

group's history was a visit from the Program Officer for the UF Clinical and Translational Science Institute in February 2020. Since that time, multiple collaborations have resulted in grants submitted, such as P30 center grants and an innovative R61/R33, as well as numerous publications. **DISCUSSION/SIGNIFICANCE:** A complex public health emergency like the opioid epidemic requires creativity and collaboration, from laboratory science to interventions in the community, putting it squarely within the sights of translational research. SARB2C will soon enter its fifth year of linking researchers and training the next generation of scientists.

553

### Creating an In-Person Workshop Series Addressing Core Team Science Principles for Early Career Investigators

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**OBJECTIVES/GOALS:** A barrier to the proliferation of team science is that academicians are often trained in disciplinary silos where "independent" research contributions are lauded. To tackle some of the most pressing scientific challenges, dismantling silos and increasing team science training efforts that focus on early career investigators is a must. **METHODS/STUDY POPULATION:** A team science training workshop for early career investigators from varied disciplinary backgrounds was informed by a 20-item needs assessment that addressed essential team science competencies and was completed by early career investigators participating in federally funded professional development programs on our campus. During the workshop, the benefits of cross-disciplinary teaming was discussed. Strategies including team formation, team effectiveness and/or dysfunction, diagnosing team strengths and weaknesses, and teaming in community settings were discussed. Instructional methods included short presentations, video clips, case studies, group discussions, pair and share activities, and panel discussions with expert role models encouraged active learning. **RESULTS/ANTICIPATED RESULTS:** The impact and value of the workshop series to participant's professional development and knowledge of team science concepts will be evaluated before and after the workshop. Multiple Likert-scale items focused on team science competencies (e.g., confidence in your ability to carry out responsibilities specific to your role on a team, recognize when the team is not functioning well; engage team science practices in on-going research), and open-ended questions (e.g., importance of engaging community partners in academic research teams, vision of what factors contribute to an effective team science collaboration) will be completed by program participants before and after completing the workshop. **DISCUSSION/SIGNIFICANCE:** Effective collaboration among scientists with expertise in different disciplines is needed to address and solve complex scientific problems. We believe our interactive approach to team competency training sessions would work in a variety of settings and improve team skills.

### Design Lab Methodology Supports Innovation in Clinical Trials

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**OBJECTIVES/GOALS:** Since 2017, we have used the Design Lab methodology to support investigators taking innovative approaches to clinical effectiveness trial design. To date we have held 12 Design Labs and this year we are creating a handbook that will support dissemination of this approach across the Clinical and Translational Science Award consortium. **METHODS/STUDY POPULATION:** The Clinical Trial Design Lab brings together a multi-stakeholder group to consider innovative and impactful clinical trial designs. An investigative team is selected from a competitive pool of applicants, after which expert-led consultations support the investigator team to think about evidence generation in the context of the full treatment development pathway. Teams map the stakeholders at each step of this pathway (e.g. clinicians, patients, researchers, funders, industry experts, policy experts, regulatory experts, payers) and consider innovative design solutions. These consultations prepare investigators for an event that involves all stakeholders in a structured and facilitated discussion about trial designs that generate the best evidence and increase potential for health impact. **RESULTS/ANTICIPATED RESULTS:** The result of our work will be a set of Design Lab principles, a handbook with templates that support stakeholder mapping and structured discussions, and educational resources to accompany the handbook. The work is supported by a literature review that characterizes the multi-component processes included in the Design Lab, situates them within the larger context of team science interventions, and lays groundwork for the development of process metrics and impact evaluation criteria to assess the Design Lab method. In this poster presentation, we will share our multi-component broadly engaged team science approach, provide a brief outline of the principles and educational resources, and include an early version of the evaluation criteria. **DISCUSSION/SIGNIFICANCE:** Broadly engaged team science supports innovative thinking about study design and is especially important in the development of clinical trials. We have grown the Design Lab program of work over the past seven years and are now able to characterize our team science methodology and support others to use this approach to innovate for health impact.

556

### Maternal Opioid Use Leads to Aberrant Maternal and Fetal Immunity

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**OBJECTIVES/GOALS:** Maternal opioid use disorder (OUD) is linked to poor fetal outcomes. While it has been established that