

Christopher C. Quinn

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Education

- 1996-2001 Yale University, Doctor of Philosophy in Neurobiology
Thesis Advisor: Dr. Susan Hockfield
- 1992-1996 Rutgers University, Rutgers College
Bachelor of Arts in Biological Sciences with high honors.

Academic Appointments

- 2018- Associate Professor, Department of Biological Sciences
University of Wisconsin, Milwaukee, WI.
- 2010-2018 Assistant Professor, Department of Biological Sciences
University of Wisconsin, Milwaukee, WI.
- 2001-2009 Postdoctoral Fellow/Instructor in the laboratory of Dr. William Wadsworth in the
Department of Pathology at the University of Medicine and Dentistry of New
Jersey, Piscataway, NJ.

External Research Support

- 2019-2024 NIH/NIMH. 1R01MH119157 Christopher Quinn, PI
Investigation of how axon development is disrupted by the autism-causing
Timothy syndrome mutation.
Total Cost: \$1,710,000
- 2017-2020 NIH/NINDS 1R03NS101524 Christopher Quinn, PI
Investigation of the mechanisms that stabilize axons and their branches.
Total Cost: \$152,000
- 2015-2018 NIH/NINDS 1R03NS091983 Christopher Quinn, PI
Investigation of SYD-1 function in axon guidance.
Total Cost: \$149,500

- 2012-2015 NIH/NINDS 1R03NS081361. Christopher Quinn, PI
Spatial organization of actin polymerization during axon guidance.
Total Cost: \$147,700
- 2011-2016 Greater Milwaukee Foundation
Shaw Scientist Award. \$200,000 Direct Cost.
- 2009-2012: NIH/NICHD R03HD060787 Christopher Quinn, PI
Investigation of asymmetric signaling complexes in axon guidance
\$156,000 Total Cost.
- 2003-2006 NIH/NINDS F32NS046840. Christopher Quinn, PI
Individual Ruth L. Kirschstein National Research Service Award.
Molecular Mechanisms of MIG-10 function in axon guidance.

Internal Research Support

- 2017-2018 Research Growth Initiative 2017 Christopher Quinn, PI
Investigation of the mechanisms that regulate axon branch stability.
Direct Cost: \$117,500
- 2012-2014 Research Growth Initiative 2017 Christopher Quinn, PI
Investigation of ITSN-1 function in axon guidance.
Direct Cost: \$94,900
- 2011-2012 Intercampus Research Grant. Co-PI with Jeff Hardin
Investigation of ABI-1 function in axon and cell migration.
Direct Cost: \$50,000

Awards and Honors

- 2011 Shaw Scientist Award
2003-2006 Individual National Research Service Award
2001-2003 UMDNJ Foundation Fellow
1996 Henry Rutgers Scholar
1994-1995 Rutgers College Merit Scholarship
1994 ASPET summer research fellowship
1994-1995 Sigma Xi research fellowship

Invited Talks

University of Illinois Chicago, Chicago Area Worm Meeting, Chicago, IL, 2018.

Greater Milwaukee Foundation, Shaw Scientist Presentation, Milwaukee, WI 2016.

Michigan Technological University, Dept. of Biological Sciences, Houghton, MI, 2015.

Milwaukee Institute for Drug Discovery, Milwaukee, WI 2014.

University of Wisconsin-Milwaukee, College of Engineering and Applied Sciences,
Milwaukee, WI, 2013.

University of Montana, Department of Biology, Missoula, MT, 2009.

University of Wisconsin-Milwaukee, Department of Biology, Milwaukee, WI, 2009.

Medical College of Georgia, Institute of Molecular Medicine and Genetics, Augusta, GA, 2009

Uniformed Services University of the Health Sciences, Department of Pharmacology,
Bethesda, MD 2009

University of Maryland Baltimore County, Department of Biology, Baltimore, MD, 2008

Stony Brook University, Department of Pharmacology, Stony Brook, NY, 2008.

Mid-Atlantic Society for Developmental Biology, 2007

Mid-Atlantic Society for Developmental Biology, "MIG-10 interacts with CED-10/Rac1-GTP to mediate axon guidance." 2007

Cold Spring Harbor meeting on Axon guidance and plasticity, "MIG-10 functions downstream of UNC-6 and SLT-1 to mediate axon guidance." 2004

East Coast *C. elegans* meeting, "MIG-10 functions downstream of UNC-6 and SLT-1 to mediate axon guidance." 2004

Society for Neuroscience meeting, "TUC-4b regulates neurite outgrowth" 2001

Teaching

Laboratory in Genetics and Cell Biology Spring Semesters 2012-present

Developmental Genetics Fall Semesters 2014-2017

Developmental Biology Fall Semesters 2020-

Foundations of Biological Sciences Alternating Fall Semesters 2017-

Seminar Courses (various) Fall or Spring 2011-2019

Seminar in Neuroscience Alternating Spring Semesters 2020-

Internal Service

Planning and Policy Committee (2018-present)
Search Committee for Genetics Assistant Professor (2017-2018)
GER course change committee (2017)
Biological Sciences Award Committee (2016-present)
Biological Sciences Personnel Committee (2014-2017)
Biological Sciences Space Committee (2012- 2014).
Search Committee for Anatomy and Physiology lecturer (2012).
Biological Sciences Colloquium Committee (2010-2011).
Curriculum Committee for reorganization of BioSci 316 (2010-2011).
Reviewer for FRACAS proposals (2014)
Reviewer for RACAS proposals (2019)
Internal reviewer Shaw Scientist proposals (2016)
Liaison to the Library (2011-present)

External Service

Ad Hoc reviewer for NSF

Ad Hoc reviewer for: *Journal of Neuroscience*, *Genetics*, *Science Signaling*, *Small GTPases*, *Neuroscience*, *Journal of Visualized Experiments*, *Molecular and Cellular Neuroscience*, *Bioessays*, *Principals of Life* (textbook).

Publications

1. Buddell T, Friedman V, Drozd CJ, **Quinn CC** (2019) An autism-causing calcium channel variant functions with selective autophagy to alter axon targeting and behavior” *PLoS Genetics*, 15(12): e1008488.
2. Xu Y, **Quinn CC** (2016) Transition between synaptic branch formation and synaptogenesis is regulated by the *lin-4* microRNA. *Developmental Biology*, 420:60-66.
3. Xu Y, **Quinn CC** (2016) SYD-1 promotes multiple developmental steps leading to neuronal connectivity. *Molecular Neurobiology*, 53(10) 6768-6773.
4. Xu Y, Taru H, Jin Y, **Quinn CC** (2015) SYD-1C, UNC-40 (DCC) and SAX-3 (Robo) function interdependently to promote axon guidance by regulating the MIG-2 GTPase. *PLoS Genetics*, 11(4): e1005185 (18 pages).
5. Xu Y, **Quinn CC** (2012) MIG-10 functions with ABI-1 to mediate the UNC-6 and SLT-1 axon guidance signaling pathways. *PLoS Genetics*, 8(11): e1003054 (10 pages).

6. Xu Y, Ren XC, **Quinn CC**, Wadsworth WG. (2011) Axon response to guidance cues is stimulated by acetylcholine in *Caenorhabditis elegans*. *Genetics*, 189:899-906.
7. **Quinn CC** and Wadsworth WG (2008) Axon Guidance: Asymmetric signaling orients polarized outgrowth. *Trends in Cell Biology*, 18:597-603.
8. ***Quinn CC**, Pfeil DS, Wadsworth WG (2008) Ced-10/Rac1 mediates axon guidance by regulating the asymmetric distribution of MIG-10/lamellipodin. *Current Biology* 18:808-13.
*Selected by Faculty of 1000 as a “Must Read”
9. **Quinn CC** and Wadsworth WG (2006) Axon Guidance: Ephrins at WRK on the Midline. *Current Biology* 16:R954-5.
10. *,**Quinn CC**, Pfeil DS, Chen E, Stovall EL, Harden MV, Gavin MK, Forrester WC, Ryder EF, Soto MC, Wadsworth WG (2006) UNC-6/netrin and SLT-1/slit guidance cues orient axon outgrowth mediated by MIG-10/RIAM/lamellipodin. *Current Biology* 16:845-853.
* Selected by Faculty of 1000 as a “Must Read”
11. **Quinn CC**, Chen E, Kinjo TG, Kelly G, Bell AW, Elliott RC, McPherson PS, Hockfield S (2003) TUC-4b, a novel TUC family variant, regulates neurite outgrowth and associates with vesicles in the growth cone. *Journal of Neuroscience* 23:2815-2823.
12. Benvenuti S, Cramer R, **Quinn CC**, Bruce J, Zvelebil M, Corless S, Bond J, Yang A, Hockfield S, Burlingame AL, Waterfield MD, Jat PS (2002) Differential proteome analysis of replicative senescence in rat embryo fibroblasts. *Mol. Cell. Proteomics*. 1:280-292.
13. Wasiak S, **Quinn CC**, Ritter B, de Heuvel E, Baranes D, Plomann M, McPherson PS (2001) The Ras/Rac guanine nucleotide exchange factor mammalian Son-of-sevenless interacts with PACSIN1/syndapin I, a regulator of endocytosis and the actin cytoskeleton. *Journal of Biological Chemistry*. 276:26622-26628.
14. Hussain NK, Jenna S, Glogauer M, **Quinn CC**, Wasiak S, Guipponi M, Antonarakis SE, Kay BK, Stossel TP, Lamarche-Vane N, McPherson PS (2001) Endocytic protein intersectin-1 regulates actin assembly via Cdc42 and N-WASP. *Nature Cell Biology* 10:927-932.
15. Tong XK, Hussain NK, de Heuvel E, Kurakin A, Abi-Jaoude E, **Quinn CC**, Olson MF, Marais R, Baranes D, Kay BK, McPherson PS. (2000). The endocytic protein intersectin is a major binding partner for the Ras exchange factor mSos1 in rat brain. *EMBO Journal* 19: 1263-1271.
16. **Quinn CC**, Gray GE, Hockfield S. (1999). A family of proteins implicated in axon guidance and outgrowth. *Journal of Neurobiology* 41:158-164