

## Yunlu Zhu, Ph.D.

### Leon Levy Neuroscience Fellow

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## Education

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Ph.D. in Biology: Developmental Biology & Neuroscience <i>University of Virginia, VA</i>	2013 – 2019
B.S. in Life Sciences: Cell Biology <i>University of Science and Technology of China, Anhui, China</i>	2009 – 2013

## Research Experience

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Rainwater 30th Anniversary Tau Leadership Fellow	01/2022 – Present
Leon Levy Neuroscience Fellow	06/2020 – Present
Post-doctoral Fellow	10/2019 – Present
Supervisor: Dr. David Schoppik <i>Neuroscience Institute, NYU Grossman School of Medicine, NY</i> <ul style="list-style-type: none"><li>New zebrafish model for tauopathies</li><li>New technique for imaging neuronal response to body tilt (<i>J. Neuro.</i> 2022)</li><li>New behavior apparatus to examine zebrafish balance behavior (<i>Cell Reports.</i> 2023)</li></ul>	
Doctoral Researcher	08/2013 – 09/2019
Supervisor: Dr. Sarah Kucenas <i>Department of Biology, University of Virginia, VA</i> <ul style="list-style-type: none"><li>Novel function of neural crest cells in developmental debris clearance (<i>Cell</i>, 2019)</li><li>Roles of glycolysis in efferocytosis (<i>Nature</i>, 2018)</li></ul>	
Undergraduate Research Assistant	08/2012 – 06/2013
<i>Institute of Biochemistry and Cell Biology, Shanghai, China</i> <ul style="list-style-type: none"><li>New protein complex during ciliogenesis (<i>Nat. Cell Bio.</i>, 2013)</li></ul>	

## Publications

### Journal Articles

- Zhu Y, Auer F, Gelnaw H, Davis SN, et al. (2023), SAMPL is a high-throughput solution to study unconstrained vertical behavior in small animals. *Cell Reports*
- D'Elia KP, Hameedy H, Goldblatt D, Frazel P, Kroese M, Zhu Y, Hamling KR, Kawakami K, Liddelow S, Schoppik D, Dasen JS. (2022), Determinants of Motor Neuron Functional Subtypes Important for Locomotor Speed. *Cell Reports*
- Hamling KR, Zhu Y, Auer F, Schoppik D. (2022), Tilt In Place Microscopy (TIPM): a simple, low-cost solution to image neural responses to body rotations. *The Journal of Neuroscience*
- Arena K, Zhu Y, Kucenas S. (2022), Transforming growth factor-beta signaling modulates perineurial glial bridging following peripheral spinal motor nerve injury in zebrafish. *Glia*

5. Zhu Y, Crowley SC, Latimer AJ, Lewis GM, Nash R, Kucenas S. (2019), Migratory Neural Crest Cells Phagocytose Dead Cells in the Developing Nervous System. *Cell*
6. Morioka S, Perry SAJ, Raymond MH, Medina CB, Zhu Y, Zhao L, Sebulea V, Onengut S, Leitinger N, Kucenas S, Rathmell JC, Makowski L, Ravichandran KS. (2018), Efferocytosis induces a novel SLC program to promote glucose uptake and lactate release. *Nature*
7. Zhao H, Zhu L, Zhu Y, Cao J, Li S, Huang Q, Xu T, Huang X, Yan X, Zhu X. (2013), The Cep63 paralogue Deup1 enables massive de novo centriole biogenesis for vertebrate multiciliogenesis. *Nature Cell Biology*

### Book Chapters & Invited Contributions

1. Zhu Y, Hamling KR, Schoppik D. (2020), Chapter 6.25: Vestibulospinal Circuits and Posture Control Mechanisms in Fish. *The Senses (Second Edition)*
2. Micrographs: Garrett RH, Grisham CM. (2016), Chapter 12: Recombinant DNA, Cloning, Chimeric Genes, and Synthetic Biology. *Biochemistry (Sixth Edition)*

### Grants & Awards

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| 1. The International Zebrafish Society Christine Beattie Award<br><i>The International Zebrafish Society</i>          | 2022             |
| 2. 30th Rainwater Tau Leadership Award<br><i>The Rainwater Charitable Foundation, Fort Worth, TX</i>                  | 2022             |
| 3. Leon Levy Fellowship in Neuroscience<br><i>The Leon Levy Foundation, New York, NY</i>                              | 2020             |
| 4. Outstanding PhD Dissertation Award (The Fleming Prize)<br><i>Department of Biology, University of Virginia, VA</i> | 2020             |
| 5. The Dent Award<br><i>Department of Biology, University of Virginia, VA</i>   | 2020             |
| 6. UVA Brain Grant<br><i>Brain Institute, University of Virginia, VA</i>  | 2017, 2019       |
| 7. (Britt) Travel Award<br><i>Graduate Student and Post-Doc Association, University of Virginia, VA</i>               | 2016, 2017, 2019 |

### Selected Conference Talks

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| 1. 17th meeting of the International Zebrafish Conference (IZFC)<br><i>Virtual / Montreal, Canada</i>                      | 2022       |
| 2. 14th meeting of the Zebrafish Disease Models Society (ZDM14)<br><i>Virtual</i>  | 2021       |
| 3. Mid-Atlantic Regional Zebrafish Meeting (MARZ)<br><i>NIH / University of Maryland School of Medicine, Baltimore, MD</i> | 2023, 2019 |
| 4. Gordon Research Seminar (GRS): Glial Biology<br><i>Ventura, CA</i>  | 2019       |

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| 5. Cold Spring Harbor Laboratory (CSHL): Glia in Health & Disease<br><i>Cold Spring Harbor, NY</i>      | 2018 |
| 6. International Zebrafish Conference (IZFC)<br><i>University of Wisconsin-Madison, Madison, WI</i>     | 2018 |
| 7. Mid-Atlantic Regional Zebrafish Meeting (MARZ)<br><i>National Institutes of Health, Bethesda, MD</i> | 2016 |

## Selected Poster Presentations

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| • 15th meeting of the Zebrafish Disease Models Society (ZDM15)<br><i>Virtual / Sheffield, UK</i>                                 | 2022             |
| • Alzheimer's Association International Conference (AAIC)<br><i>Virtual / San Diego, CA</i>                                      | 2022             |
| • Society for Neuroscience (SFN) Annual Meeting: Neuroscience 2021<br><i>Virtual</i>   | 2021             |
| • American Society for Neurochemistry (ASN) Annual Meeting<br><i>Virtual / Denver, CO</i>  | 2021, 2016       |
| • International Zebrafish Conference (IZFC)<br><i>Virtual / Madison, WI / Denver, CO</i>   | 2021, 2018, 2016 |
| • Cold Spring Harbor Laboratory (CSHL): Zebrafish Neural Circuits & Behavior<br><i>Cold Spring Harbor, NY</i>                    | 2019             |
| • Gordon Research Conference (GRC): Glial Biology<br><i>Ventura, CA</i>  | 2019, 2017       |
| • Mid-Atlantic Regional Society for Developmental Biology Meeting (MASDB)<br><i>University of Virginia, Charlottesville, VA.</i> | 2018             |
| • Cold Spring Harbor Laboratory (CSHL): Glia in Health & Disease<br><i>Cold Spring Harbor, NY</i>                                | 2019, 2018       |
| • Mid-Atlantic Regional Zebrafish (MARZ) Meeting<br><i>NYU School of Medicine, NY / Johns Hopkins University, Baltimore, MD</i>  | 2017, 2015       |

## Teaching & Advising

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| <b>Postdoc Mentor</b><br><i>Neuroscience Institute, NYU Grossman School of Medicine, NY</i>                      | 2021 – Present                       |
| <b>Graduate Mentor</b><br><i>Department of Biology, University of Virginia, VA</i>                               | 2015 – 2019                          |
| <b>Lecturer, Lab Leader &amp; Teaching Assistant</b><br><i>Department of Biology, University of Virginia, VA</i> | Spring 2014, Spring 2015 & Fall 2015 |

## Academic & Leadership Services

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<b>SPiNES Seminar Series</b> Committee Member <i>Neuroscience Institute, NYU Grossman School of Medicine, NY</i>	2022-23
<b>Leon Levy Mini-symposium</b> Organizer, Host <i>Virtual</i>	08/2021
<b>Neuroscience Outreach Group at NYU Immersive Neuroscience Program</b> Assistant Lecturer <i>Virtual</i>	07/2021
<b>Intersections Science Fellows Symposium</b> Organizer - Programming Committee <i>Virtual</i>	01/2021
<b>Neuroscience Guest Lecture and Workshop</b> Assistant Lecturer <i>Columbia Pre-college Summer Immersion Program, NY</i>	07/2020
<b>Science Class at Elementary School</b> Invited Lecturer <i>Woodbrook Elementary School, VA</i>	12/2018
<b>Biology Lab Workshop</b> Lecturer <i>Thomas Harrison Middle School STEM, VA</i>	12/2016, 12/2017