

# gliadelphia



ANA ancillary meeting

# 9.12.23

## Philadelphia Marriott Downtown

Thanks to all our attendees & congratulations to our poster award winners:

**Dr William Aisenberg (Penn, FC Bennett Lab)**

*Replacing GALC knockout microglia reduces pathologic macrophage populations and improves Krabbe disease neuropathology*

**Dr Eileen Collyer (Jefferson, Blanco-Suarez Lab)**

*Absence of Chordin-like 1 aids motor recovery in a mouse model of stroke*

**Dr Lindsay Festa (CHOP&Penn, Grinspan & Jordan-Sciutto Labs)**

*Regulation of the oligodendrocyte cytoskeleton by the lysosomal cation channel TRMPL1*

Generously supported by our Co-Sponsors:



**Penn Medicine**

Center for Neuroinflammation and Neurotherapeutics  
Division of MS and related disorders



**Jefferson**

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**Children's Hospital  
of Philadelphia<sup>®</sup>**

Leukodystrophy Center



**Temple University  
Lewis Katz School of Medicine**

**Department of Neural Sciences**

*Philadelphia*

ANA ancillary meeting



**September 12, 2023**

**Event Program**

## Many Thanks to Our Generous Sponsors



Vickie and Jack Farber Institute for Neuroscience



Center for Neuroinflammation and Neurotherapeutics  
Division of MS and related disorders



## Program Details

### LOCATION:

#### Philadelphia Marriot Downtown

Salons C-D, 5th Floor

1201 Market Street Philadelphia PA 19107

### AGENDA:

*Snacks & drinks served throughout*

12:45: Doors open, Poster Set-up period

1:00: Arrival

1:15: Session 1:

- ❖ Introductory Remarks
- ❖ *Guest Lecture:* Dr. Florian Eichler, Massachusetts General Hospital, “Approaches to Gene Therapy in the Leukodystrophies”
- ❖ *Gliadelphia Junior PI Highlight:* Dr Elena Blanco-Suarez, Jefferson, “Astrocytes and their role in stroke recovery”
- ❖ PI Flash Presentations Round I

1:45 Meet & Greet, Posters

2:30 Session 2

- ❖ *Guest Lecture:* Dr Erik Musiek, Washington University, “The circadian clock regulates astrocyte function in health and disease.”
- ❖ *Gliadelphia Junior PI Highlight:* Dr Mariko Bennett, CHOP, “What do microglia do? The next generation of neurotherapeutics”
- ❖ PI Flash Presentations II
- ❖ Group Photo

3:00 Meet & Greet, Posters

3:45 Poster Prizes, Closing Remarks

4:00 Event Wrap-up & Poster Take Down

Poster Presenters: Posters should be labeled with a badge (provided) to specify whether you wish to be considered for the “microglia”, “oligodendrocyte”, or “astrocyte” poster competition as each has different judges.

PI Flash Presenters: We’ll queue up your slides and ask that you line up to give your 1-2 min lab introduction; we’ll buzz you at time!

## Posters

|    | Name                       | Institution | Poster Title  |
|----|----------------------------|-------------|---|
| 1  | Alexander Starr            | Penn        | Comparative Analysis Of HIV-Infected Macrophages and Microglia Treated with CB2-Specific Agonists   |
| 2  | Caela Long                 | Penn        | HIV Pre-Exposure Prophylaxis (Prep) Inhibits Oligodendrocyte Maturation   |
| 3  | Danielle Barber            | CHOP        | Effects of Microglia Depletion on Brain Lesion Size and Neurodevelopmental Milestones After Hypoxia-Ischemia in Male and Female C57BL/6J Mice |
| 4  | Delia Talos                | Penn        | Seizures Increase Microglial Proliferation in Alzheimer's Disease   |
| 5  | Eileen Collyer             | Jefferson   | Absence of Chordin-Like 1 Aids Motor Recovery in a Mouse Model of Stroke  |
| 6  | Emma Kotes                 | CHOP        | Time-To-Event Measures by Electronic Medical Record Extraction in a Multisite Leukodystrophy Population                                       |
| 7  | Gabrielle Spagnuolo        | Jefferson   | Elucidating the Role and Mechanism of Astrocytic P2Y1R Neuroprotection in an In-Vitro Model of Ischemic Stroke.                               |
| 8  | Geena John                 | Drexel      | Characterization Of Calcium Clearance Dynamics in Hippocampal Ex-Vivo Cultures  |
| 9  | Hannah Loo                 | Penn        | Cortical Microglia Heterogeneity in Remyelination and Aging   |
| 10 | Jillian Saunders           | Drexel      | The Transcriptional Signature of Astrocyte-Like Glia Across Drosophila Melanogaster Late-Stage Metamorphosis                                  |
| 11 | Johnathan Wong             | Penn        | Investigating the Role of Copper in Oligodendrocyte Myelination   |
| 12 | Joseph Gallegos            | Penn        | Do Tnfa, IL-1 $\alpha$ , and C1q Promote Cortical Oligodendrocyte Regeneration After Demyelination?   |
| 13 | Julia Coakley              | Temple      | Oligodendrocyte-Targeted Transgene Expression and Cell-Specific Ablation With AAV   |
| 14 | Julia Farnan               | Drexel      | Investigating Astrocyte Reactivity in Promoting Melanoma Brain Metastases   |
| 15 | Lucas Trevoli              | CHOP        | Improved Gene Therapy for Metachromatic Leukodystrophy  |
| 16 | Lindsay Festa              | Penn        | Regulation of the Oligodendrocyte Cytoskeleton by the Lysosomal Cation Channel TRPML1   |
| 17 | Maeve Coughlan             | Penn        | TRPML1 Positions Lysosomes to Remodel Astrocytic Processes in Response to Neuronal Cues   |
| 18 | Marisa Adhikusuma Jeffries | CHOP        | The Effect of Dolutegravir on Oligodendrocyte Maturation Is Dependent on Timing and Duration of Treatment                                     |
| 19 | Mike Le                    | Drexel      | Neuron-Astrocyte Sonic Hedgehog Signaling is Stimulated in an Activity-Dependent Manner   |
| 20 | Oluwatofunmi Oteju         | Drexel      | Stimulants May Enhance HIV-Infection of Human iPSC-Derived Microglia and Monocyte-Derived Macrophages   |
| 21 | Sai Chaluvadi              | Penn        | Lysosomal Lipid Accumulation Alters Macrophage Transcriptional and Functional Profiles  |
| 22 | Sonia Lombroso             | Penn        | Discovering Regulators of Microglial Identity   |
| 23 | Sunetra Sase               | CHOP        | Therapeutic Suppression of Tubb4a Rescues H-ABC Leukodystrophy  |
| 24 | Sylvia Mutua               | CHOP        | Mapping Function Prior To Diagnosis is Essential in Metachromatic Leukodystrophy  |
| 25 | William Aisenberg          | Penn        | Replacing Galcko Microglia Reduces Pathologic Macrophage Populations and Improves Krabbe Disease Neuropathology                               |
| 26 | Zila Martinez-Lozada       | CHOP        | Characterization Of a Subpopulation of Astrocyte Precursor Cells in The Neonatal Subventricular Zone  |

## Announcements/Upcoming Events

### P-SPINE

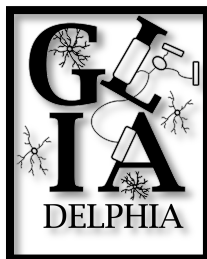
The 3rd annual Philadelphia SPINE (P-SPINE) symposium is an annual, postdoc only symposium showcasing some of the most talented and diverse emerging neuroscientists from across the United States. P-SPINE is scheduled for Sept. 27, 2023 on the University of Pennsylvania campus. For more information and to register, visit [spinephilly.org](http://spinephilly.org). Registration is free and trainees are encouraged to present posters.

### Neuroscience Research Day



The Department of Neural Sciences at Temple University Lewis Katz School of Medicine is hosting the 2nd annual Neuroscience Research Day on November 8th, 2023. Neuroscientists in the Philadelphia area are invited to attend, and students and postdocs from other universities in the area and from Temple are encouraged to submit posters. For more information, please contact Shin Kang ([shin.kang@temple.edu](mailto:shin.kang@temple.edu))

### Gliadelphia Happy Hours



We are thrilled to announce that Gliadelphia will be hosting a series of happy hour events this year. These gatherings offer an opportunity for students and post-doctoral researchers in Philadelphia's glial scientific community to come together in an informal setting to unwind, connect, and network. These events are designed to foster meaningful conversations, collaborations, and the exchange of ideas, strengthening the bonds within our scientific community. Stay tuned for more details on dates and locations, as we look forward to creating a space where science meets socializing! To stay in touch, please fill out our membership survey (<https://tinyurl.com/gliadelphiamember>)

### CHOP Myelin Research Group

The CHOP Neuroscience Center & Leukodystrophy Center for Excellence is formalizing a collaborative group of research labs focused on myelin and glial research at CHOP & Penn. Anyone from CHOP and beyond is welcome to join the initiative. We will host regularly occurring educational seminars to facilitate and enrich partnerships across research teams. Keep an eye out for an announcement for our inaugural event to be hosted in the late fall 2023. To get on the mailing list, please contact Samantha Ferrante (Administrative Director for Research, Neuroscience Center) at [ferrante@chop.edu](mailto:ferrante@chop.edu).

## Attendees

### Gliadelphia 2023 Event Organizers

Denise Garcia, Drexel  
 Elena Blanco-Suarez, Jefferson  
 Jennifer Orthmann-Murphy, Penn  
 Joseph Gallegos, Penn  
 Joshua Jackson, Drexel  
 Mariko Bennett, CHOP  
 Samantha Ferrante, CHOP  
 Shin Kang, Temple

### Gliadelphia Member Labs

| PI                       | Institution | Group                                     | Website   |
|--------------------------|-------------|---|---|
| Adeline Vanderver        | CHOP        | Leukodystrophy Center of Excellence       |   |
| Amit Bar-Or              | Penn        | Bar-Or Lab                                |   |
| Angelo Lepore            | Jefferson   | Lepore Lab                                | <a href="https://research.jefferson.edu/labs/researcher/lepore-laboratory.html">https://research.jefferson.edu/labs/researcher/lepore-laboratory.html</a>   |
| Andrea C.K. Mortensen    | Drexel      | A. Mortensen Lab                          | <a href="https://drexel.edu/medicine/about/departments/pharmacology-physiology/research/a-mortensen-lab/">https://drexel.edu/medicine/about/departments/pharmacology-physiology/research/a-mortensen-lab/</a> |
| Brigid Jensen            | Jefferson   | Jensen Lab                                | <a href="https://www.jeffersonhealth.org/clinical-specialties/weinberg-als-center/research">https://www.jeffersonhealth.org/clinical-specialties/weinberg-als-center/research</a>                             |
| Chris Bennett            | Penn        | FC Bennett Lab                            | <a href="http://fcblab.org">fcblab.org</a>  |
| Elena Blanco-Suarez      | Jefferson   | Blanco-Suarez Lab                         | <a href="http://www.blancosuarezlab.com">www.blancosuarezlab.com</a>  |
| Jacqui Barker            | Drexel      | Barker Lab                                |   |
| Jennifer Orthmann-Murphy | Penn        | Orthmann Murphy Lab                       | <a href="https://orthmannmurphylab.com/">https://orthmannmurphylab.com/</a>   |
| Judy Grinspan            | CHOP        | Grinspan lab                              |   |
| Kelly Jordan-Sciutto     | Penn        | Jordan-Sciutto Lab                        |   |
| Mariko Bennett           | CHOP        | Mariko Bennett Lab                        | <a href="http://mlblab.org">mlblab.org</a>  |
| Michael Haney            | Penn        | Haney Lab                                 |   |
| Olimpia Meucci           | Drexel      | Department of Pharmacology and Physiology | <a href="https://drexel.edu/medicine/about/departments/pharmacology-physiology/">https://drexel.edu/medicine/about/departments/pharmacology-physiology/</a>   |
| Peter J. Gaskill         | Drexel      | Gaskill Lab                               | <a href="https://www.gaskilllab.com">https://www.gaskilllab.com</a>   |
| Ramesh Raghupathi        | Drexel      | Ragupathi Lab                             |   |
| Shin Kang                | Temple      | Kang Lab                                  |   |
| Silva Markovic-Plese     | Jefferson   | Silva Markovic-Plese lab                  |   |
| Yuanquan Song            | CHOP        | Yuanquan Song                             |   |
| Zachary Klase            | Drexel      | Klase Lab                                 | <a href="http://huntingtheninja.com/">http://huntingtheninja.com/</a>   |



