# **ESZTER KATALIN VLADAR, PhD**

Department of Pathology Stanford University School of Medicine 300 Pasteur Drive, R220 Edwards Stanford, CA 94305-5324

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Citizenship: USA

#### **EDUCATION**

DOCTOR OF PHILOSOPHY, Genetics

Department of Genetics
Stanford University School of Medicine, Stanford, CA
Topic: Centriole formation during motile ciliogenesis
Thesis advisor: Timothy P. Stearns, PhD

BACHELOR OF SCIENCE, Genetics
University of California at Davis, Davis, CA

#### RESEARCH EXPERIENCE

INSTRUCTOR
Department of Pathology
Stanford University School of Medicine, Stanford, CA
Tanics Multiplicated calls in the parmet and disposed.

Topic: Multiciliated cells in the normal and diseased respiratory epithelium

POSTDOCTORAL FELLOWSHIP 2007-2014

Department of Pathology Stanford University School of Medicine, Stanford, CA Topic: Planar cell polarity in multiciliated epithelial cells

Advisor: Jeffrey D. Axelrod, MD, PhD

DOCTORAL RESEARCH 2001-2007

Department of Genetics

Stanford University School of Medicine, Stanford, CA Topic: Centriole formation during motile ciliogenesis

Advisor: Timothy P. Stearns, PhD

RESEARCH ASSISTANT 2000-2001

Department of Molecular and Cellular Biology University of California at Davis, Davis, CA Topic: Cloning and characterization of the *snm1* 

DNA repair gene in *Drosophila melanogaster* 

Supervisor: Kenneth C. Burtis, PhD

#### **UNDERGRADUATE RESEARCH**

Department of Molecular and Cellular Biology University of California at Davis, Davis, CA

Topic: DNA cross-link repair in *Drosophila melanogaster* 

Advisor: Kenneth C. Burtis, PhD

**RESEARCH ASSISTANT** 

summer 1996

Department of Genetics

Stanford University School of Medicine, Stanford, CA

Topic: Characterization of Wiskott-Aldrich Syndrome alleles

Supervisor: Uta Francke, MD

**RESEARCH ASSISTANT** 

summer 1995

Experimental Therapeutics
National Institute of Mental Health, NIH, Bethesda, MD

National Institute of Mental Health, NIH, Bethesda, ML Topic: Functional imaging of Schizophrenia

Supervisor: Alan Brier, MD

# **PUBLICATIONS**

**VLADAR EK**, Lee YL, Stearns T and Axelrod JD. *Observing planar cell polarity in multiciliated airway epithelial cells.* (2015) Methods in Cell Biology, in press

Boscke R, **VLADAR EK**, Konnecke M, Husing B, Linke R, Brughhage KL, Pries R, Reiling N and Wollenberg B. *Wnt signaling in chronic rhinosinusitis with nasal polyps*. (2015) Journal of Allergy and Clinical Immunology, under revision

Yuan K, Orcholski M, Panaroni C, Huang N, Jiang X, Shuffle E, Tian W, **VLADAR EK**, Rabinovitch M, Desai TJ, Nicolls M, Wu J and de Jesus Perez V. *Activation of the Wnt/planar cell polarity pathway is required for pericyte recruitment during pulmonary angiogenesis.* (2015) The American Journal of Pathology, 185(1):69-84.

Klos Dehring DA, **VLADAR EK**, Werner ME, Mitchell JW, Hwang P and Mitchell BJ. *Deuterosome Mediated Centriole Biogenesis*. (2013) Developmental Cell, 27(1):103-12.

Tan FE, **VLADAR EK**, Ma L, Fuentealba LC, Hoh RA, Espinosa H, Stearns T, Alvarez-Buylla A, Kintner C, Axelrod JD and Krasnow MA. *Myb promotes centriole amplification and later steps of the multiciliogenesis program.* (2013) Development, 140(20):4277-4286.

**VLADAR EK** and Brody SL. *Analysis of ciliogenesis in primary culture mouse tracheal epithelial cells.* (2013) Methods in Enzymology, 525:285-309.

**VLADAR EK**, Bayly RD, Sangoram AM, Scott MP and Axelrod JD. *Microtubules enable the planar cell polarity of airway cilia.* (2012) Current Biology, 22(1):1-10.

Stubbs JL, **VLADAR EK**, Axelrod JD and Kintner C. *Multicilin promotes centriole assembly and ciliogenesis during multiciliate cell differentiation*. (2012) Nature Cell Biology, 14(2):140-7.

**VLADAR EK**, Antic D and Axelrod JD. *Planar cell polarity signaling: the developing cell's compass.* (2009) Cold Spring Harbor Perspectives in Biology, 1(3):a002964.

Bassuk AG, Wallace RH, Buhr A, Buller AR, Afawi Z, Shimojo M, Miyata S, Chen S, Gonzalez-Alegre P, Griesbach HL, Wu S, Nashelsky M, **VLADAR EK**, Antic D, Ferguson PJ, Cirak S, Voit T, Scott MP, Axelrod JD, Gurnett C, Daoud AS, Kivity S, Neufeld MY, Mazarib A, Straussberg R, Walid S, Korczyn

AD, Slusarski DC, Berkovic SF and El-Shanti HI. *A homozygous mutation in human PRICKLE1 causes an autosomal-recessive progressive myoclonus epilepsy-ataxia syndrome.* (2008) American Journal of Human Genetics, 83(5):572-81.

**VLADAR EK** and Axelrod JD. *Dishevelled links basal body docking and orientation.* (2008) Trends in Cell Biology, 18(11):517-20.

**VLADAR EK** and Stearns T. *Molecular characterization of centriole assembly in ciliated epithelial cells.* (2007) Journal of Cell Biology, 178(1):31-42.

Laurencon A, Orme CM, Peters HK, Boulton CL, **VLADAR EK**, Langley SA, Bakis EP, Harris DT, Harris NJ, Wayson SM, Hawley RS and Burtis KC. *A large-scale screen for mutagen-sensitive loci in Drosophila*. (2004) Genetics, 167(1):217-31.

# **MANUSCRIPTS IN PREPARATION**

**VLADAR EK**, Nayak J and Axelrod JD. *Planar cell polarity signaling regulates multiple aspects of airway epithelial homeostasis and is misregulated in lung disease.* 

**VLADAR EK**, Sutherland J and Axelrod JD. *Prickle family proteins regulate motile cilium biogenesis and planar cell polarity.* 

**VLADAR EK**, Stratton MB, Stearns T and Axelrod JD. *The cyclin-dependent kinase control of motile ciliogenesis*.

#### **AWARDS**

2009 and 2008 The Helena Anna Henzl-Gabor Postdoctoral Travel Award 2008 A.P. Giannini Foundation Postdoctoral Fellowship (3 year) 2007 NIH Tumor Biology Postdoctoral Fellowship (1 year)

# **INVITED LECTURES**

2014 UNC Cystic Fibrosis Center, University of North Carolina, Chapel Hill, NC

2013 Department of Biochemistry, University of Mississippi School of Medicine, Jackson, MI

2013 Gordon Research Conference on Cilia, Mucus and Mucociliary Interactions, Lucca, Italy

2013 Keystone Symposium on Lung Development, Cancer and Disease, Taos, NM

2011 Gordon Research Conference on Cilia, Mucus and Mucociliary Interactions, Ventura, CA

2005 EMBO Workshop on Centrosomes and Spindle Pole Bodies, Heidelberg, Germany

# **TEACHING EXPERIENCE**

# **TEACHING ASSISTANT**

- Advanced Genetics, Stanford University (2002)
- Molecular and Cellular Biology, UC Davis (2000)

#### **COURSE DESIGN**

 Participated in the design and implementation of the Advanced Techniques in Light Microscopy course, Stanford University (2004)

# **COMMUNITY OUTREACH**

Docent at the Genetics Exhibit at The Tech Museum of Innovation, San Jose, CA (2004)

#### **MENTORING**

- Mentored a high school student through the Cancer Biology High School Summer Research Program for students of diverse ethnic and lower socio-economic backgrounds, Stanford University (2009)
- Mentored two undergraduate and two graduate students, Axelrod Lab, Stanford University (from 2007)
- Mentored two undergraduate and five graduate students, Stearns Lab, Stanford University (2002-2007)
- Mentored eight fellow undergraduate students, Burtis Lab, UC Davis (1998-2001)

#### REFERENCES

# JEFFREY D. AXELROD, MD, PhD

(postdoctoral advisor)

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# **TIMOTHY P. STEARNS, PhD**

(graduate advisor)

Professor and Chair, Department of Biological Sciences

Professor, Department of Genetics

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