

# BIOLOGICAL MODELING SPECIALTY SECTION RECEPTION & WEBINAR

INVITED SPEAKER

***SIR MODELING OF COVID-19 TRANSMISSION***

**BENJAMIN LOPMAN, PHD**

DEPARTMENT OF EPIDEMIOLOGY,  
ROLLINS SCHOOL OF PUBLIC HEALTH,  
EMORY UNIVERSITY

# AGENDA

PART 1- BMSS business briefing

PART 2- WEBINAR:

*SIR Modeling of COVID-19 Transmission by Dr Benjamin Lopman*

# AWARDS

## 2020 Perry J. Gehring Award for Biological Modeling

**Dr. Zhenzhen Shi**, Postdoctoral Fellow at Emory University, mentored by Dr. Qiang Zhang. “Development of a Virtual Population Model of Thyroid Hormone Regulation for Safety Assessment of Endocrine Disrupting Chemicals”.

**Honesty Tohon**, Graduate Student at University of Montreal, mentored by Dr. Sami Haddad. “Estimation of toluene exposure in air from BMA (S-benzylmercapturic acid) urinary measures using a reverse dosimetry approach based on physiologically based pharmacokinetic modeling”.

# AWARDS

## 2020 Andersen-Clewell Trainee Award with RASS/Endowment

**Qiran Chen**, Graduate Student at Indiana University, mentored by Dr. Kan Shao. "A Novel Dose-Response Framework with Quantitatively Integrated MOA Information".

## 2020 BMSS Best Trainee Abstract Award

**Kazi Tasneem**, Graduate Student at Vanderbilt University. "Toxicokinetic Model Predicts Cellular Exposure in Organ-on-Chip Microdevices".

# AWARDS

## 2019 Biological Modeling Best Paper

**Wei-Chun Chou and Zhoumeng Lin.** Bayesian evaluation of a physiologically based pharmacokinetic (PBPK) model for perfluorooctane sulfonate (PFOS) to characterize the interspecies uncertainty between mice, rats, monkeys, and humans: Development and performance verification. *Environ Int.* 2019.

**Serena Manganelli, Alessandra Roncaglioni, Kamel Mansouri, Richard S Judson, Emilio Benfenati, Alberto Manganaro, Patricia Ruiz.** Development, validation and integration of in silico models to identify androgen active chemicals. *Chemosphere.* 2019

# AWARDS

## 2019 Biological Modeling Best Paper

### Honorable mentions:

**Han AA, Timchalk C, Carver ZA, Weber TJ, Tyrrell KJ, Sontag RL, Gibbins T, Chrisler WB, Weitz KK, Du D, Lin Y, Smith JN.** Physiologically Based Pharmacokinetic Modeling of Salivary Concentrations for Noninvasive Biomonitoring of 2,4-Dichlorophenoxyacetic Acid (2,4-D). *Toxicol Sci.* 2019

**Ring CL, Arnot JA, Bennett DH, Egeghy PP, Fantke P, Huang L, Isaacs KK, Jolliet O, Phillips KA, Price PS, Shin HM, Westgate JN, Setzer RW, Wambaugh JF.** Consensus Modeling of Median Chemical Intake for the U.S. Population Based on Predictions of Exposure Pathways. *Environ Sci Technol.* 2019.

# TREASURY REPORT

Looking good! 👍 👍

2019 – 2020: + \$2 K year-end

2020 – 2021: + \$6 K starting

# THANK YOU

Outgoing Officers:

- **Jeff Fisher** (Past President)
- **Tammie Covington** (Secretary-Treasurer)
- **Alicia Paine** (Councilor)



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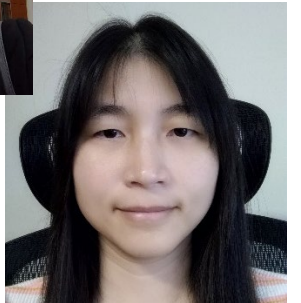
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Michel Bteich



# MASCOT

Future prize winners for BMSS Reception Quizzes needs a name!



Details can be found in the newsletter

# SESSION PROPOSALS

Submit before May 30<sup>th</sup>, 2020 for review by BMSS

Email to [BMSSreviews@gmail.com](mailto:BMSSreviews@gmail.com) or Andy ([andy.nong@canada.ca](mailto:andy.nong@canada.ca))

DEADLINE for submission to SOT is June 12, 2020

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Please stay tuned for our new updated website!

(<https://www.toxicology.org/groups/ss/BMSS/>)

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# Invited Speaker

## *SIR MODELING OF COVID-19 TRANSMISSION*

*Benjamin Lopman, PhD*

*Department of Epidemiology*

*Rollins School of Public Health*

*Emory University*