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**RESEARCH RESOURCES | Graphic Design Tools**

**BioRender**

BioRender is an online tool that can be used to create and edit scientific diagrams and illustrations. It offers a library of over 40,000 icons relevant to over 30 life sciences fields to use in the creation of scientific posters, presentations, and publications. It features easy to use drag and drop functionality.

"BioRender 101" webinars are held weekly to provide an overview on using BioRender to create professional scientific images. Webinars include information on how to:

- Navigate the interface and search for icons and templates
- Create and share folders and files
- Jump start figure making using an existing template
- Edit an icon using preset and custom colors
- Change and edit grouped icons

The University of Pittsburgh has a licensing agreement with BioRender, making it available to students at no cost via the Software Download Service (software.pitt.edu); departments can purchase BioRender licenses at a cost of $100 per user, per year, from the Pitt IT Software Store in PantherExpress.

More information about BioRender can be found on the University of Pittsburgh Information Technology website.

**Canva**

Canva is an online graphic design tool that comes in several versions, including one that is free for users. Canva offers an array of options and can be used to create study recruitment materials like brochures and flyers, clinician awareness and referral materials, and poster and presentation content.

The Recruitment Innovation Center, a component of the Trial Innovation Network (an affiliation of more than 60 Clinical and Translational Science Awardee sites around the country), developed a Recruitment and Retention Materials and Content Design Toolkit that embeds helpful Canva video tutorials. A recorded Trial Innovation Network webinar also contains a Canva demo as well as other advice on developing recruitment and retention materials.

The University of Pittsburgh Health Sciences Library System is offering presentations on both BioRender and Canva in December. Please see the Upcoming Events section on page four for details.

**FUNDING OPPORTUNITIES**

**UPMC Competitive Medical Research Fund**

The University of Pittsburgh Office of Research, Health Sciences (OORHS) is soliciting applications for fiscal year 2025 grant support from the UPMC Competitive Medical Research Fund (CMRF). The intent of the CMRF program is to provide funds for junior, independent scientists to develop the preliminary data and refinement of procedures and hypotheses that will enable the submission of highly competitive applications to national funding sources.

**HEAL (Helping to End Addiction Long-Term) Initiative: Development and Validation of Remote or Patient Wearable Device-Derived Objective Biosignatures or Functional Assessments to Monitor Pain for Use as Endpoints in Clinical Trials**

This National Institutes of Health sponsored opportunity calls for study approaches aimed at developing validated remote or wearable device-derived objective biosignatures and functional assessments to assess the effectiveness of pain therapeutics and identify novel digital endpoints.

**Notice of Special Interest (NOSI): Utilizing Telemedicine or Other Remote-Based Platforms to Develop and Support Treatments for Substance Use Disorders**

This National Institutes of Health sponsored opportunity encourages the submission of applications that will rapidly improve the ability to: 1) offer remotely-delivered SUD treatments to patients, including efforts to bring access to difficult to reach populations, and 2) conduct clinical trials of novel treatments using remote patient safety and clinical outcomes monitoring to reduce the need for in-person visits. This NOSI encourages research among subgroups who have difficulty accessing SUD treatment/research programs, including racial/ethnic minorities, socio-economically disadvantaged individuals, and rural populations.
REGULATORY NOTES

REDCap 21 CFR Part 11 Validated Instance Now Available

The University of Pittsburgh now has an instance of the web application REDCap (Research Electronic Data Capture) that has been validated to be in compliance with the FDA 21 CFR Part 11 regulations. Use of the new REDCap 21 CFR Part 11 validated system will be mandatory after January 1, 2024, for management of electronic records and signatures by any sponsor submitting a new Investigational New Drug (IND) or Investigational Device Exemption (IDE) application, or a new protocol under an existing IND or IDE approval. The only exception to this requirement will be the use of an external data capture system that has been validated to be 21 CFR Part 11 compliant and approved by the Office of the Vice Chancellor and Chief Information Officer, Health Sciences. This change does not affect studies that do not require compliance with FDA regulations. These studies may continue to use the original REDCap instance, which will be maintained for ease of use for these non-FDA compliant studies. The new instance has been added as a selection to the Electronic Data Management page in PittPRO. For questions concerning REDCap, please contact hs.appsupport@hs.pitt.edu.

CTSI UPDATES

Pitt Innovation Challenge (PInCh®) Celebrates Tenth Year, Announces Awardees

Congratulations to the 2023 PInCh® Challenge awardees! This year marked the Challenge’s 10th anniversary and as in previous years, investigators from diverse disciplines submitted impressive research ideas proposing bold solutions to challenging health problems. Projects that plan to prevent and/or reduce health disparities were awarded bonus funding, indicated with an asterisk below. This year’s awardees are:

**BITE Tick Repellant**
($115,000 Awardee*) A green alternative to DEET derived from naturally-occurring carbon binding compounds. Jill Henning, PhD; Matthew Tracey, PhD; Manisha Nigam, PhD; Luis Bonachea, PhD

**AneuRisk**
($100,000 Awardee) An artificial intelligence-based tool to assess the risk of abdominal aortic aneurysm patients that can reduce imaging costs, radiation, and prevent adverse outcomes. Timothy Chung, PhD; David Vorp, PhD; Nathan Liang, MD, MS

**Cerebral Aneurysm Test 7 (CAT-7)**
($100,000 Awardee) A simple blood based diagnostic test that can detect cerebral aneurysm formation and risk of rupture, opening the door for high-risk screening and early detection of those with aneurysms. Adi Mittal; Michael McDowell, MD; Robert Friedlander, MD; Daniel A. Wecht, MD, MSc

**A-SIDE**
($50,000 Awardee*) A bioengineered Autologous Serum Ocular Insert for Dry Eye Disease, using a patient’s own blood serum proteins to treat dry eye disease with convenience, comfort, and efficacy. Morgan DiLeo, PhD; Vishal Jhanji, MD

**CuffLink**
($50,000 Awardee*) A groundbreaking rotator cuff telehealth rehabilitation platform that combines the safety of mechanical motion exercise equipment with motion tracking and remote monitoring to improve patient recovery. Kevin M. Bell PhD; Michael P. McClincy, MD

**Lexi Medical**
($35,000 Awardee) Deep brain stimulation of the motor thalamus after stroke to improve movement in paralyzed or weak facial muscles, resulting in improved speech, breathing, and swallowing. Jordyn E. Ting; Elvira Pirondini, Ph.D

**Lyme Disease Testing Kit (LDK)**
($30,000 Awardee*) A better diagnostic test for Lyme disease that is simple, cost-effective, and reliable to allow early disease detection and reduce antibiotic misuse. Danielle Tufts, PhD

**One Pass Epidural Needle (OPEN)**
($30,000 Awardee*) A single, simple epidural needle which can be used to place multiple leads or catheters for epidural delivery, eliminating the need for second skin puncture to minimize pain. Trent Emerick, MD, MBA; Gaurav Chauhan, MD

**MPower Hub: From Personal Data to Diabetes Health**
($25,000 Awardee) A mobile platform that empowers people to achieve diabetes health by visualizing their combined personal data, helping them transform data insights into healthier diabetes habits. Carissa Low, PhD; Ann-Marie Rosland, MD, MS; Timothy M. Bober, MD
Dear CTSI,

Question:

Our research team is looking for professional organizations that would be beneficial to join. What are some of the options?

Answer:

Reputable organizations to help researchers advance their professional knowledge and stay current with the latest developments in research include:

The Association of Clinical Research Professionals (ACRP) is a non-profit organization dedicated to representing, supporting, and advocating for clinical research professionals by providing educational and credentialing programs. ACRP supports members with many ongoing educational opportunities; current and recent topics include investigator initiated trials, decentralized trials, study management and conduct, and good clinical practices. ACRP also provides certification in six specialties: ACRP Certified Professional, Certified Clinical Research Associate, Certified Clinical Research Coordinator, Certified Principal Investigator, ACRP Medical Device Professional, and ACRP Project Manager.

The Society of Clinical Research Associates (SOCRA) is an educational membership organization committed to providing education, certification, and networking opportunities to professionals involved in clinical research activities. SOCRA provides an array of educational opportunities, including live events, webinars and online training courses. Upcoming live events cover topics like site coordination, device research, FDA regulatory compliance, and clinical research monitoring. SOCRA offers a Certified Clinical Research Professional Certification.

UPCOMING EVENTS

Tuesday, November 28 | noon to 1 p.m.  
Smooth Sailing with the IRB  
Presented by the CTSI Responsible Conduct of Research Center/University of Pittsburgh Human Research Protection Office  
Virtual Event

Monday, December 4 | 10 to 11:30 a.m.  
Graphic Design in Canva  
Presented by the University of Pittsburgh Health Sciences Library System  
Virtual Event

Friday, December 8 | noon to 1 p.m.  
Creating a Data Collection System  
Presented by the CTSI Responsible Conduct of Research Center/CTSI Biostatistics, Epidemiology and Research Design Core  
Virtual Event

Monday, December 11 | 10 to 11 a.m.  
BioRender: Top Design Tips for Better Grant Figures  
Presented by the University of Pittsburgh Health Sciences Library System

Tuesday, December 12 | noon to 1 p.m.  
Institutional Conflicts of Interest  
Presented by the CTSI Responsible Conduct of Research Center/the University of Pittsburgh Office of Research Protections  
Recorded Webinar  
Respecting Persons: From Basic Requirements to Embracing Participant-Centered Informed Consent  
Presented by the Office for Human Research Protections

Questions for us?

We’d love to hear from you: ctsi@pitt.edu

Pitt+Me questions: ASKPPM@pitt.edu