

ERDEM GÜLTEKIN TAMGÜNEY, PH.D.

Assistant Professor
University of California, San Francisco
Department of Neurology
Institute for Neurodegenerative Diseases
School of Medicine
513 Parnassus Avenue, Room HSE-774, Box 0518
San Francisco, CA 94143-0518

(415) 476-5590 (office)
(415) 476-8386 (fax)
etamguney@ind.ucsf.edu (email)

EDUCATION

- **Ph.D.**, Biochemistry, Friedrich-Alexander University of Erlangen-Nuremberg, Germany 1997–2001
Thesis title: 'Specific gene-expression in human T cells after herpesviral growth transformation'
- **Diplom** (*equivalent to B.S. and M.S.*), Biochemistry, Bayreuth University, Germany 1991–1997
Thesis title: 'The nucleomorph genome of the cryptomonads: characterisation of chromosomal segments'

EMPLOYMENT

- **Assistant Professor** 2008–now
University of California, San Francisco
Institute for Neurodegenerative Diseases, Department of Neurology, School of Medicine
- **Postdoctoral fellow**, laboratory of **Stanley B. Prusiner, M.D.** 2002–2008
University of California, San Francisco
Institute for Neurodegenerative Diseases, School of Medicine
- **Postdoctoral fellow**, laboratory of **Helmut Fickenscher, M.D.** 2001–2002
Friedrich-Alexander University of Erlangen-Nuremberg, Germany
Institute for Clinical and Molecular Virology, School of Medicine
- **Ph.D. student**, laboratory of **Helmut Fickenscher, M.D.** 1997–2001
Friedrich-Alexander University of Erlangen-Nuremberg, Germany
Institute for Clinical and Molecular Virology, School of Medicine

GRANTS

- R03 grant, National Institute of Neurological Disorders and Stroke (\$153,958) 2006–2008
- Charles E. Culpeper Biomedical Pilot Initiative (\$25,000) 2004–2005

HONORS AND AWARDS

- Larry L. Hillblom Foundation, postdoctoral fellowship 2005–2008
- German Research Foundation (DFG), postdoctoral fellowship 2002–2004
- Boehringer Ingelheim Fonds, Ph.D. fellowship 1998–2001
- German Academic Exchange Service (DAAD), ERASMUS fellowship 1996
- German Academic Exchange Service (DAAD), ERASMUS fellowship 1994–1995
- Rotary International, scholarship 1988–1989

PUBLICATIONS

Papers published in peer-reviewed journals

- **Tamgüney G**, Miller WM, Wolfe LL, Sirochman TM, Glidden DV, Palmer C, Lemus A, DeArmond SJ, and Prusiner SB (2009). Asymptomatic deer excrete infectious prions in feces. *Nature* **461**, 529-32.
- **Tamgüney G**, Francis KP, Giles K, Lemus A, DeArmond SJ, and Prusiner SB (2009). Measuring prions by bioluminescence imaging. *Proc Natl Acad Sci U S A* **106**:15002-6.
- **Tamgüney G**, Miller WM, Giles K, Lemus A, Glidden DV, DeArmond SJ, and Prusiner SB (2009). Transmission of scrapie and sheep-passaged bovine spongiform encephalopathy prions to transgenic mice expressing elk prion protein. *J Gen Virol* **90**, 1035-47.
- **Tamgüney G**, Giles K, Glidden DV, Lessard P, Wille H, Tremblay P, Groth DF, Yehiely F, Korth C, Moore RC, Tatzelt J, Rubinstein E, Boucheix C, Yang X, Stanley P, Lisanti MP, Dwek RA, Rudd PM, Moskovitz J, Epstein CJ, Dawson Cruz T, Kuziel WA, Maeda N, Sap J, Hsiao Ashe K, Carlson GA, Tesseur I, Wyss-Coray T, Mucke L, Weisgraber KH, Mahley RW, Cohen FE, and Prusiner SB (2008). Genes contributing to prion pathogenesis. *J Gen Virol* **89**, 1777-88.
- Safar JG, Lessard P, **Tamgüney G**, Freyman Y, Deering C, Letessier F, DeArmond SJ, and Prusiner SB (2008). Transmission and detection of prions in feces. *J Infect Dis* **198**, 81-9.
- **Tamgüney G**, Giles K, Bouzamondo-Bernstein E, Bosque PJ, Miller MW, Safar J, DeArmond SJ, and Prusiner SB (2006). Transmission of elk and deer prions to transgenic mice. *J Virol* **80**, 9104-14.
- **Tamgüney G**, van Snick J, and Fickenscher H (2004). Autocrine stimulation of rhadinovirus-transformed T cells by the chemokine CCL1/I-309. *Oncogene* **23**, 8475-85.
- Greve T*, **Tamgüney G***, Fleischer B, Fickenscher H, and Bröker BM (2001). Downregulation of p56^{lck} kinase activity in T cells of squirrel monkeys (*Saimiri sciureus*) correlates with the non-transforming and apathogenic properties of herpesvirus saimiri in its natural host. *J Virol* **75**, 9252-61. (*equal contribution)
- Gröschl M, Rauh M, Wagner R, Neuhuber W, Metzler M, **Tamgüney G**, Zenk J, Schoof E, Dörr HG, Blum WF, Rascher W, and Dötsch J (2001). Identification of leptin in human saliva. *J Clin Endocrinol Metab* **86**, 5234-9.
- Hiller C, **Tamgüney G**, Stolte N, Mätz-Rensing K, Lorenzen D, Hör S, Thureau M, Wittmann S, Slavin S, and Fickenscher H (2000). Herpesvirus saimiri pathogenicity enhanced by thymidine kinase of herpes simplex virus. *Virology* **278**, 445-55.

Papers published in non peer-reviewed journals

- **Tamgüney G** (2001). Mechanisms promoting or protecting T cells from growth transformation by herpesvirus saimiri. *B.I.F. Futura* **16**, 275-9.

Papers in preparation

- **Tamgüney G**, Palmer C, and Prusiner SB. Identification of C-terminal residues controlling prion transmission in mice expressing mouse/elk chimeric prion proteins.
- **Tamgüney G**, Lemus A, DeArmond SJ, and Prusiner SB. Evidence for the horizontal transmission of prions among sheep and deer by saliva.

- Wille H, Latawiec D, **Tamgüney G**, Bloch L, Lemus A, McDonald M, Kendall A, Long JR, DeArmond SJ, Stubbs G, and Prusiner SB. The full-length scrapie prion protein forms amyloid fibrils in vitro and in vivo.

Abstracts

- **Tamgüney G**, Miller MW, Giles K, Lemus A, DeArmond SJ, and Prusiner SB. 10/2008
Transmission of scrapie and BSE prions from sheep to mice expressing elk prion protein. *Prion 2008*, Madrid, Spain.
- **Tamgüney G**, Giles K, Glidden DV, Lessard P, Wille H, Legname G, Tremblay P, Groth DF, Yehiely F, Korth C, Moore RC, Tatzelt J, Rubinstein E, Boucheix C, Stanley P, Lisanti MP, Dwek RA, Rudd PM, Sisodia SS, Moskovitz J, Epstein CJ, Dawson Cruz TC, Kuziel WA, Maeda N, Pagoulatos GN, Sap J, Ashe KH, Carlson GA, Tesseur I, Wyss-Coray T, Mucke L, Mahley RW, Cohen FE, and Prusiner SB. 09/2007
A search for auxiliary proteins in prion replication. *Prion 2007*, Edinburgh, UK.
- **Tamgüney G**, Nazor K, Liliental JE, Cohen SN, and Prusiner SB. 11/2006
Genes modifying the pathogenesis of dementing diseases. *5th Annual Scientific Meeting of the Larry L. Hillblom Foundation*, La Jolla, CA, USA.
- **Tamgüney G**, Giles K, Bosque PJ, Miller MW, Safar J, DeArmond SJ, and Prusiner SB. 10/2006
Transmission of CWD to transgenic mice. *Prion 2006*, Turin, Italy.
- **Tamgüney G**, Giles K, Bosque PJ, Miller MW, Safar J, DeArmond SJ, and Prusiner SB. 09/2006
Prions of deer and elk transmit to transgenic mice. *2006 Neuroscience Asilomar Retreat*, Pacific Grove, CA, USA.
- **Tamgüney G**, Nelken P, Yang J, Giles K, Bosque PJ, Miller MW, Safar J, DeArmond SJ, and Prusiner SB. 07/2005
Interspecies transmission of prions causing Chronic Wasting Disease. *The Second International Chronic Wasting Disease Symposium*, Madison, WI, USA.
- **Tamgüney G** and Fickenscher H. Cytokine-mediated autocrine stimulation in herpesvirus saimiri-transformed human T cells. 04/2002
Annual Meeting of the German Society of Virology, Erlangen, Germany.
- **Tamgüney G**, Greve T, Fleischer B, Fickenscher H, and Bröker BM. 09/2001
Downregulation of p56^{lck} kinase activity in T cells of squirrel monkeys (*Saimiri sciureus*) correlates with the non-transforming and apathogenic properties of herpesvirus saimiri in its natural host. *Keystone Symposium: Control of Viral Latency and Persistence*, Breckenridge, CO, USA.
- Hiller C, **Tamgüney G**, Stolte N, Mätz-Rensing K, Lorenzen D, Hör S, Thureau M, Wittmann S, Slavin S, and Fickenscher H. 07/2001
Herpesvirus saimiri pathogenicity is enhanced by the thymidine kinase gene of herpes simplex virus. *International Herpesvirus Workshop 2001*, Regensburg, Germany.
- Greve T, **Tamgüney G**, Fleischer B, Bröker B, and Fickenscher H. 07/2001
Downregulation of p56Lck tyrosine kinase activity in T cells of squirrel monkeys correlates with the non-transforming and apathogenic properties of herpesvirus saimiri in its natural host. *International Herpesvirus Workshop 2001*, Regensburg, Germany.
- Hiller C, **Tamgüney G**, Stolte N, Mätz-Rensing K, Lorenzen D, Hör S, Thureau M, Wittmann S, Slavin S, and Fickenscher H. 03/2001
Herpesvirus saimiri pathogenicity is enhanced by the thymidine kinase of herpes simplex virus. *Annual Meeting of the German Society of Virology*, Dresden, Germany.

- **Tamgüney G**, Greve T, Fleischer B, Fickenscher H, and Bröker BM. Apathogenicity of herpesvirus saimiri in the natural host correlates with suppression of tyrosine kinase p56Lck in T cells of *Saimiri sciureus*. *Annual Meeting of the German Society of Virology*, Dresden, Germany. 03/2001
- Greve T, **Tamgüney G**, Fleischer B, Fickenscher H, and Bröker BM. Downregulation of p56^{Lck} tyrosine kinase activity in T cells of squirrel monkeys (*Saimiri sciureus*) correlates with the non-transforming and apathogenic properties of herpesvirus saimiri in its natural host. *Joint Annual Meeting of Immunology of the German and Dutch Societies (DGfI, NVvI)*, Düsseldorf, Germany. 11/2000
- **Tamgüney G**, Knappe A, and Fickenscher H. Differential expression of human T-cell genes after herpesviral growth-transformation. *64th Symposium: Signaling & Gene Expression in the Immunesystem*, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY, USA. 06/1999

INVITED LECTURES

- Highly sensitive mouse models for the detection and quantification of infectious prions. Center for Excellence in Infectious Diseases at the Paul L. Foster School of Medicine, Texas Tech University Health Sciences Center, El Paso, TX, USA. 10/2009
- Prions in feces of asymptomatic deer. *Prion 2009*, Porto Carras, Chalkidiki, Greece. 09/2009
- Transgenic mouse models to study prion disease. Buck Institute for Age Research, Novato, CA, USA. 03/2009
- Bioluminescence imaging of prion disease in mice. *7th Annual Scientific Meeting of the Larry L. Hillblom Foundation*, Newport Beach, CA, USA. 11/2008
- Source and transmission of highly infectious prion diseases in nature. University Medical Center Schleswig-Holstein Campus Kiel (UKSH) and Christian-Albrecht University of Kiel, Institute for Infection Medicine, Kiel, Germany. 06/2008
- Transmission of chronic wasting disease to transgenic mice. Friedrich-Alexander University of Erlangen-Nuremberg, Institute for Clinical and Molecular Virology, Erlangen, Germany. 02/2006
- Transmission of elk and deer prions to transgenic mice. Ludwig-Maximilian University Munich, Zentrum für Neuropathologie und Prionforschung, Munich, Germany. 02/2006
- Transgenic mouse models for chronic wasting disease of deer and elk. *Prion Biology Meeting*, Wellcome Trust Conference Centre, Hinxton, Cambridge, United Kingdom. 09/2005
- Investigating the species barrier – a mouse model for chronic wasting disease. *4th North American Meeting of the Boehringer Ingelheim Fonds*, Woods Hole, Massachusetts. 09/2004
- Prions and mad cow disease. Niman Ranch, Oakland, California, USA. 01/2004
- Differential expression of human T-cell genes after herpesviral growth-transformation. *Application Meeting: Atlas Arrays & PCR-Select, Identification and Analysis of Differentially Expressed Genes*, German Cancer Research Center (DKFZ), Heidelberg, Germany. 11/1999

PUBLIC AND PROFESSIONAL SERVICE

- Reviewer, UC Discovery Grant, *ad hoc*. 2008–now
- Reviewer, PLoS One, *ad hoc*. 2008–now
- Advisor, Korean Broadcasting System, Korea’s public service broadcaster (Youngdon Lee's consumer report), on BSE and the safety of US beef 05/2008
- Reviewer, US Department of Veterans Affairs, Career Development Program, *ad hoc*. 2007–now
- Advisor, Prostate Awareness Foundation, a San Francisco based non-profit organization (www.prostateawarenessfoundation.org) 2004–now
- Reviewer, US Department of Agriculture, Small Business Innovation Research Program, *ad hoc*. 2004–now
- Reviewer, US Department of Agriculture, Agricultural Research Service, CRIS Research Project Plan. *ad hoc*. 2003–now
- Reviewer, US Department of Agriculture, NRICGP, Food Safety Program, *ad hoc*. 2003–now

TEACHING EXPERIENCE

Instructor

- “Biology of Human Aging” (BIOL108), University of San Francisco (USF), San Francisco, CA. Teaching comprised 20 units of 50 minute lectures with homework assignments and 2 graded exams. 2007
- Assistant instructor (Black belt level), UCSF Taekwondo Club at Millberry Union 2005–now

Guest Lectures

- “CWD Prions”, Neuroscience Speaker Series, University of San Francisco (USF), San Francisco, CA 03/2007
- “Protein misfolding and prions”, Cell Physiology (BIOL212), University of San Francisco (USF), San Francisco, CA 11/2006

Teaching Assistant

- Virology lab I for medical students (03298), biannual 1998–2001
- Virology lab II for science students (advanced) (03299), biannual 1998–2001

Mentoring

- Natrina Johnson, B.A., volunteer 2009
- Shairaz Shah, B.S., animal technician 2008
- Sharif Nankoe, M.S., volunteer 2008
- Christina Palmer, M.S., Staff Research Associate II 2007–2008
- Shuyi Wang, Ph.D., Staff Research Associate II 2006–2007
- Natrina Johnson, B.A., volunteer 2005

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

- American Association for the Advancement of Science (AAAS) 2006–now
- American Society for Biochemistry and Molecular Biology (ASBMB) 2006–now
- New York Academy of Sciences (NYAS) 2006–2007

COURSES TAKEN

- QB3/GE Bio-Processing Course, California Institute for Quantitative Biomedical Research (QB3) 03/2008
- A Life Scientist's Guide to Intellectual Property, UCSF Center for BioEntrepreneurship 2006
- Scientific Leadership and Laboratory Management: A Course for Postdoctoral Fellows and Junior Faculty, UCSF Office of Career and Professional Development 12/2005