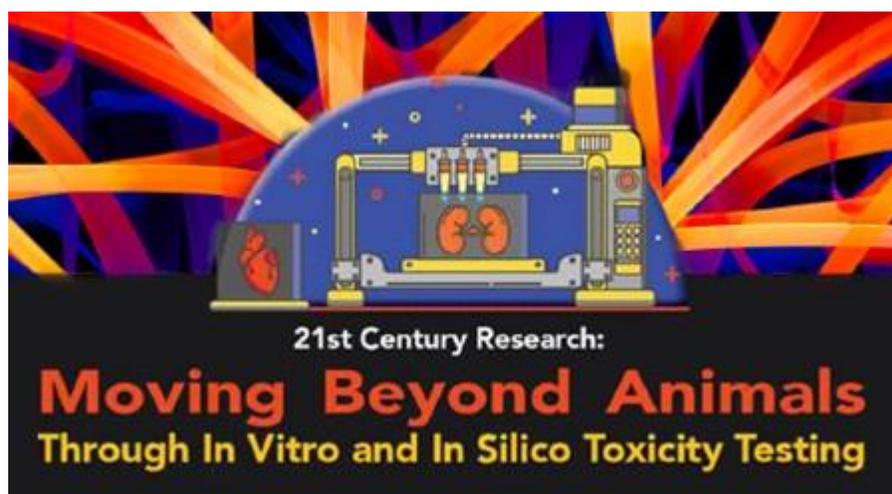




**March 2020**



[The Physicians Committee for Responsible Medicine's ERA21 team](#) and Shamar Advisors are co-hosting a free webinar on **Friday, March 27 at 4:30 p.m. ET** on 21st Century Research—Moving Beyond Animals for Toxicity Testing and Coronavirus Research. This webinar is dedicated to exploring methods for more human-relevant testing and research and will focus on in silico and in vitro methods for toxicity testing. In light of the current coronavirus pandemic, the event will also feature discussion of the need for more human-based research for coronavirus therapies and vaccines. Registration is available [here](#).

### **Featured Scientific Articles**

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

**[A SARS-CoV-2-Human Protein-Protein Interaction Map Reveals Drug Targets and Potential Drug-Repurposing](#)**

Gordon DE, Jang GW, Bouhaddou M, Xu J, Obernier K, O'Meara MJ, et al. A SARS-CoV-2-Human protein-protein interaction map reveals drug targets and potential drug-repurposing. *bioRxiv*. 2020.

### **[COVID-19 Vaccine Candidates: Prediction and Validation of 174 SARS-CoV-2 Epitopes](#)**

SPrachar M, Justesen S, Steen-Jensen DB, Thorgrimsen SP, Jurgons E, Winther O, et al. COVID-19 vaccine candidates: Prediction and validation of 174 SARS-CoV-2 epitopes. *bioRxiv*. 2020.

## **Employment Opportunities**

The International Foundation for Ethical Research (IFER) is now accepting applications for [Graduate Fellowships for Alternatives to the Use of Animals in Science](#). IFER Graduate Fellowships are one-year grants of typically \$12,500 for projects that support the development, acceptance and implementation of innovative scientific methodologies that advance science and refine, reduce or replace the use of animals in research, testing or education. Applications are due **April 30**.

The [Peter Loskill laboratory](#) is hiring a postdoc position with a focus on Organ-on-Chip and immune safety assessment. Applicants should have a PhD in biomedical engineering, biophysics or similar fields and extensive experience with at least two of the following topics microfluidics, tissue engineering, toxicology and/or immunology.

[Lifetime CDT](#) has a clinical research training fellowship available. The fellowship is open to clinicians interested in the development of non-animal technologies to improve predictive power of pre-clinical drug screens and thus drive medicines discovery.

The [Canadian Centre for Alternatives to Animal Methods](#) 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.

A [postdoctoral position](#) is available immediately within the [NIH TissueChip consortium](#) to study antigen sampling across gastrointestinal barriers in the Department of Microbiology and Immunology at Montana State University. Project leaders are seeking a PhD graduate with a background in mucosal immunology or developmental biology.

The [Wyss Institute for Biologically Inspired Engineering at Harvard University](#) is hiring a postdoctoral fellow with expertise and knowledge of

bone marrow function, the hemapoietic niche, immunology and stem cell biology to join an interdisciplinary team of biologists and engineers.

[Center for Alternatives to Animal Testing](#) (CAAT) at Johns Hopkins University is looking for a postdoctoral fellow to work in the areas of developmental neurotoxicology (autism), 3D organoid models, high-content imaging, and CRISPR/Cas9 gene editing. All interested in the position should send a CV and motivation letter to Dr. Lena Smirnova, [lena.smirnova@jhu.edu](mailto:lena.smirnova@jhu.edu).

[PETA International Science Consortium](#) is hiring a research associate for PETA US and PETA India. Applicants should have a passion for replacing animal tests with efficient and effective in vitro and in silico models.

The Collins lab at Swarthmore College is looking for a highly motivated postdoctoral researcher with excellent communication skills and a PhD in toxicology, pharmacology, computational biology, neurobiology, biomedical engineering, molecular biology, or closely related field. To read the full job posting and to apply, candidates should submit their application materials through the [Swarthmore College Job Portal](#).

The McCullough Lab at the US Environmental Protection Agency's Human Studies Facility is seeking a new postdoctoral fellow to develop and utilize organotypic in vitro models for cellular and molecular toxicology. Contact Shaun McCullough, PhD, [mccullough.shaun@epa.gov](mailto:mccullough.shaun@epa.gov), for more information.

[Eurofins Lancaster Laboratories](#) is hiring for a postdoctoral research fellow to work with computational toxicology in Richmond, VA. The selected candidate will design and apply computational toxicology principles and tools for in vitro-to-in vivo extrapolation, focusing on respiratory tract dosimetry and related health effect.

## Upcoming Events



There is still time to apply to the [Summer School on Innovative Approaches in Science!](#)

Join other students and early-career scientists this summer at Johns

Hopkins University School of Public Health for FREE lectures, laboratory visits, hands-on demonstrations, networking, and interactive sessions on cutting-edge methods to reduce and replace animal tests in toxicology and biomedical science.

Learn from experts in the field from Harvard University, Johns Hopkins University, the National Institutes of Health, the Environmental Protection Agency, the Physicians Committee for Responsible Medicine, and more.

The school will take place **June 22-25 at Johns Hopkins University** in Baltimore, Maryland. **Registration is free** and open to undergraduates through early-career researchers. Applications are being accepted on a rolling basis. Space is limited so be sure to apply as soon as possible!

Hosted by the Physicians Committee for Responsible Medicine, the Center for Alternatives to Animal Testing at Johns Hopkins University, and the European Commission Joint Research Centre.

### **Funding Opportunities**

There are a number of travel grants available for the [11th World Congress on Alternatives and Animal Use in the Life Sciences](#). Check out the [website](#) for information on eligibility and deadlines.

The Humane Society of the United States is now accepting nominations for the [2020 Russell and Burch Award](#). The award will be presented to a scientist who has made outstanding contributions to the advancement of alternative methods in the areas of research, testing or higher education. Nominations are due **April 10**.

The Johns Hopkins University Center for Alternatives to Animal Testing [Next Generation Humane Science Award](#) is available to young scientists to acknowledge and encourage researchers who focus on replacing animal experiments. The 2020 award will provide a prize of up to \$5,000 recognizing the work of one young scientist, or may be shared among two or more young scientists. [Applications](#) are due **May 31**.

[Animal Free Research UK](#) has open grant calls for Early Career Researcher Conference Grants and PhD and Postdoc Grants. These funding opportunities award research funding to cutting-edge scientists that develop human methods and non-animal technologies to study human disease.

## **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](mailto: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.*

#### **Physicians Committee for Responsible Medicine**

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