In vitro models

Editor-in-Chief: J Miguel Oliveira, Ketul Popat
Publishing model: Hybrid. How to publish with us, including Open Access

In vitro models aims to address the paradigm-shift in research related to: i) an increasing trend for "saying good bye to flat biology", i.e. introducing 3D in research methods in order to develop tools to better emulate human tissues/organs and diseases, and ii) to reduce/eliminate the need for animal experimentation. As the first journal fully dedicated to this research area, we will provide both a home for research on *in vitro* models and a platform to foster its multi-disciplinary community.

In vitro models aims to become a leading journal among the top multidisciplinary journals covering all aspects of *in vitro* models research, which also includes a broad spectrum of topics related to at the interface of biomaterials science, chemistry, physics, engineering, informatics, nanotechnology, pharma, medicine, and biology. The new journal provides a specialized forum for the publication of significant and original work related to experimental and theoretical studies on fundamental and applied inter- and multidisciplinary research dealing with *in vitro* models, and in particular focusing on 3D cell/tissue culture and enabling technologies.

In vitro models will publish peer-reviewed Communications, Reviews, Concepts, Highlights, Essays/Editorials, and full original Research Articles on all aspects of *in vitro* models research, including, but not limited to, the following topics:

- *In vitro* models
- New Perspectives in *in vitro* tissue models Research
- Complementary and Alternative models to animal experimentation
- Cell culturing Methods (e.g. 2D and 3D cell culture)
- *Ex vivo* models
- Biomaterials as extracellular matrix
- Drug development
- Bio 3D printing
- Cell engineering
- Dynamic culturing
- Microfluidics
- Biofluid mechanics
- Organ-on-a-chip
- Bioreactors
- In silico models
- Modelling and simulation
- Nanomedicine
- Tissue engineering
- Precision Medicine
- Cancer research
- Regenerative Medicine
- Translational Research

- **Uniquely positioned to serve the multi-disciplinary research community, exploring *in vitro* models**
- **We aim for a fast and fair review process, with a time to first decision after peer-review within 28 days**
- **We welcome contributions involving the development of *in vitro* tools and methods to effectively emulate human tissues, organs and disease and that can be alternatives to animal experimentation.**