

Colson Parker Tomberlin

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Colson.Tomberlin@Colorado.edu

Education

University of Colorado – Boulder (2014-)

- Major: Integrative Physiology
- Minor: Philosophy
- Anticipated graduation date: 2018

Extracurricular Activities

- Member of the American Medical Student Association (AMSA) ~ 2 years
- Participant at Zenko Kyudojo Japanese archery
- Intermural Basketball (co-captain)

Journal and Editorial Positions

- Founder and editor in Chief of the Colorado Undergraduate Research Journal (CURJ). Peer reviewed student journal focusing on research done in STEM fields.

Research Experience

- Research assistant at the Molecular Biology of Neurodegeneration Laboratory (May 2015 -)
 - Researched the genetic and molecular biological mechanisms behind neurodegenerative pathologies, with a primary focus on Alzheimer's disease and ALS using the C. elegans model
 - Some Projects Include:
 - Conducted chemotaxis assays on pan-neuronal and muscular expressed amyloid beta C elegans strains and their effects on homeostasis
 - Integrated extrachromosomal GFP fluorescent tagged transgenes into C. elegans
 - Testing of lipid soluble amyloid beta binding dyes in C. elegans
 - Worked on Ethyl-Methyl-Sulfate (EMS) mutagenesis screens to discover possible suppressor mutations for germ line proliferation genes within distal tip cell affected C elegans strains
 - PCR and primer design
 - Advisor: Christopher D. Link Ph.D.

- Clinical Research intern at the Justin Parker Neurological Institute and Boulder Neurosurgical Associates (January 1, 2016 -)
 - Research for a JPNI sponsored study for a comparison of polyetheretherketone (PEEK) cages vs. femoral cortical bone allograft interbody spacers in transforaminal lumbar interbody fusion.
 - Advisors: Sigita Burneikiene, MD

Awards and Scholarships

- Member of the National Society of Collegiate Scholars (NSCS)
- Member of the University of Colorado Honor Society
- Severance Scholarship Recipient
- Justin Parker Neurological Institute Memorial Scholarship

Publications

- Link C.D., Tomberlin CP, Liachko N.F. (2016). Cold-tolerance is a fast and easy method to identify neuronal dysfunction in *C. elegans*. *Worm Breeder's Gazette*. 20(3):25-28

Work Experience

- 50 hours of shadowing in a surgical setting
 - Orthopedic Surgery, CU Sports medicine
 - Under Dr. Kushal Patel and Dr. Eric McCarty
 - Boulder Neurosurgical Associates
 - Under Dr. Lee Nelson and Dr. Sharad Rajpal
- 30 hours of shadowing in a clinical setting (CU Sports Medicine and Boulder Neurosurgical Associates)
- Scientific Education and Research Institute Medical Summer Camp (2014)
- Sanitary Management and Customer Resource employee at Pelican Lakes Golf Club (2013-2014)

Volunteering

- Town of Windsor Special Olympics Tennis Coach (2013, 2014)
- Windsor Arbor Day Race (2014)
- Youth Basketball Camp Counselor (2012- 2014)

References

- Christopher D. Link Ph.D. Associate Professor of Integrative Physiology. Institute for Behavioral Genetics.
 - Boulder, CO Phone: 303-735-5112 Fax: 303-492-8063 email: Chris.Link@Colorado.edu
- Kushal V. Patel, MD. Orthopedic Sports Medicine Fellow Department of Orthopedics University of Colorado.
 - Email: kushal.patel@ucdenver.edu Phone: 713.443.1716
- Thomas LaRocca Ph.D. Post-Doctoral Research Fellow at the Laboratory for Molecular Biology of Neurodegeneration and Integrative Physiology Instructor
 - Email: Thomas.LaRocca@Colorado.edu