

# ARDF

## 2023 YEAR IN REVIEW



The Alternatives Research & Development Foundation had a busy and exciting year in 2023, and we are pleased to share some of our biggest accomplishments and activities.

### ANNUAL OPEN GRANT PROGRAM

Our flagship program, the **Annual Open Grant program**, was the scientific highlight of this year. We were able to fund seven outstanding proposals across a broad range of scientific areas, with the essential help of our dedicated reviewers. The funded projects for 2023 include:

- **Modeling diabetes in an organoid on chip platform** (Vincenzo Cirulli, MD, PhD and Laura Crisa, MD, PhD; University of Washington, Seattle, WA)
- **Precision-cut gingival slices as an animal-free model of oral inflammation** (Quinn Easter, PhD and Kevin Byrd, DDS, PhD; ADA Science & Research Institute, LLC, Gaithersburg, MD)
- **Highly matured human cardiac models to measure cardiotoxicity** (Kshitiz, PhD and Junaid Afzal, MBBS, MS; University of Connecticut Health Center, Farmington, CT and University of California, San Francisco, CA)
- **First steps towards a fracture hematoma on-a-chip model – Mimicking the initial phase of fracture healing in vitro** (Moritz Pfeiffenberger, PhD; Charité Universitätsmedizin Berlin, Berlin, Germany)
- **Advanced neurotoxicity testing with an in vitro model of sex differences** (Maren Schenke, PhD; Johns Hopkins Bloomberg School of Public Health, Baltimore, MD)
- **Developing a cigarette smoke exposure model using human precision cut lung slices to study COPD and potential drug therapeutics** (Venkataramana Sidhaye, MD; Johns Hopkins University, Baltimore, MD)
- **A human-relevant and AOP-driven in vitro approach for studying the cholestatic potential of micro- and nanoplastics** (Mathieu Vinken, PhD; Vrije Universiteit Brussel, Brussels, Belgium)

### OUTREACH AND COMMUNITY-BUILDING

It was a big year of travel, as many conferences returned to in-person events. ARDF staff had a full schedule of national and international meetings that provided invaluable opportunities to engage with the research and policy communities.

- ARDF President Sue Leary continued her term as an **appointed member of the Scientific Advisory Committee on Alternative Toxicological Methods (SACATM)**, which advises the Interagency Coordinating Committee on the Validation of Alternative Methods (ICCVAM) and the NTP Interagency Center for the Evaluation of Alternative Toxicological Methods (NICEATM).
- In June, our program director, Angela Hvitved, attended the **Health and Environmental Sciences Institute (HESI) annual meeting**, held in partnership with the NC3Rs in London. The meeting focused on implementing NAMs for safety assessment and gathered a range of stakeholders to discuss challenges and strategies to overcome them.
- Also in June, Angela and Sue attended the **MPS World Summit** in Berlin, for which ARDF has been an enthusiastic sponsor since its inception. This year's meeting was a testament to the rapid growth of this field, and it was inspiring to talk with the researchers making these advances and learning where the new challenges lie.
- In August, Sue and Angela attended the **12th World Congress on Alternatives and Animal Use in the Life Sciences (WC12)** in Niagara Falls, Canada. The World Congress is a keystone event for the alternatives field, bringing together stakeholders from academia, industry, government, and NGOs. The ARDF booth had a steady stream of visitors interested in our work and funding opportunities.

## POLICY ENGAGEMENT

We took advantage of several opportunities this year to submit stakeholder comments, providing our feedback to help advance the development and implementation of alternatives through various state and federal initiatives including:

- Testimony in March in **support of Maryland HB 626/SB 560**, to create a research fund for non-animal testing and research methods under the Maryland Technology and Development Corporation. This bill passed, making Maryland the first in the nation to establish a fund of this type.
- In August we responded to **NIH's request for information on developing alternatives for biomedical research**. Our response stressed the importance of substantial future investments to realize the full potential of human-based models for biomedical research, and called on NIH to pursue a wide range of funding strategies to achieve these advances.
- In October, we provided feedback on an **NIH proposal to streamline IACUC review** in a way that could reduce the consideration of alternative methods during IACUC deliberations. We encouraged NIH to reconsider its proposal, given its potential to reduce the quality of IACUC review.
- Through October and November, we participated in a series of listening sessions for **NIH's Complement-ARIE initiative**, a new and significant program to develop and implement alternative methods. We were encouraged by the constructive discussions and submitted written comments with feedback to help guide the strategic planning of this promising program.

We are grateful for the community's continued interest in and support of ARDF's work, and we look forward to another year of advancing non-animal research methods together.