

## IMAG Amplifying Impact by Nurturing Diversity – FUTURES Meeting 2020

The IMAG Multiscale Modeling Consortium held its 13<sup>th</sup> meeting on March 17, 2020, guided by the theme, “Amplifying Impact by Nurturing Diversity.” The meeting showcased the future of multiscale modeling by spotlighting the innovation, diversity, and impact of research being conducted by trainees in the multiscale modeling community. Since it coincided with the national concern surrounding the global COVID-19 pandemic, convening at one location was not possible, therefore the organizers conducted the event online.

### Trainee Podium and Poster Competition Winners

A key feature of the meeting was a Trainee Oral Presentation and a Trainee Poster Competition, judged by members of the meeting Program Committee. The first-place winners and honorable mentions were selected from nearly 40 submitted abstracts, and these trainees received cash prizes generously provided by the Paul G. Allen Frontiers Group.

All of the submitted abstracts and posters, as well as the oral presentations, can be viewed on the [IMAG Wiki](#).

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### Trainee Oral Presentation Competition Results



#### *First Place*

**Kyoko Yoshida, Ph.D., University of Virginia**

Multiscale model of pregnancy-induced heart growth: Integrating hormonal signaling and mechanics



#### *Honorable Mention*

**Christian Guerrero-Juarez, Ph.D., University of California, Irvine**

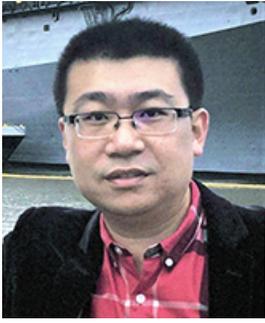
Towards a multiscale synthesis of skin regeneration: Single cell transcriptomics and modeling reveal functional fibroblast heterogeneity in skin wounds



#### *Honorable Mention*

**Angela Jarrett, Ph.D., University of Texas at Austin**

Integrating multiple scales and imaging modalities to predict tumor response for individual patients and generate personalized therapy regimens



*Honorable Mention*

**Peng Zhang, Ph.D., University of Michigan**

Integrating machine learning in multiscale modeling for blood flow and platelet-mediated thrombosis initiation

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**Trainee Poster Competition Results**



*First Place*

**Ariel Nikas, Ph.D., Emory University**

Investigating waning of influenza vaccine induced immunity with a multi-scale modeling approach



*Honorable Mention*

**Jacob Herrmann, Ph.D., University of Vermont**

Self-organizing of honeycombing in an agent-based model of lung fibrosis



*Honorable Mention*

**Erin Louwagie, Columbia University**

Biomechanics of cervical funneling in high-risk pregnancies

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