

Research Center for
Transforming Health

20 ANNUAL 20 REPORT





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"A YEAR LIKE
NO OTHER



This was undoubtedly a 'year like no other' for the Research Center for Transforming Health (RCTH). The year began with a transition of leadership: the departure of Dr. Christine Turley and my appointment as Director. Soon after, the onset of the Covid-19 pandemic dramatically shifted our daily operations. Pivoting to an all-virtual office presented challenges but the RCTH team persevered.

Not only did we continue our previous work, but we were able to expand in several ways. With academic conferences cancelled, the team learned how to create and host virtual poster sessions, allowing SOAR students and other School of Medicine (SOM) researchers the opportunity to present their research. To meet the needs of SOM faculty, our team

created a virtual Peer Grant Review Program, allowing them to submit grant proposal drafts online to receive crucial feedback from experienced researchers.

The RCTH was also able to enhance its work with our external partners. A formal partnership was established between the SOM and the Columbia VA to assist VA investigator in their research efforts. This collaboration will not only help Columbia VA research grow but also provide shared opportunities between our institutions. In addition, the Transformative Research Seed Grant initiative was launched to invigorate collaborative research partnerships between UofSC and Prisma Health.

This annual report not only highlights the RCTH's accomplishments for 2020, but also demonstrates the resiliency of the RCTH team, and the School of Medicine at large, to adapt in this 'year like no other'. I could not be prouder of how our team worked together, learned new skills, and found new ways to do this work to further the research mission of the School of Medicine.

Kevin J. Bennett
Director

SINCE 2017, THE CENTER HAS

WORKED WITH
30+
INVESTIGATORS



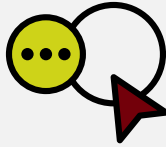
COMPLETED 50
GRANT
SUBMISSIONS



CONDUCTED 20+
PROJECT
CONSULTATIONS



FACILITATED OVER
8 MILLION IN GRANT
DOLLARS



OVER 50%
SUBMITTED GRANTS
AWARDED

Wayne Carver, PhD

Department Chair and Professor
Department of Cell Biology and Anatomy



"Since working with the Research Center for Transforming Health, my department has experienced a 10-15% overall increase in grant submissions. Their assistance save our faculty significant time and energy in preparation of proposals, which allows them to focus primarily on development of the research aspect of the proposals."

CONTINUING SUPPORT

Despite the challenges of 2020 and adapting to the 'new normal', the RCTH has remained focused on our mission in supporting investigators to make research possible. By utilizing virtual tools, the RCTH staff was able to remain fully operationally.

Our remote work capabilities have expanded the way we offer support, such as meeting availability outside normal business hours. In addition, adaptations needed for RCTH programs have also led to new RCTH services, such as the Virtual Poster Platform.

Check out our updated website!



sc.edu/medicine/rcth



IDENTIFYING
FUNDING
OPPORTUNITIES



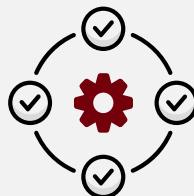
STUDY DESIGN



GRANT
SUBMISSION



BUDGET
DEVELOPMENT



BIostatISTICS AND
DATA ANALYTICS
CONSULTATIONS

GRANT PEER REVIEW

New to 2020, was the introduction of the RCTH Peer Grant Review Program. This program provides the opportunity for UofSC School of Medicine faculty/faculty affiliates and Columbia VA investigators to have their grant proposal materials peer reviewed prior to submission. This valuable resource for investigators allows them to obtain useful pre-submission feedback of their

proposals by experienced researchers. Investigators are asked to submit at a minimum their research plan/strategy for review and are welcome to submit additional grant sections for enhanced feedback of the overall proposal. Grant proposal review requests can be made by completing the online form located on the RCTH Grant Peer Review webpage.

CREATING NEW OPPORTUNITIES

Virtual Poster Session platform

The COVID-19 epidemic caused the cancellation of many academic conferences, including Discover USC. This left many students and faculty without a venue to present their research.

To bridge this gap, the RCTH created a virtual poster session platform that allowed students to gain presenting experience and disseminate their research, all from the comfort of home! This platform was used to showcase

the work of the SOAR 2019 cohort as well as the research of medical students at the School of Medicine and the UofSC Quality Improvement Education and Systems Training program.

Additionally, our platform was leveraged by the American Academy of Family Physicians for their annual Global Health Summit which was held virtually this year.

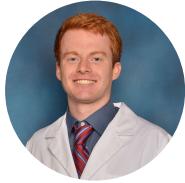
4 Virtual Poster Sessions

48+ UofSC SOM Student posters

900+ Unique visitors across the sites

SOAR

2020 COHORT



RESEARCH FROM HOME

The SOAR 2020 cohort was announced days prior to the school-wide "Stay-Home" order. Every week brought more cancellations and uncertainty about the possibility of conducting research, especially in clinical settings.

In most cases, students would be unable to travel or go in to a lab. How can you conduct research from home? Thanks in large part to the flexibility and tenacity of all those involved in the program,

every SOAR 2020 student was able to get hands-on research experience this summer.

The RCTH team worked with every student and mentor to ensure that if originally planned project were unfeasible under current conditions, that an alternative research project was identified and ready. In addition, our summer research seminar was also held virtually to allow students to remain socially distant.

57 Students applied

25 Matches awarded

22 SOAR students earned certificates in Advanced Training in Translational Research

SOAR 2020

SOAR students that plan to pursue a research career **72%**



SOAR students satisfied with their program experience **100%**



EMERGING PHYSICIAN SCIENTIST PROGRAM

The Emerging Physician Scientist program (EPS) is a 15-month faculty fellowship for early career or transitioning physician scientists to gain the experience and mentorship needed for successful extramural grant funding. The EPS program looked a little different this year, however the RCTH was able to welcome four

EPS Scholars to the program:

- Christopher Goodman, MD, Department of Internal Medicine
- Lisa Knight, MD, Department of Pediatrics
- Samantha Cox, DO, Department of Surgery, Division of Vascular Surgery
- Tyler Gonzalez, MD, Department of Orthopedics

Kristl Tomlin, MD

Clinical Assistant Professor
Department of Obstetrics and
Gynecology; and Pediatrics
2019-2020 Emerging Physician
Scientist Faculty Fellow



"Participating in the EPS program has been one of the most valuable experiences of my academic career so far. It gave me the confidence to expand my research to a larger scale and tackle bigger projects because I knew I had not just funding, but a valuable support structure behind me. The EPS staff were exceptional at helping me with drafting writing, helping with ideas, introducing me to collaborators, and even helping me develop coding and questionnaires. Research for a new clinician can be daunting and this experience gave me the confidence to tackle the applications, paperwork, highs and lows of a bigger research project. It was an invaluable experience for which I am extremely grateful."

INDEPENDENT STUDENT PROJECTS

The COVID-19 pandemic upended everyone's summer research plans. While the SOAR program was able to proceed in a safe, socially distant format, many other programs were cancelled, leaving those students to seek other opportunities. The RCTH was able to support the medical students who chose to take on independent research projects. Our team helped them navigate the regulatory landscape and connected them with faculty mentors that would guide their experience.

PEER

COORDINATORS FORUM

The newly named Peer Exchange and Education for Research (PEER) Coordinators meeting is a forum hosted by the RCTH where research coordinators come together to discuss topics of interest and create a community of learning. At each quarterly meeting, research coordinators share tips and best practice, discuss important topics, and get the chance to network with their peers. This year's topics included: accessing Prisma Health data for research and research patient tracking.

In response to COVID-19, the PEER Coordinators meeting is being offered both in person and virtually! This has allowed us to grow the program beyond the midlands. We now bring together coordinators from the UofSC School of Medicine, Prisma Health Upstate, Prisma Health Midlands, and the Columbia VA Healthcare System.



ROADMAP *to a Successful* GRANT SUBMISSION



CONTACT THE RCTH

Our team can help you at every stage of the grant development and submission process

1



2

STRATEGIC GRANT PLANNING

- Research opportunities
- Identify collaborators
- Create RFA specific submission checklist
- Establish a detailed timeline
- Plan and develop your budget

PROPOSAL DEVELOPMENT

- Solicit and track supplemental documentation
- Provide constructive critique of proposal
- Evaluate specific aims
- Assist with technical document drafting

3



4

SUBMITTING SUPPORT

- Upload submission documents to required system
- Assist with internal routing requirements
- Assist with "Just-in-Time" requests



"THEY PROVIDE
STRONG SUPPORT ON
ALL MY GRANTS"



CUTTING THROUGH THE RESEARCH RED-TAPE

The Research Center for Transforming Health works with investigators on every segment of the Translational Research Spectrum. **Dr. Tan is an Associate Professor in the Department of Cell Biology and Anatomy at the UofSC School of Medicine** and uses molecular research to answer important clinical questions regarding congenital vascular malformations. In addition, the rise of the pandemic of COVID-19 has shifted his research focus to assess the molecular determinants for SARS-CoV-2 entry of host cells. Ultimately, he is trying to determine why obese patients have increased susceptibility to COVID-19 infection and development of severe symptoms. "The COVID-19 outbreak is a significant threat to the U.S. population and global health. There is an urgent need to

understand the disease mechanism and develop effective counter viral measurements."

"The RCTH has been helping me since I arrived at USC in 2018," says Dr. Tan, a frequent patron of the research support provided by our team. "Initially, they supported the process of transferring my grants and then working with and submitting to the local IRB protocol. Since then, **the team has provided very strong and professional support on all my grant submissions.** Their grants administrator helps me upload files, creates budgets, and communicate with administrative offices and other investigators."

When the time comes to submit another grant, Dr. Tan always first makes sure to work with the RCTH. **"Without their substantial help and support, many of my work couldn't be completed,"** he explained. "I sincerely appreciate their effort, service and dedication. I deeply rely on their services and highly recommend them."

This endorsement is echoed by Dr. Wayne Carver, his department chair: **"I hope that more faculty in the department will begin to take advantage of the Center's services."**

BUILDING BRIDGES

The Research Center for Transforming Health collaborates with several partners across UofSC and the community. We leverage these connections to assist researchers in developing their network to build research

capacity through shared knowledge and expertise. By supporting investigative partnerships, we move closer to our common goal of supporting translational research to improve health and healthcare.

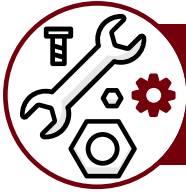
SEED GRANT OPPORTUNITY

In the fall of 2020, the RCTH was able to announce the 2021 Transformative Research Seed Grant Initiative. This initiative, supported by multiple UofSC partners, aims to facilitate collaborative pilot research activities between the University of South Carolina and Prisma Health. Projects supported by this funding opportunity must focus on improvement of health system performance, population health, or biomedical science that translates to clinical

practice and improved patient outcomes. In addition, the project must include an investigative partnership between a UofSC- Columbia faculty employee and a clinical collaborator from Prisma Health. Investigators who receive an award, may have their projects funded up to \$20,000. Letters of Intent to submit for this opportunity were due December 5th, 2020 and final applications are due by February 5th, 2021.

PARTNERS IN THIS WORK INCLUDE:

- UofSC Vice President for Research
- UofSC School of Medicine Columbia
- UofSC College of Pharmacy
- UofSC College of Nursing
- UofSC College of Engineering and Computing
- Prisma Health



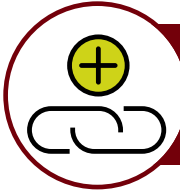
EXPAND RESEARCH TOOLS FOR FACULTY AND STAFF

- Increase awareness and investigator use of the Grant Peer Review program
- Develop a model for post-award administration support services across the School of Medicine



ENHANCE EXTERNAL PARTNERSHIPS

- Further support Columbia VA research initiatives
- Expand the partnership with Prisma Health to facilitate joint research efforts



INCREASE EDUCATIONAL OPPORTUNITIES AND RESEARCH SUPPORT

- Establish a mentoring program for faculty interested in research
- Expand support activities to further research education and opportunities

Les Hall, MD

UofSC SOM Executive Dean



"This past year has been particularly exciting for the Research Center for Transforming Health. Through expanded partnerships, the Center has broadened the impact of the work to the highest level ever."

OUR RESEARCH EXPERTS



KEVIN J. BENNETT, PHD
DIRECTOR



SHALON HOWARD, MS
SR. RESEARCH ASSOCIATE



JESSICA BURCHETT, MS
GRANTS ADMINISTRATOR



BRITTANY WESLEY, BS
EDUCATION COORDINATOR



SAMANTHA RENAUD, MA PMP
PROGRAM MANAGER

Research Center for Transforming Health

OUR VISION

To create a culture of possibility to accelerate translational research and foster collaborations.

OUR MISSION

To support investigators and their teams as they move from concept to fulfillment, making transformative and innovative research possible.



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RCTH@uscmed.sc.edu



WEB
SC.edu/Medicine/RCTH

The background features a collage of colorful, isometric illustrations. A large red banner at the top contains contact information. Below it, various scenes are depicted in 3D-style frames: a person in a yellow shirt reaching for a shelf, two people sitting on a blue sofa, a person in a red shirt sitting at a desk with a laptop, a person in a blue shirt sitting on a red sofa with a dog, a person in a blue shirt pointing at a red table, a person in a blue shirt sitting on a pink chair, and a person in a red shirt sitting at a desk. The scenes are connected by dashed red lines. At the bottom, a white box with a black border contains the text 'Research Center for Transforming Health'.

Research Center for
Transforming Health