



The Jackson  
Laboratory

## Short Course on the Genetics of Addiction

January 13-16, 2025

Morgan State University  
Baltimore, Maryland

### Schedule of Activities

#### Monday, January 13<sup>th</sup>

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| 8:30 am  | <b>Course Welcome &amp; Announcements</b><br>Elissa Chesler, Ph.D., The Jackson Laboratory                       |
| 8:45 am  | <b>Lecture: Gaps &amp; Opportunities in Addiction Research</b><br>Ingrid Tulloch, Ph.D., Morgan State University |
| 9:30 am  | <b>Lecture: Human Genetics of Addiction</b><br>Danielle Dick, Ph.D., Rutgers University                          |
| 10:15 am | <b>Coffee Break</b>  |
| 10:45 am | <b>Lecture: Mouse Genetics &amp; Addiction</b><br>Elissa Chesler, Ph.D., The Jackson Laboratory                  |
| 11:30 am | <b>Lecture: Modeling Addiction Phenotypes</b><br>David Jentsch, Ph.D., Binghamton University                     |
| 12:15 pm | <b>Lunch Break</b>   |
| 1:15 pm  | <b>Lecture: Genetic Variation of Overdose</b><br>Jason Bubier, Ph.D., The Jackson Laboratory                     |
| 2:00 pm  | <b>DEMO: MPD, MGI &amp; Mouse Demos</b><br>TBD from The Jackson Laboratory                                       |
| 2:45 pm  | <b>Coffee Break</b>  |
| 3:00 pm  | <b>Panel Discussion</b><br>Moderated by: TBD   |
| 4:30 pm  | <b>Adjourn for Day</b>   |

#### Tuesday, January 14<sup>th</sup>

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| 8:30 am | <b>Announcements</b> |
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- 8:45 am **Lecture: Transcriptomics**  
Mary Kay Lobo, Ph.D., University of Maryland School of Medicine
- 9:30 am **Lecture: TBD**
- 10:15 am **Coffee Break**
- 10:45 am **Lecture: Epigenetics: Introduction and Overview**  
Ryan Logan, Ph.D., UMass Chan Medical School
- 11:30 am **Lecture: Epigenetics of Addiction**  
Jean Lud Cadet, Ph.D., NIDA
- 12:15 pm **Lunch Break**
- 1:15 pm **Demo: Data Analysis**  
Heidi Fisher, Ph.D., The Jackson Laboratory
- 2:00 pm **NIDA Funding Opportunities**  
Amy Lossie, Ph.D., NIDA
- 2:45 pm **Coffee Break**
- 3:00 pm **Panel Discussion**  
Moderated by: TBD
- 4:30 pm **Adjourn for Day**

## Wednesday, January 15<sup>th</sup>

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- 8:30 am **Announcements**
- 8:45 am **Lecture: Introduction to GWAS**  
Howard Edenberg, Ph.D., Indiana University School of Medicine
- 9:30 am **Lecture: Using GWAS Inferring Transcripome-Therapeutics**  
Alex Hatoum, Ph.D., Washington University in St. Louis
- 10:15 am **Coffee Break**
- 10:45 am **Lecture: Molecular Genetics – Interpreting GWAS**  
Rohan Palmer, Ph.D., Emory University
- 11:30 am **Lecture: Chronic Health**  
Holly Moore, Ph.D., NIDA
- 12:15 pm **Lunch Break**
- 1:15 pm **Demo: Consilience-Geneweaver Webtool**  
Chelsie Benca-Bachman, Ph.D., Brown University

- 2:00 pm            **Demo: All of Us**  
Anjené Musick, Ph.D., MPH, National Institutes of Health
- 2:45 pm            **Coffee Break**
- 3:00 pm            **Panel Discussion**  
Moderated by: TBD
- 4:30 pm            **Adjourn for Day**

## Thursday, January 16<sup>th</sup>

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- 8:30 am            **Announcements**
- 8:45 am            **Lecture: Developmental Risk for Addiction**  
TBD
- 9:30 am            **Lecture: ABCD & Addiction**  
Pamela Madden, Ph.D., Washington University in St. Louis
- 10:15 am           **Coffee Break**
- 10:45 am           **Lecture: TBD**  
Julie Blendy, Ph.D., University of Pennsylvania Perelman  
School of Medicine
- 11:30 am           **Lecture: CRISPR**  
TBD
- 12:15 pm           **Lunch Break**
- 1:15 pm            **Lecture: Pain**  
TBD
- 2:00 pm            **Lecture: Machine Learning and Phenotyping**  
Vivek Kumar, Ph.D., The Jackson Laboratory
- 2:45 pm            **Coffee Break**
- 3:00 pm            **Panel Discussion**  
Moderated by: TBD
- 4:30 pm            **Adjourn**