPATED RESULTS:** Survivors reported poorer sleep quality and greater fatigue than their partners. Survivors also reported disclosing more thoughts, feelings, and information about cancer compared to their partners. For both survivors and partners, feeling more satisfied with each other's cancer-related discussions and reporting lower relational distress correlated with fewer physical symptoms, sleep problems, fatigue, and psychological distress. **DISCUSSION/SIGNIFICANCE:** For both survivors and their partners, feeling more satisfied with how often they talked about survivorship and the cancer experience was associated with better psychological and physical health. This research demonstrates the health benefits and importance of open communication for both survivors and their partners across the cancer continuum.

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### **Drawing on Arts-Based Methodologies to Elicit Transgender and Gender Diverse (TGD) Children's Experiences in Health Care**

Eline Lenne

Oregon Health & Science University

**OBJECTIVES/GOALS:** Understand how prepubescent TGD children experience pediatric care with a dual purpose of informing clinical practice and presenting alternative methods for research with children. Centering their perspectives is critical to improving care for this age group, ultimately improving TGD health. **METHODS/STUDY POPULATION:** A participatory arts-based study involving drawing, photo elicitation, and narrative interviews with prepubescent TGD children (n=15) in the Pacific Northwest. Participants will make photos and draw a picture of their most recent pediatric visit. Participants guide the analysis and interpretation of their artwork, informing subsequent interviews. Interviews are coded and interpreted using inductive thematic analysis at the semantic level, and verified by participants and near-peer community partners. The combination of multiple data sources that represent both stimuli and verifiers of perceptions provide methodological triangulation. **RESULTS/ANTICIPATED RESULTS:** Early pilot data with community partners suggest that TGD children do not feel sufficiently supported in pediatric settings, which impacts their sense of safety and agency in the clinical context. Findings will inform changes to clinical practice to improve gender affirmation for prepubescent children, positively impact child-caregiver relationships, and ultimately improve health care and wellbeing for TGD people. Observations related to the implementation of novel methodologies will inform future research practices intended to include younger children as active agents in the knowledge production process. **DISCUSSION/SIGNIFICANCE:** There are missed opportunities to positively impact children's health and caregiver-child relationships when gender affirming care is overlooked in the pediatric context. This study provides first-hand multi-media perspectives to inform improvements in prepubescent gender affirming pediatric care.

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### **Virtual community and partner-engaged panels - We can do them, but should we?**

Lesli Skolarus, Tamara Sutton, Darius Tandon and Josefina Serrato  
 Northwestern University

**OBJECTIVES/GOALS:** We describe the transition of ShAred Resource Panels (ShARPs) within the Center for Community Health (CCH) at Northwestern University's Clinical and Translational Sciences (NUCATS) Institute to virtual sessions and explore ongoing practices. **METHODS/STUDY POPULATION:** Restrictions placed during the COVID-19 pandemic led to changes in community-engaged health equity research, such as the transition of community and partner-engaged panels from in-person to virtual. ShARPs have occurred since December 2015. The model includes research team members, community members, community