

KEVIN DAVIS

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Education **University of Miami**

Miami, Florida

2018-Present. Medical Scientist Training Program

Brigham Young University

Provo, Utah

2009–2015. B.S. Neuroscience.

Research Experiences **University of Miami**

Miami, Florida

2019. Dr. Abhishek Prasad. Research Rotation

Application design for home-use modulation of brain-computer interface in a patient with Spinal Cord Injury

2018. Dr. Bradley Goldstein. Research Rotation

Time-course expression of CXCLR4 within murine olfactory epithelium after injury

2018. Dr. Monica Perez. Research Rotation

Modulation of spasticity through vibration and acute intermittent hypoxia

University of Iowa

Iowa City, Iowa

2016–2018. Dr. Huxing Cui. Research Projects: Lateral hypothalamic regulation of blood pressure; behavioral and metabolic characterization of eating disorders associated with HDAC4^{A778T} mutation in mice

2015–2016. Dr. Andrew Pieper. Research Projects: Axonal degradation in mouse models of traumatic brain injury; neuroprotective properties of compound P7C3

Brigham Young University

Provo, Utah

2013–2015. Dr. Steven Charles. Research Projects: Control of redundant movements of the wrist and forearm; minimum-jerk trajectories applied to rotational movements of the wrist

2014–2015. Dr. Jonathan Wisco. Research Project: Developmental differences in putative pheromone-induced brain activity in male and female adults

Center for Sensorimotor Neural Engineering

Seattle, Washington

2014. Dr. Kat Steele. Research Projects: Long-term electromyography gait analysis in patients with cerebral palsy

Publications Published

2020. K. C. Davis, K. Saito, S. R. Rodeghiero, B. A. Toth, M. Lutter, H. Cui Behavioral alterations in mice carrying homozygous HDCA4A778T missense mutation associated with eating disorder. *Frontiers in Neuroscience*. 14. 1-12.
2019. Saito, K. et al. Celastrol Reduces Obesity in MC4R Deficiency and Stimulates Sympathetic Nerve Activity Affecting Metabolic and Cardiovascular Functions. *Diabetes* db181167 (2019). doi:10.2337/db18-1167 2018.
2018. Dorman, G. R., Davis, K. C., Peaden, A. W. & Charles, S. K. Control of redundant pointing movements involving the wrist and forearm. *J. Neurophysiol.* 120, 2138–2154 (2018).2016.
2016. M. Lutter, M. Z. Khan, K. Satio, K. C. Davis, I. J. Kidder, L. McDaniel, B. W. Darbro, A. A. Pieper, and H. Cui, "The Eating-Disorder Associated HDAC4(A778T) Mutation Alters Feeding Behaviors in Female Mice.," *Biol. Psychiatry*, pp. 1–8.
2016. T. C. Yin, J. R. Voorhees, R. M. Genova, K. C. Davis, A. M. Madison, J. K. Britt, C. J. Cintron-Perez, L. McDaniel, M. M. Harper, and A. A. Pieper, "Acute Axonal Degeneration Drives Development of Cognitive, Motor, and Visual Deficits after Blast-Mediated Traumatic Brain Injury in Mice," *eNeuro*, vol. 3, no. 5, p. e0220–16.2016.

Awards Presentations

2020. 1st place MD/PhD Trainee Presentation. Eastern-Atlantic Student Research Forum

Grants

2014. Brigham Young University Magnetic Resonance Imaging Research Facility Grant

Presentations & Abstracts Eastern-Atlantic Student Research Forum *Miami, Florida*

2020. Poster Presentation. Behavioral Alterations in homozygous HDAC4A778T mice with eating disorder. K.C. Davis, K. Saito. S. R. Rodeghiero. H. Cui.

Diabetes Research Week *Iowa City, Iowa*

2018. Poster Presentation. Celastrol reduces obesity in MC4R deficiency and stimulates sympathetic nerve activity affecting cardiovascular function. K. C. Davis, K. Siato, D. Morgan, B. A. Toth, H. Cui

Society for Neuroscience 2017 *Washington D.C.*

2017. Poster Presentation. Behavioral and metabolic characterization of eating disorder associated HDAC4-A778-T mutant mice. K.C. Davis, S. R. Rodeghiero, K. Saito, B. A. Ahlers, H. Cui.

Iowa Research Week

Iowa City, Iowa

2017. Poster Presentation. Anti-obesity effect of celastrol requires leptin signaling but is independent of the central melanocortin system. K. C. Davis, K. Saito, E. N. Rodriguez, B. Toth, E. Martinez, H. Cui

Pharmacology Retreat

Coralville, Iowa

2016. Poster Presentation. Characterization of the HDAC4^{A778T} Mouse. K. C. Davis, M. Z. Khan, L. McDaniel, B. W. Darbro, A. A. Pieper, M. Lutter, H. Cui.

UW Research Symposium

Seattle, Washington

2014. Poster Presentation. Long-Term acquisition of EEG signals in daily activities. K. C. Davis. B. Shuman, K. Rumberger, K. M. Steele.

Utah Neuroscience Symposium

Snowbird, Utah

2013. Poster Presentation. Control of redundant wrist movements. G. M. Dorman, K. C. Davis, A. W. Peadan, S. K. Charles

**Teaching
Experiences**

University of Miami

Miami, Florida

2019. Dr. Thomas Champney. Anatomy Laboratory. Head Teaching Assistant

Brigham Young University

Provo, Utah

2013–2015. Dr. Jonathan Wisco. Elementary Anatomy Laboratory Teaching Assistant

University of Utah

Salt Lake City, Utah

2014. Dr. Jonathan Wisco. University of Utah School of Medicine anatomy laboratory short-term teaching assistant

**Volunteer
Service**

University of Miami DOCS

Miami, Florida

2019–2020. DOCS Medical Informatics Project Manager

2018–2019. DOCS Medical Informatics Assistant Station Manager

Iowa City Free Medical Clinic

Iowa City, Iowa

2016–2018. Supervisor: Jennifer Beltran. Patient guide

Habitat for Humanity

Iowa City, Iowa

2015–2016. Local community builds

Utah Special Olympics

Provo, Utah

2013–2014. Supervisor: Michael Blomfield. Basketball. Soccer. Softball

The Church of Jesus Christ of Latter-Day Saints

Hungary

2010–2012. Mission President: Gary S. Baughman. Leadership Roles:
Assistant to the President

**Previous
Employment**

Brigham Young University Print and Mail Services

Provo, Utah

2012–2013. Employer: Zack Cameron. Junior Web and Software Developer

Devila Web Design

Phoenix, Arizona

2007–2009. Employer: Ricardo Devila. Freelance Web Developer

**Technical
Skills**

Life Sciences

PCR/qPCR, Western Blot, Immunohistochemistry, Mouse dissection,
Mouse Stereotaxic Surgery, Optogenetics, Behavioral Assays

Computational

Python, C/C++, Bash, NodeJS, TypeScript, JavaScript, HTML, (S)CSS,
MatLab, Assembly. Familiar: PHP, SQL, Networking Systems

Software

Microsoft Office, MatLab, GraphPad Prism