

WORKSHOP ON

EVOLUTIONARY SYSTEMS BIOLOGY & MODELING

Wisconsin Institute for Discovery, UW-Madison, August 4 & 5, 2016



PROGRAM OF EVENTS



DAY 1: THURSDAY, AUGUST 4, 2016

8:00am.....**Registration**

Registration, Poster Setup, Morning Coffee

9:00am.....**Laurence Loewe (UW-Madison)**

Welcome to EvoSysBio, Workshop Overview and Context: Why Modeling Needs More than One Perspective.

SESSION 1: ANTIBIOTICS RESISTANCE

9:15am.....**Mentewab Ayalew (Spelman College, Invited Speaker)**

Are Antibiotic Resistance Mechanisms Different in Plants and Bacteria?

~ BREAK, 10:00AM ~ POSTERS ~

10:15am.....**Ye Xu (UW-Madison)**

Germination Interactions among *Streptomyces*

11:00am.....**Erik Wright (UW-Madison)**

Survival of the Common is Nearly as Widespread as Survival of the Fittest among Antibiotic Producing Bacteria

~ CATERED LUNCH, 12:00PM ~ POSTERS ~

SESSION 2: TUTORIAL ON NETWORK BIOLOGY

1:00pm.....**Sushmita Roy (UW-Madison)**

Computational Approaches for Studying Regulatory Networks: From Inference to Evolution, Part 1

~ BREAK, 2:00PM ~ POSTERS ~

2:15pm.....**Sushmita Roy (UW-Madison)**

Computational Approaches for Studying Regulatory Networks: From Inference to Evolution, Part 2

~ COFFEE, 3:15PM ~ POSTERS ~

SESSION 3: MODELING VARIOUS SYSTEMS IN BIOLOGY

3:45pm.....**Kate Scheuer (UW-Madison)**

A 25-Years Overview of Time Series of the *Drosophila melanogaster* Circadian Clock

4:30pm.....**Brian McLoone (UW-Madison)**

A Multilevel N-Player Snowdrift Game and the Evolution of Cooperation

5:15pm.....**Official End of Day One**

Informal Discussion of various Models and Modeling Questions, until Doors Close at 7:00pm

EvoSysBio DAY 2: FRIDAY, AUGUST 5, 2016

9:00am.....**Registration**
Registration, Poster Setup (if needed), Morning Coffee

9:55am.....**Laurence Loewe (UW-Madison)**
Introductory Remarks on Common Ground between Transdisciplinary Education and Programming Languages

SESSION 1: INSPIRING TRANS-DISCIPLINARY WORK FOR EVOSYSBIO

10:00am.....**Mentewab Ayalew (Spelman College, Invited Speaker)**
How Biology and Physics Departments Can Collaborate on Teaching

10:30am.....**John Yin (UW-Madison)**
Trans-disciplinary Aspects of an Engineering Education

11:00am.....**Laurence Loewe and Brian McLoone (UW-Madison)**
Experiences with a Trans-disciplinary EvoSysBio Course in an Efficient Disciplinary Education Environment

11:30am.....**Open Discussion**
An Open Discussion about Inspiring Trans-Disciplinary Work in EvoSysBio and Beyond

~ OFF-SITE LUNCH BREAK: BIOLOGY ON A NAPKIN, 12:00PM ~

SESSION 2: EVOLVIX SYNTAX REVIEW

2:00pm.....**Laurence Loewe (UW-Madison)**
The Importance of Names in Biological Modeling and the Flipped Programming Language Design Approach

~ COFFEE, 2:45PM ~ POSTERS ~

3:00pm.....**Lea Rogers (Spelman College) and Laurence Loewe (UW-Madison)**
Pain(t) by Logic: The Ambiguity Game

3:45pm.....**Laurence Loewe (UW-Madison)**
Discussion of Fundamental Modes of Computing: How can we integrate this *and* be user friendly?

5:15pm.....**Mentewab Ayalew (Spelman College) and Laurence Loewe (UW-Madison)**
Closing Remarks

5:30pm.....**End of Day Two**
Informal Discussion until doors close at 6:00pm

POSTERS

are on display for the meeting's duration
If you want to discuss a poster, please find the presenter during a break period.



~ THANK YOU FOR ATTENDING ~

