3-D Retina Organoid Challenge (3-D ROC) 2020

Submissions should be emailed to NEI3dROC@mail.nih.gov

Submission Requirements

Prepare the solution as you would prepare a manuscript that is being sent to a peer-reviewed journal. Include relevant data in the results section. Supporting figures and documentation may be included in the Appendix, but they may be used at the discretion of the reviewers. A detailed materials and methods section including all protocols must be submitted in the Appendix. **Video abstracts and a written 300-word abstract are required.**

Submissions MUST Follow all page limits (references not included in page limit), have page dimensions (8.5 x 11 inches), font size of 11 pt. or greater (for all text including figure legends), and 0.5-inch margins. Include figure legends only if they add information not available in proposal body. Include a cover page which is not counted toward the page limit, required sections as listed below, and references.

Application Format

Abstract
Prepare an abstract that clearly states the advantages and novelties of the retina organoid (300 word and/or 2-page max). A video abstract should be submitted by uploading video to YouTube or other site (e.g., Vimeo) and providing URL as part of text abstract. The video should highlight the novelty of the methods, summarize results (including how prototype has been applied to disease modeling or high-content screening) and discuss impact on end users, accelerating retinal research and therapy discovery, and clinical translation.
- Include relevant background and highlight the advances achieved with protocol compared to current ones.
- Provide a methods summary describing any existing methods or technologies that were used, combined, or built upon to develop the retina organoid model systems. Focus on the novel or creative aspects of the technologies used and how protocol addresses the scientific evaluation criteria. Indicate if the model is applicable to disease modeling or high-content screening; if the former, discuss which disease is being modeled. Provide full method details in the Appendix.
- Include an evidence-based description of the innovation and impact. Cite results and compare to published work to provide evidence that (1) the approach is paradigm-shifting, novel, and creative, and (2) combining or using new technologies gives advantageous results.
- Include how solution will advance understanding of retinal diseases or accelerate therapeutic discoveries.

Results Section
3 pages maximum for results text, 5 pages maximum for data figures.
- Results should be divided into a text-only section that describes figures and data, and a data section, which includes tables, images, etc. Figure descriptions should be integrated into text pages, and figure legends on the data pages must be 11 pt. or greater font and should be sufficient. Include publication-quality data that support the achievement of each of the scientific evaluation criteria.

Biographical Sketches & References
- For each individual, include a brief biographical sketch (**2-page max, regardless of team size**) of relevant experience and expertise, including only highly relevant publications and accomplishments.
- References should have full citations using a standard format.

Appendix
- Methods. Provide a complete description of protocol(s) used to develop retina organoid model systems and how it addresses the scientific evaluation criteria. Provide sufficient detail to ensure reproduction.
- Supporting figures and documentation may be included in the supplement, however reviewers can use their discretion as to whether to consider the optional supplemental data as part of their evaluation.
- If applicable, address compliance with NIH/HHS research-related policies and regulations.

Contact the NEI Office of Regenerative Medicine if you have any questions at NEIORM@nei.nih.gov or NEI3dROC@mail.nih.gov.