



Patricia Levy Zusman International Workshop on Neuroregeneration

ORGANIZING COMMITTEE

Philip J. Horner (Co-Chair)	Karim Fouad (Co-Chair)
Ariel Levine	Elizabeth Bradbury
Cindy Farach-Carson	Robert Krencik

March 3, 2021 (Day 1)

All sessions will take place on a virtual platform.

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

9:00am-9:30am	Log-in
9:30am-9:45am	Welcome Comments Philip Horner, PhD , Director, Center for Neuroregeneration, Houston Methodist Karim Fouad, PhD , Professor, Rehabilitative Medicine, University of Alberta
9:45am-10:00am	Introduction to Miro and facilitation techniques
10:00am-11:00am	Keynote Vision: A visualization and debate of what regeneration will look like in 2071 Keynote Discussants: Vance Lemmon, PhD , University of Miami Wolfram Tetzlaff, MD, PhD , University of British Columbia
11:00am-11:10am	Horner Lab, Philip Horner, PhD
11:10am-11:20am	Open Data Commons, Karim Fouad, PhD
11:20am-11:40am	Mini-Grant Development of 2019 Workshop Winners (<i>10 min per team</i>) -Collaborative Projects of Ariel Levine, PhD , NINDS and Steve Perlmutter, PhD , UW - <i>Mechanisms of Glial-Regulated Synaptic Plasticity After Injury</i> , Joshua Burda, PhD , Cedars-Sinai Medical Center and Robert Krencik, PhD , Houston Methodist

Session 1: Axon and Dendrite Growth Mechanisms

Moderator: **Philip Horner, PhD**, Houston Methodist

11:40am-12:00pm	<i>Dendritic Growth Mechanisms in Head Injury</i> , Kimberly Tolias, PhD , Baylor College of Medicine
12:00pm-12:20pm	<i>Axon Regeneration and CNS Repair</i> , Binhai Zheng, PhD , University of California San Diego
12:20pm-12:40pm	<i>Extracellular Mechanisms of Axon Growth</i> , Philippe Monnier, PhD , University of Toronto
12:40pm-1:00pm	Session 1 Discussion
1:00pm-1:15pm	1-minute Poster Blitz for all posters
1:15pm-2:00pm	Lunch



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Session 2: Plasticity in the Injury Environment

Moderator: **Ariel Levine, MD, PhD**, NINDS (National Institute of Neurological Disorders and Stroke)

2:00pm-2:20pm	<i>Extracellular Mechanisms of Spinal Plasticity</i> , Elizabeth Bradbury, PhD , Kings College London
2:20pm-2:40pm	<i>Intrinsic and Extrinsic Mechanisms of Plasticity</i> , Veronica Tom, PhD , Drexel University of Medicine
2:40pm-2:50pm	Coffee Break
2:50pm-3:00pm	Miro time!
3:00pm-3:20pm	<i>Motor Cortex Neuromodulation and Spinal Cord Plasticity</i> , John Martin, PhD , City University of New York School of Medicine
3:20pm-3:40pm	<i>Spinal Stimulation and Neuromodulation of the Respiratory System</i> , Erica Dale, PhD , University of Florida
3:40pm-4:10pm	Session 2 Discussion

March 4, 2021 (Day 2)

All sessions will take place on a virtual platform.

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9:00am-9:30am	Log-in and Miro Set-up
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Session 3: Neuromodulation Session I

Moderator: **Karim Fouad, PhD**, University of Alberta

9:30am-9:50am	<i>Brain Stem Neuromodulation</i> , Patrick Whelan, PhD , University of Calgary
9:50am-10:10am	<i>Adenosine and Excitability of Spinal Circuitry</i> , Giuliano Taccola, PhD , International School for Advanced Studies (SISSA)
10:10am-10:30am	<i>Primate Optogenetics and Motor Systems</i> , Adriana Galvan, PhD , Emory University School of Medicine
10:30am-10:50am	Session 3 Discussion
10:50am-11:05am	Coffee Break
11:05am-11:15pm	Miro time!



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Session 4: Neuromodulation Session II

Moderator: **Karim Fouad, PhD**, University of Alberta

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| 11:15am-11:35am | <i>Neural Activity and Autonomic Function</i> , Aaron Phillips, PhD , ICORD (International Collaboration on Repair Discoveries) |
| 11:35am-11:55am | <i>Hypoxia and Neuromodulation</i> , Randy Trumbower, PhD , Harvard Medical School |
| 11:55am-12:15pm | <i>Optogenetic Modulation of Upper Limb Circuitry</i> , Sarah Mondello, PhD , University of Washington |
| 12:15pm-12:35pm | Session 4 Discussion |
| 12:35pm-1:30pm | Lunch Break |
| 1:30pm-2:30pm | Miro Time/Networking for Mini-Grant Teams and Proposals
(Mini-Grant teams formed must post their Team Name on Miro by 4:00pm in order to be considered for presentation and awards on Day 3.) |

Session 5: Brain Computer Interfaces

Moderator: **Amir Faraji, MD, PhD**, Houston Methodist

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| 2:30pm-2:50pm | <i>Sensory BCI</i> , Douglas Weber, PhD , Carnegie Mellon University |
| 2:50pm-3:10pm | <i>Closed Loop Stimulation and Locomotion</i> , Marina Martinez, PhD , University of Montreal |
| 3:10pm-3:30pm | <i>High-Performance Biocompatible Electronics for Neural Networks</i> , Dion Khodagholy, PhD , Columbia University |
| 3:30pm-3:50pm | Session 5 Discussion |
| 3:50pm-4:15pm | Mini-grant Development Team Name Announcement on Miro |



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March 5, 2021 (Day 3)

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9:00am-9:30am Log-in and Miro Set-up

Session 6: Emerging Topics

Moderator: **Robert Krencik PhD**, Houston Methodist

9:30am-9:50am	<i>Neurogenic Bladder and Urinary Reconstruction</i> , Rose Khavari, MD , Houston Methodist
9:50am-10:10am	<i>Tissue Engineering</i> , Cindy Farach-Carson, PhD , The University of Texas Health Science Center
10:10am-10:30am	<i>Combining Invasive with Non-Invasive Stim, Double the Potential</i> , Dimitry Sayenko, PhD , Houston Methodist
10:30am-10:50am	Session 6 Discussion
10:50am-11:00am	Coffee Break
11:00am-11:10am	Miro time!

Session 7: Early Stage Concepts and Team Building

Moderators: **Marina Martinez, PhD**, University of Montreal and **Philip Horner, PhD**, Houston Methodist

11:10am-12:20pm	Top 7 Trainee Poster Presentations (10 minutes each)
12:20pm-1:00pm	Lunch break with Trainee Poster Competition- <i>voting on Survey Monkey</i>
1:00pm-2:00pm	Mini-grant Development 2021 Presentations by Teams
2:00pm-2:30pm	Clinical Trials Summary, Linda Jones, PT, PhD , Thomas Jefferson University
2:30pm-3:30pm	Keynote Presentation, Jerry Silver, PhD , Case Western University
3:30pm-3:40pm	Coffee Break
3:40pm-3:50pm	Miro wrap-up
3:50pm-4:00pm	Awards
4:00pm-4:15pm	Closing comments by Philip Horner, PhD and Karim Fouad, PhD