



# Short Course on the Genetics of Addiction

September 11-16, 2016

## **EVENT SCHEDULE**

*All sessions are at the Highseas Conference Center*

### **Sunday, September 11<sup>th</sup>**

PM

5:00 Registration and Reception at Highseas

6:00 Dinner

### **Monday, September 12<sup>th</sup>**

AM

7:30-8:15 **Breakfast**

8:15-8:30 **Course Welcome**  
*Elissa Chesler, Ph.D., The Jackson Laboratory*

8:30-9:30 **Overview of Alcoholism and Addiction**  
*Wade Berrettini, M.D., Ph.D., University of Pennsylvania*

9:30-10:30 **Addiction Related Cognition**  
*David Jentsch, Ph.D., University of California, Los Angeles*

10:30-11:00 **Break**

11:00-12:00 **The Science, Art & Anecdotes of Behavioral Phenotyping**  
*Stacey Rizzo, Ph.D., The Jackson Laboratory*

PM

12:00-1:00     **Lunch**

1:00-2:30     **Student Presentations**

2:30-6:00     **Free Time**

6:00-7:00     **Dinner**

## **Tuesday, September 13<sup>th</sup>**

AM

7:30-8:15     **Breakfast**

8:15-8:30     **Morning Announcements**

*Elissa Chesler, Ph.D., The Jackson Laboratory*

8:30-9:30     **Characterizing the Molecular Mechanisms of Addiction Using Mouse Models**

*Paul J. Kenny, Ph.D., Icahn School of Medicine at Mount Sinai*

9:30-10:30   **Modeling Addiction-Relevant SNPs: *Oprm1* in Mice and Men**

*Julie A. Blendy, Ph.D. Perelman School of Medicine, University of Pennsylvania*

10:30-11:00   **Break**

11:00-12:00   **Genetics of Addiction in Selected Lines**

*Nicholas Grahame, Ph.D., Indiana University-Purdue University, Indianapolis*

PM

12:00-1:00     **Lunch**

1:00-2:00     **Complex Trait Analysis and Advanced Mouse Populations**

*Gary Churchill, Ph.D., The Jackson Laboratory*

2:00-3:00     **Gene Expression Analysis and eQTL**

*Shannon McWeeney, Ph.D., Oregon Health & Science University*

3:00-6:00     **WORKSHOP: Gene Expression Analysis and QTL Mapping 1**

*Shannon McWeeney, Ph.D., Oregon Health & Science University*

6:00             Dinner on your own (*Items will be available in the snack room for making your own dinner or you can go into Bar Harbor*)

## **Wednesday, September 14<sup>th</sup>**

AM

7:30-8:15      **Breakfast**

8:15-8:30      **Announcements**

*Elissa Chesler, Ph.D., The Jackson Laboratory*

8:30-9:30      **Mapping Addiction in Closely Related Strains**

*Vivek Kumar, Ph.D., The Jackson Laboratory*

9:30-10:30    **High Throughput Genetic Studies of Addiction**

*Lisa Tarantino, Ph.D., University of North Carolina*

10:30-11:00   **Break**

11:00-12:00   **Systems Genetics and Integrative Genomics**

*Elissa Chesler, Ph.D., The Jackson Laboratory*

PM

12:00-1:00    **Lunch**

1:00-2:00      **DO & eQTL Mapping**

*Dan Gatti, Ph.D., The Jackson Laboratory*

2:00-5:00      **WORKSHOPS: R/QTL, DOQTL, QTLREL, Sanger Mouse Genomes, GeneNetwork and Gene Weavery**

5:00-6:30      **Free Time**

6:30             **Dinner**

7:30-9:00      **Clinical Translation**

*Bradley Evanoff, M.D., MPH, Washington University in St. Louis*

## **Thursday, September 15<sup>th</sup>**

AM

7:30-8:15      **Breakfast**

8:15-8:30      **Announcements**

*Elissa Chesler, Ph.D., The Jackson Laboratory*

- 8:30-9:30     **Pharmacogenetics**  
*Wade Berrettini, M.D., Ph.D., University of Pennsylvania*
- 9:30-10:30   **Refinement of the Human Addiction Phenotype**  
*Pamela A. Madden, Ph.D., Washington University, St Louis*
- 10:30-11:00   **Break**
- 11:00-12:00   **Epigenetics**  
*Chris Pierce, University of Pennsylvania*
- PM
- 12:00-1:00    **Lunch**
- 1:00-2:00     **Human Genetics Analysis**  
*Richard Crist, Ph.D., University of Pennsylvania*
- 2:30-3:30     **Break**
- 3:30-4:30     **Career Paths and NIDA Funding Opportunities for Research on the Genetics of Addiction**  
*Jonathan Pollock, Ph.D., National Institute on Drug Abuse/NIH*
- 5:00-6:30     **Free Time**
- 6:30            **Lobster Dinner**

### **Friday, September 16<sup>th</sup>**

- AM
- 7:30-8:15     **Breakfast**
- 8:15-8:30     **Announcements**  
*Elissa Chesler, Ph.D., The Jackson Laboratory*
- 8:30-9:30     **CRISPR-Cas 9**  
*Michael Wiles, Ph.D., The Jackson Laboratory*
- 9:30-10:30    **Nicotine GWAS – Anatomy of a Success Story**  
*Thorgerir E. Thorgerirsson, Ph.D., deCODE Genetics*
- 10:30-11:00   **Break**

11:00-12:00    **PGC**  
*Raymond Walters, Ph.D., Broad Institute*

PM

12:00-1:00    **Lunch**

1:00-2:00    **Human Addiction Genetics**  
*Laura Bierut, M.D., Washington University, St Louis*

End of Course – Labs remain open

**6:00pm**        **Optional Dinner at Higheas - please sign up in advance**