



## 2<sup>nd</sup> Netflux and Logic-based Network Biology Meeting

January 16, 2024 1-5 pm EST on Zoom

Free Registration: [link](#)

Abstract Submission: Dec 20, 2023 [link](#)

Keynote speaker: Jay Humphrey (Yale U.), John C. Malone Professor of Biomedical Engineering

~10 short talks from trainees invited or selected from abstracts using various approaches for logic-based network modeling

Lightning talks for all accepted abstracts

Live demonstration of Netflux software for user-friendly modeling of biological networks [link](#)

Group discussions on network modeling

### Program Committee:

Julie Leonard-Duke (UVA), Ashlee Ford-Versypt (U Buffalo),

Daniela Valdez-Jasso (UCSD)

For info: meeting chair Jeff Saucerman, [jsaucerman@virginia.edu](mailto:jsaucerman@virginia.edu)

## Invited Speakers

Keynote: Jay Humphrey (Yale U.), From Transcript to Tissue -- Modeling Arterial Adaptations

Johane Bracamonte (U. Alabama Birmingham), Multiscale model predicts drug modulation of ventricular hypertrophy following experimental canine mitral regurgitation

Tanya Cruz (U. Virginia) Integration of Cerebral Cavernous Malformation (CCM) Signaling Pathways Into a Logic Based Computational Model of Brain Endothelial Cells

Yufan Lin (UC San Diego), Mechanosignaling network model of PAAF in PAH

Paige Nielsen (U. Minnesota), A Cell-signaling Model to Predict Active Mechanics of Vascular Smooth Muscle Cells during Pregnancy

Krutika Patidar (U. Buffalo), Modeling the Role of Glucose-Mediated Inflammation in Glomerular Endothelial Dysfunction Using Logic-Based Differential Equations

Kaitlyn Wintruba (U. Virginia), Systems-enabled drug repurposing for cardiomyocyte proliferation

## Resources

Netflux software for user-friendly modeling of biological networks

<https://github.com/saucermanlab/Netflux>

Video introduction and tutorials for Netflux

<https://www.youtube.com/watch?v=tU2gU8d5hvQ&list=PLTbDE7ZQfKy-ijd5ZrCQJ7eB-NSCQKI>  
[Bi](#)

45 publications Using Netflux or Logic-Based Differential Equations

[https://docs.google.com/document/d/1FjzbdYM3lyllpgx0t4mQ6\\_zQETJ1MS2QQAgS\\_e\\_rX1Fo/e/dit?usp=sharing](https://docs.google.com/document/d/1FjzbdYM3lyllpgx0t4mQ6_zQETJ1MS2QQAgS_e_rX1Fo/e/dit?usp=sharing)



<https://tinyurl.com/netfluxmeet>