



September 2020

A photograph of a female scientist in a white lab coat and safety glasses, focused on her work in a laboratory. She is using a pipette to transfer liquid into a multi-well plate. The background is a blurred laboratory setting with various glassware and equipment. The overall color palette is dominated by blues and whites, with some orange and teal accents at the bottom.

Physicians Committee
for Responsible Medicine

ERA21
Early-Career Researchers
Advancing 21st Century Science

**PRESENTS A WEBINAR SERIES
for early-career scientists by early-career scientists**

Beginning Fall 2020

This series will give students and early-career researchers the platform to present their work, gain experience answering questions from their peers, and participate in thoughtful discussion with fellow scientists.

We're looking for scientists interested in presenting their human-relevant research!

If you would like to be a part of this webinar series, please contact Janine McCarthy at jmccarthy@pcrm.org

ERA21 presents a new webinar series scheduled to begin in Fall 2020. If you are interested in presenting, please contact Janine McCarthy at jmccarthy@pcrm.org.

Don't forget to join the ERA21 [Facebook](#) & [LinkedIn](#) groups!

Featured Scientific Articles

Check out this month's featured articles to learn more about new human-relevant research scientists are currently conducting.

[A Human-Based Functional NMJ System for Personalized ALS Modeling and Drug Testing](#)

Guo X, Smith V, Jackson M, et al. A human-based functional NMJ system for personalized ALS modeling and drug testing. *Advanced Therapeutics*. 2020.

[Human Cardiac Organoids for Modeling Genetic Cardiomyopathy](#)

Buono MF, Boehmer L, Strang J, et al. Human cardiac organoids for modeling genetic cardiomyopathy. *Cells*. 2020.

[SARS-CoV-2 Productively Infects Human Gut Enterocytes](#)

Lamers MM, Beumer J, van der Vaart J, et al. SARS-CoV-2 productively infects human gut enterocytes. *Science*. 2020.

Employment Opportunities

The [Mumenthaler lab at the University of Southern California](#) is hiring a postdoc to develop cutting-edge preclinical models (e.g. organoids and organ-on-chips) to investigate tumor microenvironment interactions impacting colorectal cancer progression.

[U.S. Environmental Protection Agency \(EPA\)](#) has an opening for a postdoc position to develop computational models to predict the safety of chemicals without running tests on whole animals. The project integrates data science, software engineering, applied statistics, and predictive mathematical modeling.

[TARA Biosystems](#) is hiring for several positions with varying levels of experience including research associates, senior scientists, engineers, and more.

[Integrated Laboratory Systems, LLC \(ILS\)](#) is searching for a computational toxicologist to join their team supporting government and commercial clients.

MultiCASE is hiring a Computational Toxicology Research Associate to conduct (Q)SAR modeling research projects. This position requires special attention to cheminformatics, specifically in the pharmaceutical and computational toxicology area. Interested applicants should send letter of interest and resume to sales@multicase.com.

[AxoSim](#) is looking for a postdoctoral researcher to assist with their ALS NerveSim™ platform. This platform grows living human cells in a proprietary 3D environment to mimic nerve tissue in both form and function. The candidate should be a dynamic, driven, and motivated team player ready to guide a project while working in a startup environment.

The Wyss Institute for Biologically Inspired Engineering at Harvard University has an opening for a [postdoctoral fellow position in the Brain Targeting Program \(BTP\)](#). The position will focus on the discovery of new targets and engineered transport vehicles to carry therapeutic and diagnostic payloads into the brain.

The [Canadian Centre for Alternatives to Animal Models](#) is recruiting postdocs to develop human biology-based in vitro platforms for disease modelling and toxicity testing—areas of interest include human stem cell-based disease modelling, cellular and tissue engineering, synthetic biology, in vitro & computational toxicology, and science policy.

Upcoming Events

The [National Center for Advancing Translational Science](#) is offering a seven-week online course in translational science this fall. The course is open to the public. To receive an invitation to register for the **Fall 2020** course [add your name to the course's waitlist](#).

The Laboratory for Stem Cells and Tissue Engineering at Columbia University is hosting "[TISSUE TALKS](#)" every **Wednesday at 3 p.m. ET**. These virtual seminars will feature leaders in the field of tissue engineering from around the globe. To register fill out the [google doc](#).

Cruelty-Free Europe is hosting "[Building Back Better: A Roadmap to Human Relevant Research in a Post Covid-19 World](#)" on **September 10**. This online conference features a broad range of stakeholders from the EU and US to talk about the contribution new approach methodologies can make to delivering the EU Green Deal and to building back better all over the world; initiatives underway in Europe and North America to replace animal testing; what

programs like Horizon Europe can do to bring about a paradigm shift and how applying the logic of targets could be the important next step.

E-poster and in-person abstracts are now being accepted for the [Annual Biomedical Research Conference for Minority Students \(ABRCMS\)](#). ABRCMS 2020 is scheduled to take place in San Antonio, Texas from November 11-14. Deadline to submit an abstract is **September 11**.

The second webinar in the [Antibodies webinar series](#) will take place on **Sept. 16 at 10 a.m. ET**. Learn more about the findings from a 2018 EURL ECVAM Scientific Advisory Committee meeting that reviewed the validity and benefits of using animal-free technology to produce affinity reagents and the subsequent EURL ECVAM recommendation. This webinar series is co-organized by the US National Toxicology Program Interagency Center for the Evaluation of Alternative Toxicological Methods, the PETA International Science Consortium Ltd., and the European Union Reference Laboratory for alternatives to animal testing.

The Global Summit on Regulatory Science, co-hosted by the Global Coalition for Regulatory Science Research and the National Center for Advancing Translational Sciences, is taking place **September 28-30**. The theme is "Emerging Technologies and Their Application to Regulatory Science". [Register here](#).

The [9th annual meeting of the American Society for Cellular and Computational Toxicology](#) will be held virtually **October 20-22**, no registration fee will be charged. There will be opportunities for mentoring, awards, and flash poster presentations for students and early-career scientists working in the in vitro and computational toxicology fields.

Thomas Hartung's Webinar on "The Role of Non-Animal Approaches in COVID-19 Related Research" for the European Parliament, presented by the Intergroup on the Welfare & Conservation of Animals, is now available on the CAAT [YouTube channel](#). The full collection of presentations from the meeting can be found [here](#).

Organoid and Organs-on-Chip Trainee Symposium is [now available on YouTube](#).

Funding Opportunities

The European Partnership for Alternative Approaches to Animal Testing's (EPAA) [2020 3Rs Science Prize](#) is now open for submissions. The EPAA aims to promote the development, validation and acceptance of 3Rs alternative approaches (replacement, reduction and refinement of testing on animals). The 3Rs science prize is granted every two years to a scientist with an outstanding contribution to 3Rs. Deadline to apply is **October 5**.

The [Colgate-Palmolive Award for Student Research Training in Alternative Methods](#) is now accepting applications. The purpose of this award is to enhance graduate student research training using in vitro methods or alternative techniques to replace the use of animals in toxicological research. Deadline to apply is **October 9**.

The [National Science Foundation Graduate Research Fellowship Program](#) is accepting applications for 2021. The purpose of this program is to help ensure the vitality and diversity of the scientific and engineering workforce of the United States. The program recognizes and supports outstanding graduate students who are pursuing full-time research-based master's and doctoral degrees in STEM or STEM education. Deadline to apply is **October 19**.

The [National Center for Advancing Translational Science \(NCATS\)](#) has issued two Notices of Special Interest to support research in collecting and examining data on the risks and outcomes for COVID-19 infections using tissue chips. Such work is expected to advance the translation of research findings into diagnostics, therapeutics, and vaccines. Applications for both opportunities will be accepted on a rolling basis from **May 15, 2020, through January 25, 2022**.

Learn More About Human-Based Research

The ERA21 team wants to bring human-based research to your institution! We can help organize an educational speaker series or host a symposium on human-based research at your university. Please contact Janine McCarthy at jmccarthy@pcrm.org for more information.

[Good Science Digest](#)

Find out what Physicians Committee scientists have to say about the latest obstacles and advances in replacing animal use with human-relevant methods in research, testing, and education.

[Ethical Science News](#)

Ethical Science News provides the latest updates on human-relevant research advances to replace animal use.

[Explore human-relevant research happening in labs across the United States](#)

Stay Connected!

[Join the ERA21 Facebook group](#) for updates on 21st century science and to connect with fellow scientists.