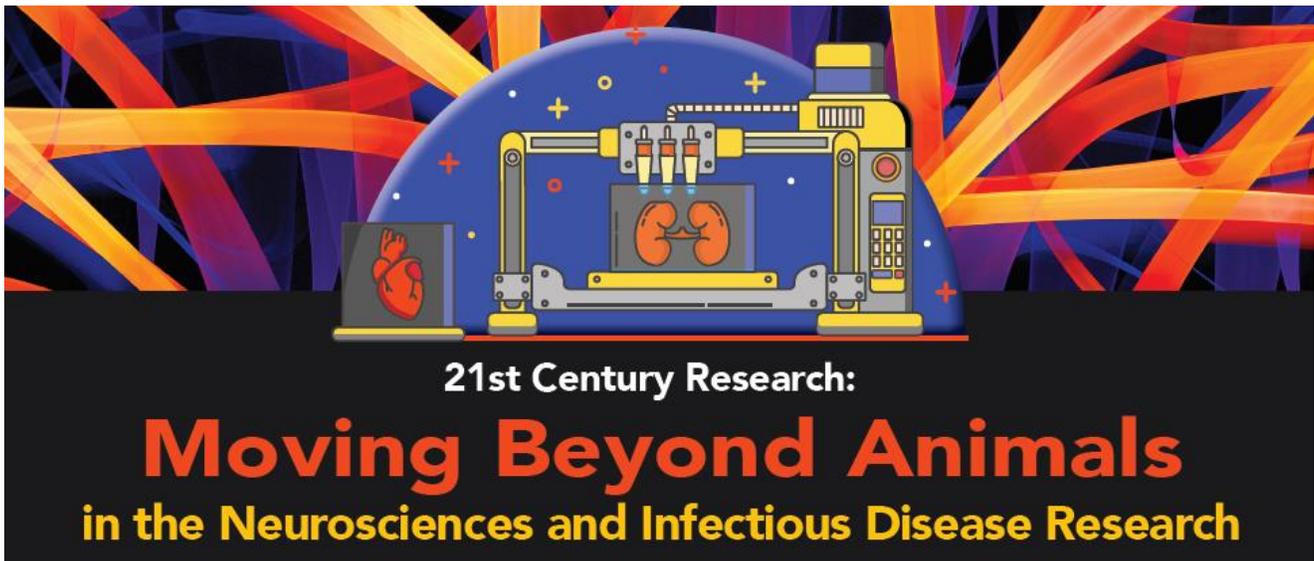




April 2020



[The Physicians Committee for Responsible Medicine's ERA21 team](#) and Shamar Advisors are co-hosting a free webinar on **Friday, April 24 at 2:30 p.m. ET** on 21st century research: Moving beyond animals in neuroscience and infectious disease research. This webinar is dedicated to exploring methods in human-relevant testing and research. Registration is available [here](#).

The recording from the previous webinar in this series on *in vitro* and *in silico* methods is available [here](#).

Featured Scientific Articles

In light of the COVID-19 pandemic, this month's featured articles highlight some of the current human-relevant research being conducted.

[Preliminary Identification of Potential Vaccine Targets for the COVID-19 Coronavirus \(SARS-CoV-2\) Based on SARS-CoV Immunological Studies](#)

Ahmed SF, Quadeer AA, McKay MR. Preliminary identification of potential vaccine targets for the COVID-19 Coronavirus (SARS-CoV-2) based on SARS-CoV immunological studies. *Viruses*. 2020.

[Structural Basis for the Recognition of SARS-CoV-2 by Full-Length Human ACE2](#)

Yan R, Zhang Y, Li Y, Xia Y, Guo Y, Zhou Q. Structural basis for the recognition of SARS-CoV-2 by full-length human ACE2. *Science*. 2020.

[Immune Cell Profiling of COVID-19 Patients in the Recovery Stage by Single-Cell Sequencing](#)

Wen W, Tang WSH, Le W, Zhang X, Zheng Y, Liu X, et al. Immune cell profiling of COVID-19 patients in the recovery stage by single-cell sequencing. *medRxiv*. 2020.

[Blood Single Cell Immune Profiling Reveals the Interferon-MAPK Pathway Mediated Adaptive Immune Response for COVID-19](#)

Huang L, Shi Y, Gong B, Jiang L, Liu X, Yang J, et al. Blood single cell immune profiling reveals the interferon-MAPK pathway mediated adaptive immune response for COVID-19. *medRxiv*. 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 medicine

discovery.

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.

The [Wyss Institute at Harvard University](#) has a number of postdoctoral fellowships open.

[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.

[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 effects.

Upcoming Events



Join other students and early-career scientists for the [Summer School on Innovative Approaches in Science](#). This free event will give attendees the chance to learn more about cutting-edge science from experts from Harvard University, Johns Hopkins University, the National Institutes of Health, the Environmental Protection Agency, the Physicians Committee for Responsible Medicine, and more.

The Summer School on Innovative Approaches in Science will now be held as a virtual meeting! For the latest updates visit www.InnovativeScience2020.org. Applications are still required to attend, to apply visit [here](#). Please contact SummerSchool@pcrm.org for questions concerning applications or attendance.

Funding Opportunities

There are a number of travel grants available for the [11th World Congress on](#)

[Alternatives and Animal Use in the Life Science](#). Check out the [website](#) for information on eligibility and deadlines.

In response to the global COVID-19 pandemic, the Johns Hopkins Center for Alternatives to Animal Testing has a new call for proposals: [Fast-Track Grant For Research on Non-Animal Approaches to Investigate Mechanisms, Medicines, and Vaccines for Coronaviruses](#). The goal is to centralize information and stimulate funding of the development of non-animal, human biology-based models to help coordinate and accelerate response to current and emerging pandemics. Applications for this grant will be screened by an advisory committee and will be funded as soon as possible. The application deadline is **April 30**.

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**.

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.

[Check out our full collection of resources.](#)

Stay Connected!

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