that student a lower percentage of the total work. DISCUSSION/
within team variations, where one student may report a higher pro-
closely to individual quantitative reports. The data also revealed
performed by their teammates. Reflective writing mapped more
paring the group document to the individual perceptions of work
students, there was a discordance of workload distribution when com-
dynamics and teamwork. We retrospectively performed a mixed-
Evaluating Student Team Dynamics
Celia Chao1, Emma Tumilty2, Celia Chao1, Judith Aronson1,
Jonathan D. Hommel2, and Mark R. Hellmich4
1University of Texas Medical Branch

OBJECTIVES/GOALS: We aimed to explore the students’ assessment
ments of workload distribution by comparing personal reflective
aries and team documents defining division of labor in a
team science setting. METHODS/STUDY POPULATION: The
Improfessional Research Design course models the team science
experience by bringing together MD and PhD students to write a
research grant. Four teams of 13 students were tasked with both indi-
and team-based assignments: 1) Each week, each student
reported their perception of their own and their team members’
effort over the week (totaling 100%). 2) Iterative work contracts
for each team were submitted at four time-points; assigned work
forward project completion totalled 100%. 3) Lastly, each student sub-
mitted a short commentary reflecting on the prior week’s team
dynamics and teamwork. We retrospectively performed a mixed-
methods analysis of the workload data. RESULTS/ANTICIPATED
RESULTS: Group-reporting in the team contracts remained static
throughout the course, often stating equal distribution of workload,
whereas individual reporting was more dynamic. Of 13 students, 8
rated more than 50% of the weeks as balanced. Among some stu-
dents, there was a discordance of workload distribution when com-
paring the group document to the individual perceptions of work
performed by their teammates. Reflective writing mapped more
closely to individual quantitative reports. The data also revealed
within team variations, where one student may report a higher pro-
portion of their contributions, while the rest of the team attributed
that student a lower percentage of the total work. DISCUSSION/
SIGNIFICANCE OF IMPACT: An important aspect of team
function is workload distribution. Group-based workload discus-
sions may be a useful framework, but does not provide insight into
team dynamics, whereas individually reported workload distribu-
tions and short reflections seem to more accurately inform us on
team function.

Evaluating the Emerging Investigators Website as an
Educational Resource for Early Career Researchers
Layla Fattah1, Inga Peter, PhD1, Jenny Lin1, and Janice Lynn
Gabrilove, MD, FACP2
1Mount Sinai School of Medicine

OBJECTIVES/GOALS: The aim of this project is to assess the usability
and acceptance of a web-based educational resource for early career
researchers. The Emerging Investigators website is designed to bring
together resources, provide educational support and foster a commu-
nity of early career researchers throughout the Mount Sinai Health
System (MSHS). Locally designed and built, this web-based platform
is developed using the principles of Community of Inquiry (COI),
which considers how the design of online learning environments might
best create and sustain a sense of community among learners.
Developing a resource that meets the needs of this cohort of researchers
requires an iterative implementation strategy guided by user feedback.
A formal website roll-out strategy and accompanied evaluation aims to
determine the design, navigability, content, relevance and educational
value of this online resource from a user perspective. METHODS/
STUDY POPULATION: In order to ensure this resource effectively
meets the needs of this cohort of researchers, a mixed process of evalu-
ation and design was utilized. An initial phase 1 survey was conducted
with TL1 and KL2 scholars. Surveys consisted of standardized ques-
tions with answers arranged as Likert-type scales and additional written
responses to collect valuable qualitative data. A convenience sample of
early career researchers at Mount Sinai were contacted for initial survey
participation (N = 10). A total of 3 junior faculty KL2 scholars, 3 TL1
post-doc and 4 TL1 pre-doc scholars responded to the survey.
Participants were initially asked to comment on design, functionality
and usefulness of content on a Likert scale with qualitative comments
support the given scores. They were subsequently asked to consider
what key topics or resources were missing from the website. Based on
the initial survey, changes were made to the format and content of the
Emerging Investigators website to improve content relevance and
usability. For phase 2, an evaluation rubric was developed to assess
design, navigability, content, relevance, along with three key COI cri-
teria to determine the educational value of this online resource.
The rubric will be utilized to collect feedback in the wider phase 2 roll
out of the website. RESULTS/ANTICIPATED RESULTS: The first
phase of survey feedback shaped overall design of the resource. The sec-
ond phase will comprehensively evaluate the value of the website in the
context of teaching and learning for emerging investigators. Ten sur-
veys were captured in the first phase. Data collection is ongoing for
the second phase. Phase 1 feedback was primarily qualitative, and valu-
able in informing overall design choices and content. Overall the
website was well received, with participants commenting on the value
of the resource in terms of content and educational value. Participants
particularly appreciated the regularly updated calendar function and
the links provided to a wide range of resources. Functionality issues,
such as broken links, were reported by participants and repaired for
phase 2. Further topics of content were identified, and additional links
and multimedia resources were added to address this feedback. The sec-
ond phase evaluation is ongoing with data collection being conducted
via an evaluation rubric. DISCUSSION/SIGNIFICANCE OF IMPACT: The Emerging Investigators website, developed using the principles of COI provides key learning, reading and resources for early career investigators in a format that is well received by a sample group of early career researchers at Mount Sinai. The website has aimed to address the reported need for communication, collaboration and social interaction with peers and other researchers across the MSHS through the addition of further web-based resources such as a LinkedIn page, a blog to feature research and provide a sounding board for research efforts, and a calendar of events targeted specifically at early career researchers. These were highlighted as areas of particular value by the participants. We anticipate the results of phase 2 rubric-based evaluations will provide actionable data that will lead to further refinement of the website, an optimized interface, and improved usability.

4015
Evaluation of the Impact of a Clinical and Translational Science Predoctoral Program on Post-Graduate Outcomes
Alexandra Joelle Greenberg-Worisek, PhD, MPH1; Katherine Cornelius, Mayo Clinic1; Becca Gas1; Carmen Silvano1; Karen Marie Weavers, Asst. Professor of Medical Education1; Lewis R Roberts1; Stephen C Ekker, PhD4; Felicity Enders, PhD, MPH1; and Anthony Windebank, MD1
1Mayo Clinic

OBJECTIVES/GOALS: The Mayo Clinic Clinical and Translational Science (CTS) Predoctoral program aims to develop independent researchers capable of leading multi-disciplinary teams to accelerate the translation of discovery to application. Here, we detail the outcomes of our graduates over the past ten years (2010-2019). METHODS/STUDY POPULATION: A survey was fielded with all CTS graduates whose degrees were conferred since the program’s inception to 2019. Items addressed their current position, whether they were still involved in research, what type of research they were involved in, and whether they stayed involved with education. They also submitted a recent CV, from which data were collected about publications and grants. A subset were then contacted for a semi-structured interview. Items included questions addressing motivation for pursuing a PhD in CTS, whether the program prepared them for their current work, gaps they felt they had in training, and whether they felt they were making a difference in the lives of patients. RESULTS/ANTICIPATED RESULTS: Of the 41 alumni, 34 responded (83% response rate). Of these, 19 (56%) are at Mayo Clinic, 9 (26%) work for other academic institutions, and 6 (21%) do not work for an academic institution. Most have remained in research (33/34, 97%). The majority (22/33, 67%) are involved in clinical research, 30% (10/33) in basic science, and 24% (8/33) in healthcare delivery research. Most (23/34, 68%) are engaged in educational activities. When asked about changes they have led, 67% (18/27) led quality improvement projects and 44% (12/27) designed a new research method. Several hold leadership positions either in their organization (12/16, 75%) or in a professional organization (10/16, 63%). DISCUSSION/SIGNIFICANCE OF IMPACT: The CTS Predoctoral program successfully prepares scholars for careers involving clinical and translational research; furthermore, alumni remain in research-oriented careers after graduation. We will continue to gather longitudinal data alumni move forward in their careers.

4350
From Translational to Transformational: Establishing CLIC’s Vision for a Research Education and Training Community
Alfred Vitale1, Russell Lackey1, Melissa Trayhan2, and Robert White2
1University of Rochester Medical Center; 2Center for Leading Innovation and Collaboration (CLIC)

OBJECTIVES/GOALS: The new CLIC Education & Career Development Gateway aims to be a translational science workforce ecosystem for CTSAs to share learning and training resources and career opportunities. The Gateway also provides individualized assistance to identify and implement TS learning and training resources. METHODS/STUDY POPULATION: The CLIC Education & Career Development Gateway, located on the CLIC website, is an entry way to: 1) the Education Clearinghouse, a platform where CTS Program hubs can find and share educational resources individually or as part of resource kits; 2) the Opportunities Board, which includes jobs and mini-sabbaticals from CTS Program hubs; and 3) the Education & Training Navigator, a personalized approach to education and training requests. These approaches help empower and support a cooperative learning and training community that is inclusive and collaborative, facilitating and amplifying opportunities for the sharing of educational resources throughout the translational science workforce. RESULTS/ANTICIPATED RESULTS: Through a person-centered, direct engagement approach, the anticipated outcomes of these efforts are to promote increased collaboration across CTS Program Hubs and partners, and the amplification of accessible, relevant existing resources. Another anticipated outcome is increased production of educational materials through the reduction of work duplication and identification of gaps in education and training resources. The Gateway also provides an opportunity to communicate the work and efforts that consortium-level special groups (working groups, special interest groups, etc.) produce. Ongoing evaluations and suggestions will help determine future improvements and functionalities. DISCUSSION/SIGNIFICANCE OF IMPACT: CLIC’s education and training ecosystem promotes education as a community space to facilitate opportunities for collaboration and partnerships, amplifying visibility of the work created by members of the CTSA community, and encouraging a transformative career trajectory for trainees and scholars.

4143
HiREC Endowment: Building Models in Research Capacity for Infrastructure Sustainability and Productivity
Lourdes E. Soto de Laurido1; Walter R. Frontera1; and Araceli Huertas1
1University of Puerto Rico, Medical Sciences Campus

OBJECTIVES/GOALS: Improve infrastructure, resources, partnerships, and metrics to enhance the research environment for Hispanic researchers as a Minority Serving Institution. To support the research infrastructure in our Campus to encourage a research culture of sustainability and productivity. METHODS/STUDY POPULATION: Development of four research capacity-building models to enhance the pathway of junior researchers as independent researchers.1. MSc Phase I-Scholar Award 2 years in a Post Doctoral Master in CTR; 2. Advanced CTR Award 1 year to support research