

Jordan Taylor Moore

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EDUCATION

The Ohio State University	
Ph.D. Biomedical Engineering	2020-2022
M.S. Biomedical Engineering	2018-2020
B.S. Applied Mathematics	2012-2015

AWARDS

- 1st place graduate student poster (EHIRS 2020)**
- Chronic Brain Injury Travel Award (OSU CBI 2019)**
- Chronic Brain Injury Travel Award (OSU CBI 2018)**

RELATED EXPERIENCE

The Ohio State University (OSU), Columbus, Ohio	
Graduate Research Associate, Dr. Daniel Gallego-Perez Lab	08/2018 - Present
Neuroscience Scholars Program Associate	08/2020 – 05/2022
Peer Mentorship Program, Office of Graduate Education	08/2020 - 05/2021
Graduate Teaching Assistant, Dept. of Biomedical Engineering	08/2018 - 05/2019
Research Assistant 2 B/H, Dr. Daniel Gallego-Perez Lab	10/2017 - 07/2018
Research Assistant 1 B/H, Dr. Daniel Gallego-Perez Lab	12/2016 - 10/2017

The Ohio State University (OSU), Columbus, Ohio

Graduate Research Associate, Dr. Daniel Gallego-Perez Lab 08/2018 - Present

- Designed and performed experiments applying nanoscale tissue nano-transfection to nerve injury/repair applications and other neurodegenerative conditions
- Performed cell culture experiments to investigate cellular reprogramming capabilities
- Worked with my advisor to perform peer-review of manuscripts for journals
- Performed literature reviews and helped write grants for DoD and NIH applications

The Ohio State University (OSU), Columbus, Ohio

Peer Mentorship Program, Office of Graduate Education 08/2020 - 05/2021

- Assisted incoming graduate students in transitioning to graduate school and the new environment
- Mentored two first-year Ph.D. students: one biomedical engineering and one materials science engineering student

The Ohio State University (OSU), Columbus, Ohio

Graduate Teaching Assistant, Dept. of Biomedical Engineering 08/2018 - 05/2019

- Guided students through introductory labs of biomechanics, cell/tissue engineering, and imaging
- Performed demonstrations in a cleanroom facility for photolithography
- Created quiz questions over lecture material
- Created rubrics and graded assignments

The Ohio State University (OSU), Columbus, Ohio

Research Assistant, Laboratory Manager, Dr. Daniel Gallego-Perez Lab 12/2016 - 12/2018

- Performed *in vivo* transfections and assisted with tissue collection of rodents
- Performed immunohistochemistry (ICC, IF, DAB)
- Performed RNA and DNA isolation, cDNA synthesis, and qRT-PCR
- Assisted with electrophysiology measurements of rodents
- Worked with adherent cell cultures

The Ohio State University (OSU), Columbus, Ohio

Volunteer Research Assistant, Dr. Daniel Gallego-Perez Lab

11/2015 - 12/2016

Major Topics:

- Non-Viral Gene Delivery to Peripheral Nerve through a Nanostructured Chip Platform

The Ohio State University (OSU), Columbus, Ohio

Research Assistant 1 B/H, Laboratory Manager, Laser-Capture Molecular (LCM) Core Lab 05/2015 – 12/2016

- Managed the Laser Capture Molecular Core facility that currently houses two state-of-the-art laser capture microdissection instruments
- Managed and coordinated facility operational budgets and fiscal forecasting – analyzed and reconciled financial reports
- Presented facility growth, financial activities and fiscal projection in the monthly advisory meetings
- Managed one staff, multiple students, and supervised facility users
- Involved in hiring, coaching and mentoring staffs
- Coordinated research projects with several principal investigators (PIs) within OSU
- Implemented a new inventory management system

PROFICIENT LABORATORY SKILLS

- Mammalian cell culture: established and primary cell lines.
- Protein: immunohistochemistry, immunocytochemistry.
- RNA: isolation from tissue and cells/exosomes, cDNA preparation, qPCR analysis.
- DNA: PCR
- Microscopy: wide-field and confocal fluorescent, bright-field imaging, laser capture microdissection, SEM, and TEM.
- Muscle physiology: compound muscle action potential (CMAP), muscle force.

PUBLICATIONS

J. Moore, C. Wier, L. Lemmerman, L. Ortega-Pineda, D. Dodd, W. Lawrence, et al.

“Nanochannel-Based Poration Drives Benign and Effective Nonviral Gene Delivery to Peripheral Nerve Tissue”. *Advanced Biosystems* (2020, paper)

V. Shukla, S. Duarte-Sanmiguel, A. Panic, A. Senthilvelan, J. Moore, C. Bobba, et al.

“Reciprocal Signaling between Myeloid Derived Suppressor and Tumor Cells Enhances Cellular Motility and is Mediated by Structural Cues in the Microenvironment”. *Advanced Biosystems* (2020, paper)

L. Diaz-Starokozheva, D. Das, X. Gu, J. Moore, L. Lemmerman, I. Valerio, et al. *“Early Intervention in Ischemic Tissue with Oxygen Nanocarriers Enables Successful Implementation of Restorative Cell Therapies”*. *Cellular and Molecular Bioengineering* (2020, paper)

S. Duarte-Sanmiguel, V. Shukla, B. Benner, J. Moore, L. Lemmerman, W. Lawrence, et al.

“Guided migration analyses at the single-clone level uncover cellular targets of interest in tumor-associated myeloid-derived suppressor cell populations”. *Scientific Reports* (2020, paper)

J. Moore, D. Alzate-Correa, D. Dasgupta, W. Lawrence, D. Dodd, C. Mathews, et al.

“Nanoengineered exosomes drive targeted delivery of reprogramming genes to nerve tissue”. *Nanotechnology and Microfluidics* Published online December 27, 2019 (chapter)

N. Higueta-Castro, L. Lemmerman, A. Sunyecz, S. Duarte-Sanmiguel, ..., J. Moore, ..., et al.

“Nanoengineered exosomes drive targeted delivery of reprogramming genes to nerve tissue”. *Society for Neuroscience, Chicago, Illinois, USA October 19-23 2019 (abstract)*

J. Moore, N. Higueta-Castro, C. Wier, S. Kolb, I. Valerio, D. Gallego-Perez. *“Tissue nano-transfection drives localized delivery of therapeutics to the peripheral or central nervous system in a minimally invasive manner”*. *Society for Neuroscience, Chicago, Illinois, USA*

October 19-23 2019 (abstract)

J. Moore, N. Higueta-Castro, C. Wier, D. Gallego-Perez. "In vivo non-viral delivery of gene and cell therapies to peripheral and central nervous system". Society for Neuroscience, San Diego, California, USA November 3-7 2018 (abstract)

D. Gallego-Perez, D. Pal, S. Ghatak, V. Malkoc, N. Higueta-Castro, ..., **J. Moore**, ..., et al.

"Topical tissue nano- transfection mediates non-viral stroma reprogramming and rescue" Nat. Nanotechnol. (2017), [10.1038/nnano.2017.134](https://doi.org/10.1038/nnano.2017.134) Published online August 7, 2017 (paper)

CONFERENCES AND PRESENTATIONS

J. Moore, N. Higueta-Castro, C. Wier, S. Kolb, I. Valerio, D. Gallego-Perez. "Tissue nano-transfection promotes localized delivery of therapeutics to the peripheral and/or central nervous system via minimally invasive methods". Podium Presentation at the 5th Annual Engineering in Healthcare: Industry and Research Symposium, Columbus, Ohio, USA February 14, 2020

J. Moore, N. Higueta-Castro, C. Wier, S. Kolb, I. Valerio, D. Gallego-Perez. "Tissue nano-transfection promotes localized delivery of therapeutics to the peripheral and/or central nervous system via minimally invasive methods". Tissue Engineering Regenerative Medicine International Society, Orlando, Florida, USA December 2-5 2019

J. Moore, Natalia Higueta-Castro, Maria Balch, Hallie N. Harris, William Lawrence, Richard Stewart, Alec Sunyecz, Chandan K. Sen, Savita Khanna, Cameron Rink, Daniel Gallego-Perez. "Nano-reprogrammed Cell Intervention Targets Brain Injury Recovery". Podium Presentation at 13th Annual Davis Heart and Lung Research Day, Columbus (OH), USA, March 2018

N. Higueta-Castro, C. Wier, **J. Moore**, A. Sunyecz, C. Sen, J. Otero, S. Kolb, D. Gallego-Perez. "Novel Non-Viral Approaches for Gene Delivery to Peripheral Nerves". Poster Presentation at Target Nucleic Acid Detection & Delivery, South Bend (IN), USA, July 2018

N. Higueta-Castro, C. Wier, **J. Moore**, A. Sunyecz, C. Sen, J. Otero, S. Kolb, D. Gallego-Perez. "Novel Non-Viral Approaches for Gene Delivery to Peripheral Nerves". Podium Presentation at 3rd Annual Engineering in Healthcare: Industry and Research Symposium, Columbus (OH), USA, March 2018

N. Higueta-Castro, C. Wier, **J. Moore**, A. Sunyecz, C. Sen, J. Otero, S. Kolb, D. Gallego-Perez. "Non-Viral Gene Delivery to Peripheral Nerve through a Nanostructured Chip Platform". Poster Presented at Biomedical Engineering Society Meeting, Minneapolis (MN), USA, October 2016.