

both securing seed funding and external support. **DISCUSSION/SIGNIFICANCE:** This study identifies features associated with eventual research program success and can be used to support accountability and impact efforts at an institutional level. Research institutes strive to ensure equal access to these opportunities and train applicants to produce improved project proposals. Results from this study inform these efforts.

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### **Clinical and Translational Researchers from Underrepresented Groups Identify the Barriers they Experience**

Judy A. Kimberly<sup>1</sup>, Stephen Kogut<sup>2</sup>, John F. Stevenson<sup>2</sup>, Anthony R. Hayward<sup>1</sup> and Meghan E. Tenca<sup>3</sup>

<sup>1</sup>Brown University; <sup>2</sup>University of Rhode Island and <sup>3</sup>Advance RI-CTR

**OBJECTIVES/GOALS:** Using the NIH's expanded definition of underrepresented populations in the biomedical, clinical, behavioral and social science research enterprise, we examined the impediments for conducting translational research experienced by those from underrepresented groups. [[https://acts.slayte.com/calls/detail/740a13de-316c-11ee-90f4-0e0ce905385c/draft/389221c1-434e-11ee-90f4-0e0ce905385c#\\_ftn1](https://acts.slayte.com/calls/detail/740a13de-316c-11ee-90f4-0e0ce905385c/draft/389221c1-434e-11ee-90f4-0e0ce905385c#_ftn1)] #\_ftn1 **METHODS/STUDY POPULATION:** One hundred and ninety-nine people completed a survey distributed to 750 persons who had interacted with our Center's service cores as users, awardees, mentors, committee members, seminar attendees, and/or participated Center sponsored programming (response rate = 26.5%). The survey addressed barriers to conducting clinical and translational research at the respondent's institution, awareness of and interest in using specific Advance RI-CTR services, and satisfaction with their institution's efforts to support clinical and translational research. **RESULTS/ANTICIPATED RESULTS:** Women reported access to collaboration across institutions as a barrier to clinical and translational research that existed to a great extent (28%) significantly more than men (10%). More than half (53%) of the other underrepresented researchers surveyed identified insufficient grant administration support as a barrier that occurs to a great extent, compared with 35% of researchers who were not from an underrepresented group. Other barriers reported more frequently among underrepresented researchers included lack of pilot project funding, inadequate space for conducting research, lower access to collaborators across institutions, and difficulty obtaining advice on regulatory issues and commercial development. **DISCUSSION/SIGNIFICANCE:** Efforts to address the barriers identified by underrepresented groups will include, but not be limited to, improving collaborations across institutions, support for grant administration, and a discussion of plans for the Center to augment and advocate at the partner institutions on behalf of these underrepresented individuals.

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### **Building an evaluation platform to capture the impact of Frontiers CTSI activities**

Maggie Padek Kalman, Shellie Ellis, Mary Penne Mays, Sam Pepper and Dinesh Pal Mudarathakam

University of Kansas Medical Center

**OBJECTIVES/GOALS:** In 2021, Frontiers CTSI revamped its evaluation infrastructure to be comprehensive, efficient, and transparent in demonstrating outputs and outcomes. We sought to build a

platform to standardize measures across program areas, integrate continuous improvement processes into operations, and reduce the data entry burden for investigators. **METHODS/STUDY POPULATION:** To identify useful metrics, we facilitated each Core's creation of a logic model, in which they identified all planned activities, expected outputs, and anticipated outcomes for the 5-year cycle and beyond. We identified appropriate metrics based on the logic models and aligned metrics across programs against extant administrative data. We then built a data collection and evaluation platform within REDCap to capture user requests, staff completion of requests, and, ultimately, request outcomes. We built a similar system to track events, attendance, and outcomes. Aligning with other hubs, we also transitioned to a membership model. Membership serves as the backbone of the evaluation platform and allows us to tailor communication, capture demographic information, and reduce the data entry burden for members. **RESULTS/ANTICIPATED RESULTS:** The Frontiers Evaluation Platform consists of 9 redcap projects with distinct functions and uses throughout the Institute. Point-of-service collection forms include the Consultation Request Event Tracking, Annual Forms include a Study Outcome, Impact, and Member Assessment Survey. Set timepoint collections include K & T application, Mock Study Section, and Pilot grant application submission, review, and outcomes. Flight Tracker is used to collect scientific outcomes and integrated with the platform. Using SQL, the membership module has been integrated into all forms to check and collect membership before service access and provide relevant member data to navigators. All relevant data is then synched into a dashboard for program leadership and management to track outputs and outcomes in real-time. **DISCUSSION/SIGNIFICANCE:** Since the launch of the evaluation platform in Fall 2022, Frontiers has increased its workflow efficiency and streamlined continuous improvement communication. The platform can serve as a template for other hubs to build efficient processes to create comprehensive and transparent evaluation plans.

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### **Mapping Translational Research Collaborations: Insights from an IDeA Clinical and Translational Research Center**

Carlamarie NoboaU, Mariela Lugo Picó<sup>1</sup>, Luisa Morales<sup>2</sup> and Vicmag Cabrera<sup>3</sup>

<sup>1</sup>UPR-Medical Sciences Campus; <sup>2</sup>Ponce Health Science University and <sup>3</sup>Universidad Central del Caribe

**OBJECTIVES/GOALS:** Policy makers are interested in understanding scientific collaborations that translate knowledge into population health. The objective of this study is to compare the translational research collaboration of the Hispanic Alliance of Clinical and Translational Research in 2020 and 2023 by using Social Network Analysis (SNA). **METHODS/STUDY POPULATION:** We conducted a systematic document review of all the Hispanic Alliance Calls for Pilot Projects from 2020 to 2023 including key attributes of the investigators and collaborators such as academic institution, highest degree, and collaborator type. Scientific collaboration was defined as two or more researchers working together in grant proposal for a pilot project application. Study data was recorded and tracked using an Excel spreadsheet. R Statistical software was used to analyze and map the networks resulting from collaboration interactions comparing the 2020 Call and 2023 Call. Network statistics were performed including nodes, isolates, edges, components, density, diameter, average degree, and the size of the main component.

**RESULTS/ANTICIPATED RESULTS:** A total of 134 investigators comprised the overall network. The network are predominantly clinician (49.3%) and basic researchers (25.4%). Preliminary results shows that diversity of disciplines and affiliations in the collaborative relationships increased across time. Findings demonstrated that the number of nodes/actors increased from 16 to 65 comparing 2020 to 2023 and the edges/relationships from 12 to 53. The number of translational research cluster increased from 4 to 13 comparing 2020 to 2023. More extensive collaborative cluster occurred across time with over 15 researchers collaborating. A mentor was the key player connecting these research clusters. **DISCUSSION/SIGNIFICANCE:** This study provides critical data to mapping the IDEa CTR translational research collaboration patterns. Research collaboration increased across time. This innovative approach serves to foster data-driven decision-making to enhance collaboration, diversity, and program outcomes. It offers valuable insights for policy and practice.

## 182 Secondary Use of Electronic Health Record (EHR) Data and Implications for Evaluation

Michelle Yee

NYU Langone Health

**OBJECTIVES/GOALS:** An academic medical library evaluated an EHR data abstraction service by assessing uptake and publication metrics, including use by department, purpose of data abstraction requests and publication counts. **METHODS/STUDY POPULATION:** The evaluation included 167 requests for EHR data processed by the institution's clinical research data management unit (CRDMU) and recorded in an intake form hosted on REDCap. These requests originated from various departments. The intake forms collected investigator and study information, as well as request completion dates. Information in the intake forms were matched with publications and meeting abstracts that were indexed in a database of faculty publications. Investigators who submitted EHR data requests that could not be readily matched to publications were contacted to verify the status of their studies and any associated publications. **RESULTS/ANTICIPATED RESULTS:** The evaluation included 167 data requests submitted to the CRDMU between 2016 and 2018. These requests were categorized into the following use cases: retrospective studies (n=93); patient recruitment (n=50); and 'other' (i.e., education, training, or process improvement; feasibility assessments; machine learning (n=14)). By the end of the evaluation period, an average of four years after the data requests were submitted to the CRDMU, 60 of all 167 EHR datasets (35.9%) led to publications as articles or meeting abstracts. 64.5% of the EHR datasets requested for retrospective studies, 56% of the datasets requested for recruitment, and 79.1% of datasets requested for other uses did not lead to publications. **DISCUSSION/SIGNIFICANCE:** These findings offer evidence that bibliometrics alone provide limited insight into the value of services and data utilized for secondary research. Data ecosystem stakeholders are encouraged to consider—and develop—scalable, reproducible, and more holistic assessments of the impact of their services.

## 183 Translational Health Informatics Support Service Practices, Challenges, and Facilitators

Boris Volkov<sup>1,2,3</sup>, Chris Pulley<sup>1</sup>, Gretchen Sieger<sup>2</sup> and Steve Johnson<sup>2</sup>

<sup>1</sup>University of Minnesota Clinical and Translational Science Institute; <sup>2</sup>University of Minnesota Institute for Health Informatics and <sup>3</sup>University of Minnesota Division of Epidemiology and Community Health

**OBJECTIVES/GOALS:** **METHODS/STUDY POPULATION:** Utilized novel TS evaluation methods and tools: - Translational Science Case Study protocol adapted to examine translational support service practices, barriers and facilitators influencing translational movement. - Translational Science Benefits Model (TSBM) Checklist elements for translational/research impact analysis. Triangulated diverse data sources: - Primary data: semi-structured interviews with translational service stakeholders. - Secondary data: service's applications, reports, and publications; public stories/news related to their research support; scientific publications; organizational/policy documents; and interviews with research stakeholders featured in published sources. **RESULTS/ANTICIPATED RESULTS:** Translational challenges include: complexity and constant change of health data; lack of data/informatics literacy amongst researchers; limited appreciation and funding for research data services; silos of functionality and data related to biomedical informatics. Translational facilitators are: the UMN CTSA support; available infrastructure and knowledge base; researchers as the best promoters for services; multidisciplinary collaborations with research/community/healthcare teams; best practice approaches; and learning by doing. The translational/research support service contributes to community and public health, clinical/medical benefits, data literacy, catalyzing data-rich research, and health equity. **DISCUSSION/SIGNIFICANCE:** The evaluation case study provides evidence and lessons learned related to translational benefits, challenges, and facilitators of a successful translational research support service integrating best informatics practices in clinical research and contributing to health equity improvement.

## 185 A Clinical and Translational Science manuscript writing support program for research staff

Elias Samuels, Carol Scott, Misty Gravelin and Ellen Champagne  
Michigan Institute for Clinical & Health Research

**OBJECTIVES/GOALS:** The objective of this initiative was to promote MICHR staff's production of Clinical and Translational Science publications. MICHR leadership approved this initiative, including an evaluation plan with measurable outcomes goals, and contracted with an experienced scientific writing coach with over 20 years of experience working with CTSA's. **METHODS/STUDY POPULATION:** A sequential mixed methods program evaluation designs was used. Pre- and post-surveys were used to measure participating staff's gain in skill, understanding & satisfaction. An interview with the instructor was then conducted to characterize staff performance, and identify possible areas of programmatic