

BIOGRAPHICAL SKETCH

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NAME Dritan Agalliu	POSITION TITLE Postdoctoral research scientist		
eRA COMMONS USER NAME			
EDUCATION/TRAINING (<i>Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.</i>)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Tirana, Albania. Faculty of Medicine		1992-1996	Medicine
University of Minnesota-Twin Cities	B.S.	1996-1998	Genetics and Cell Biology
Columbia University	Ph.D.	1998-2006	Genetics and Development

Please refer to the application instructions in order to complete sections A, B, and C of the Biographical Sketch.

EDUCATION:

- 9/1998 – 2/2006 Ph.D. with distinction. Columbia University. Department of Genetics and Development.
- 9/1996 - 5/1998 B.S. with Honors (Summa Cum Laude). University of Minnesota -Twin Cities. Genetics and Cell Biology major.
- 9/1992 - 6/1996 University of Tirana, Albania. Faculty of Medicine.

HONORS AND AWARDS:

- 2/2006 Graduated with distinction from Columbia University (Ph. D. in Genetics and Development).
- 6/1998 Graduated with honors (Summa Cum Laude) from University of Minnesota (B.S. in Genetics and Cell Biology).
- 12/1996 - 5/1998 Dean's list of distinguished students in the College of Biological Sciences, University of Minnesota, Twin Cities.
- 8/1996 Albanian-American Cultural Foundation Scholarship to study in the US.

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 – 12/2005 Ph.D. thesis. Supervisor: Dr. Thomas M. Jessell.
1. The role of Cxcl12-Cxcr4 signaling in determining the initial trajectory of mammalian motor neurons.
2. The role of Wnt-4 and Wnt-5 proteins 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, 5/2004 Guest Lecturer for the course “Genes: The Code of Codes.”. Eugene Lang College. New School University, New York, NY.
- 9/2002 Teaching Assistant for the course “Advanced Eukaryotic Molecular Genetics”. Columbia University
- 9/1997 – 5/1998 Chemistry tutor for “The Math and Science Tutorial Program for Minorities”, University of Minnesota, College of Biological Sciences.

PUBLICATIONS:

Agalliu D., Takada, S., Agalliu I., McMahon A. P. and Jessell T. M. Motor neurons with axial muscle projections are specified by a Wnt4/5 signaling pathway. (*Neuron* in press).

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. *PNAS USA* 106: 641-646.

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

Masckaucan, N., Agalliu, D. Vorontchikhina, M., Parmalee, N. L., Khoo, A., Brown, A. M. and Kitajewski, J. Wnt-5a signaling induces proliferation, survival and expression of MMP-1 and Tie-2 in endothelial cells. (Manuscript in preparation).

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 Biotechnol.* 5: 174-178.

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