



4th Patricia Levy Zusman International Workshop on Neuroregeneration



Houston Methodist Research Institute
Department of Neurosurgery
Center for Neuroregeneration



Organizers: Philip Horner, PhD; Karim Fouad, PhD; Organizing Committee: Erica Dale, PhD; Mario Romero-Ortega, PhD; Francesca Taraballi, PhD; Veronica Tom, PhD; Yi-Lan Weng, PhD; Sonia Villapol, PhD

Tuesday March 7, 2023 (Day 0)

**** Please note:** all timings provided are in CST (US Central Standard Time Zone)

- 4:00pm-6:00pm **Registration and Dinner** (*limited seating, invited guests only*)
- 6:00pm-7:00pm **Ice Breaker** (a discussion on career by chance led by a mix of junior and senior scientists)
- 7:00pm-7:30pm **2021 Workshop Mini-Grant Winner**, Sarah Mondello, PhD
- 7:30pm-7:45pm **Introduction to Lizard Brain**, Brian Tarallo, Lizard Brain
- 7:45pm-8:15pm **Keynote Presentation 1:** Tension in Growth, Kristian Franze, PhD, Cambridge University
- 8:15pm-8:45pm **Keynote Presentation 2:** Expansion Microscopy, Ed Boyden, PhD, Massachusetts Institute of Technology

Wednesday March 8, 2023 (Day 1)

****Please note:** all timings provided are in CST (US Central Standard Time Zone)

- 8:30am-9:00am **Registration and Set-up**
- 9:00am-9:15am **Welcome Comments**
Philip Horner, PhD, Director, Center for Neuroregeneration, Houston Methodist
Karim Fouad, PhD, Professor, Rehabilitative Medicine, University of Alberta
- 9:15am-9:45am **Introduction to Gallery Wall and Facilitation Techniques**, Brian Tarallo, Lizard Brain
- 9:45am-10:45am **Session 1: Look at 'em Grow! Molecular Controls and Axon Growth Rates**
Moderator: Philip Horner, PhD, Houston Methodist
Speakers: Richard Eva, PhD, Cambridge University
Sika Zheng, University of California, Riverside
Yi-Lan Weng, Houston Methodist
Selected trainee: Melissa Rudy, Baylor College of Medicine
- 10:45am-11:00am **Coffee Break/Gallery Viewing**
- 11:00am-11:45am **Poster Blitz Presentations for Trainees**, Moderator: Erica Dale, PhD
- 11:45am-1:00pm **Lunch and Networking**
- 1:00pm-2:15pm **Session 2: Is it organic? The Vegan Approach: Injectable Biomaterials in Wound Healing and Regeneration, Including Excitable Materials**
Moderator: Francesca Taraballi, PhD, Houston Methodist
Speakers: Samuel I. Stupp, PhD, Northwestern University
Mario Romero-Ortega, PhD, University of Houston
Laura de LaPorte, PhD, DWI – Leibniz-Institut für Interaktive Materialien
Dena Shahriari, PhD, University of British Columbia
Selected trainee: Megh Patel, Texas A&M College of Medicine
- 2:15pm-2:45pm **Coffee Break/Gallery Viewing**
- 3:30pm- 5:00pm **Poster Session**
- 5:00pm-7:00pm **Dinner and Networking** (*limited seating, invited guests only*)



Thursday March 9, 2023 (Day 2)

- 9:00am-9:30am **Registration and Set-up**
- 9:30am-10:30am **Session 3: The Glia Idea? Glial and Plasticity**
Moderator: Veronica Tom, PhD, Drexel University
Speakers: Philip Horner, PhD, Houston Methodist
 Sebastian Werneburg, PhD, University of Michigan
 Caroline Escoubas, PhD, MD, UC San Francisco
 Selected trainee: Peter Park, Texas A&M College of Medicine
- 10:30am-10:45am **Coffee Break/Gallery Viewing**
- 10:45am-12:00pm **Session 4: Control Your Impulses: Tools in Mouse Systems – Plasticity**
Moderator: Karim Fouad, PhD, University of Alberta
Speakers: Terrance T. Kummer, MD, PhD, Washington University School of Medicine
 Zhigang He, PhD, BM, Harvard Medical School
 Keith Fenrich, PhD, University of Alberta
 Tuan Bui, PhD, University of Ottawa
 Selected trainee: Manohar Kodavati, Houston Methodist
- 12:00pm-1:00pm **Lunch and Networking**
- 1:00pm-1:30pm **Team Discussion/Brainstorming Session**
- 1:30pm-2:30pm **Session 5: Neuromodulation: Where Is the Current Going?**
Moderator: Mario Romero-Ortega, PhD, University of Houston
Speakers: Vivian Mushahwar, PhD, University of Alberta
 Dimitry Sayenko, MD, PhD, Houston Methodist
 Marco Capogrosso, PhD, University of Pittsburgh
 Selected trainee: Alex Steele, Houston Methodist
- 2:30pm-2:45pm **Coffee Break/Gallery Viewing**
- 2:45pm-3:45pm **Session 6: Single Cell Omics: Garbage In, Roses Out?**
Moderator: Yi-Lan Weng, PhD, Houston Methodist
Speakers: Jiaqian Wu, PhD, University of Texas Health Science Center at Houston
 Kaya Matson, PhD, National Institute of Neurological Disorders and Stroke
 Will Cafferty, PhD, Yale School of Medicine
 Selected trainee: Julio Mejia, Weill Cornell College of Medicine
- 4:15pm-9pm **Houston Rodeo** (*invited guests only*)

Friday March 10, 2023 (Day 3)

- 9:00am-9:30am **Registration and Set-up**
- 9:30am-10:30am **Session 7: Winning Bowels and Minds?**
Moderator: Sonia Villapol, Houston Methodist
Speakers: Karim Fouad, PhD, University of Alberta
 Michelle Hook, PhD, Texas A&M College of Medicine
 Ceren Yazar-Fisher, PT, PhD, University of Alabama at Birmingham
- 10:30am-10:45am **Coffee Break/Gallery Viewing**
- 10:45am-11:15am **Mini-Grant Elevator Pitch Preparation**, Moderator: Erica Dale, PhD
- 11:15am-12:00pm **Mini-Grant Elevator Pitches**, Moderator: Erica Dale, PhD
- 12:00pm-1:00pm **Lunch**
- 1:00pm-1:30pm **Awards and Closing Comments**, Philip Horner, PhD and Karim Fouad, PhD