

DRITAN AGALLIU

EDUCATION

- 9/1998 – 2/2006 Ph.D. with distinction in Genetics and Development. Columbia University, New York, NY.
- 9/1996 - 5/1998 B.S. with Honors (Summa Cum Laude) in Genetics and Cell Biology. University of Minnesota, Minneapolis, MN.
- 9/1992 - 6/1996 University of Tirana, School of Medicine. Major: Medicine. Tirana, Albania.

HONORS AND AWARDS

- 9/2007 Recipient of the National Multiple Sclerosis Society fellowship to study the development of blood brain barrier in vertebrates.
- 2/2006 Ph.D. with distinction in Genetics and Development, Columbia University, New York, NY.
- 5/1998 B.S. with Summa Cum Laude in Genetics and Cell Biology, University of Minnesota, Minneapolis, MN.
- 5/1997 - 5/1998 Dean's list of distinguished students in the College of Biological Sciences, University of Minnesota.
- 8/1996 Recipient of the Albanian-American Cultural Foundation Scholarship to study in the United States.

RESEARCH EXPERIENCE

- 8/2006 - Present **Postdoctoral Scholar. Stanford University**
Supervisor: Dr. Ben A. Barres.
1. Understanding the molecular mechanisms that regulate the formation of the blood-brain barrier.
2. Development of genetic methods to visualize blood-brain barrier.
- 2/2006 - 8/2006 **Postdoctoral Research Assistant. Columbia University.**
Supervisor: Dr. Thomas M. Jessell.
The role of non-canonical Wnt signaling in the specification of motor neuron columnar identity.
- 9/1999 - 2/2006 **Ph.D. thesis.** *Supervisor: Dr. Thomas M. Jessell.*
1. The role of Cxcl12-Cxcr4 signaling in determining the initial trajectory of mammalian motor axons.
2. The role of non-canonical Wnt signaling in the specification of motor neuron columnar identity.
- 4/1997 - 6/1998 **Undergraduate research.** *Supervisor: Dr. Perry B. Hackett.*
1. RecA-mediated targeted mutagenesis in *zebrafish*.

2. Use of insulator elements in controlling position-independent expression of transgenes.

7/1995 – 7/1996

Medical school research. *Supervisor: Prof. Linda Mele (Department of Microbiology, University of Tirana, Albania)*
Characterization of endemic strains of *H.pylori* responsible for gastric ulcers in different regions of Albania.

TEACHING EXPERIENCE

9/2008 – 5/2009

Lecturer/Instructor for the course “Developmental Biology”.
San Francisco State University, San Francisco, CA.

5/2003 - 5/2006

Lecturer for the course “Genes: The Code of Codes”.
Eugene Lang College. New School University, New York, NY.
Instructor: Katayoun Chamany.

9/2002

Teaching Assistant for the course “Advanced Eukaryotic Molecular Genetics”. Columbia University, New York, NY. *Instructor: Tim Bestor*

9/1997 - 5/1998

Chemistry tutor for “The Math and Science Tutorial Program for Minorities”, University of Minnesota, College of Biological Sciences.
Coordinator: Cadance Paulaha.

PUBLICATIONS

Emery B, **Agalliu D.**, Cahoy J.D., Watkins T.A, Dugas J.C., Mulinyawe S.B., Ibrahim A, Ligon K.L, Rowitch D.H, and Barres B.A (2009). Identification of myelin-gene regulatory factor as a critical transcriptional regulator required for CNS myelination. (*Cell* in press).

Agalliu D., Takada, S., Agalliu I., McMahon A. P. and Jessell T. M. (2009). Motor neurons with axial muscle projections specified by Wnt4/5 signaling. *Neuron* 61: 708-720.

Daneman, R., **Agalliu D.**, Zhou, L., Kuhnert, F., Kuo, C.J., and Barres, B.A. (2009). Wnt/ β -catenin signaling is required for CNS, but not non-CNS, angiogenesis. *Proc. Natl. Acad. Sci. USA* 106: 641-646.

Agalliu D., I. Schieren. Heterogeneity in the developmental potential of motor neuron progenitors revealed by clonal analysis of single cells *in vitro* (2009). *Neural Development* 4: 2.

Masckauchan, N.T.H., **Agalliu, D.**, Vorontchikhina, M., Ahn, A. Parmalee, N. L., Li, C., Khoo, A., Tycko, B., Brown, A. M. and Kitajewski, J. (2006). Wnt5a signaling induces proliferation and survival of endothelial cells and expression of MMP-1 and Tie-2. *Molecular Biology of the Cell* 17: 5163-72.

Lieberam I. *, **Agalliu D.** *, Nagasawa T., Ericson J., and Jessell T. M. (2005). A Cxcl12-Cxcr4 chemokine signaling pathway defines the initial trajectory of mammalian motor axons. *Neuron* 47: 667-679.

*equal authorship

Cui Z., Yang Y., Kaufman C. D., **Agalliu D.**, and Hackett P. B. (2003). RecA-mediated targeted mutagenesis in zebrafish. *Marine Biotechnology*. 5: 174-178.

Caldovic L., **Agalliu D.**, and Hackett P. B. (1999). Position-independent expression of transgenes in zebrafish. *Transgenic Research* 8: 321-334.

CONFERENCES

- 12/2008 CSH Conference Meeting; "Blood Brain Barrier Physiology", Cold Spring Harbor, NY. "Understanding the function of Apcdd1 in CNS angiogenesis and blood-brain barrier development." (*Poster*).
- 6/2008 Gordon Research Conference Meeting; "Barriers of the CNS", Tilton, NH. "Understanding the function of Apcdd1 in CNS angiogenesis and blood-brain barrier development." (*Poster*).
- 5/2007 Gordon Research Conference Meeting; "Cell Contact and Adhesion", II Ciocco, Lucca (Barga), Italy. "Identification of the repertoire of tight junction associated proteins that contribute to the mammalian blood-brain barrier formation." (*Poster*).
- 8/2006 Gordon Research Conference Meeting on Neural Development, Salve Regina College, Newport, RI. "Specification of axial motor neuron identity by non-canonical Wnt signaling." (*Poster*).
- 9/2004 "Axon Guidance and Neural Plasticity", Cold Spring Harbor Meeting, Cold Spring Harbor, NY. "A Cxcl12-Cxcr4 chemokine signaling pathway defines the initial trajectory of mammalian motor axons." (*Poster*).
- 6/2003 International Society for Stem Cell Research, First Annual Meeting, Washington, DC.
- 3/2003 Keystone symposium "From Stem Cells to Therapy", Steamboat Springs, CO. "FACS isolation and characterization of motor neuron progenitors from mouse embryonic spinal cord." (*Poster*). Recipient of a student fellowship to attend conference.