

**Katerina Akassoglou, Ph.D.**  
**Senior Investigator, Gladstone Institutes**  
**Professor of Neurology, UCSF**  
**Associate Adjunct Professor of Pharmacology, UCSD**  
**Director, Gladstone Center for In Vivo Imaging Research (CIVIR)**

Address: Gladstone Institutes  
University of California, San Francisco  
1650 Owens St  
San Francisco, CA 94158

Telephone: (415) 734 2512 (office)

E-mail: [kakassoglou@gladstone.ucsf.edu](mailto:kakassoglou@gladstone.ucsf.edu)

URL: <http://akassogloulab.org>  
<http://profiles.ucsf.edu/katerina.akassoglou>

---

## EDUCATION

- 1998-2003 **Postdoctoral Fellow**  
Skirball Institute, New York University, NY (Moses Chao Lab)  
The Rockefeller University, New York, NY (Sidney Strickland Lab)  
State University of New York, Stony Brook, NY (Sidney Strickland Lab)
- 1994-1998 **Ph.D.** in Neurobiology  
University of Athens, Athens, Greece  
& Hellenic Pasteur Institute (George Kollias Lab)
- 1990-1994 **B.Sc.** in Biology (First Class Honors)  
University of Athens, Athens, Greece

## POSITIONS

- 2013- Present **Senior Investigator**  
Gladstone Institute of Neurological Disease, University of California, San Francisco
- 2012- Present **Professor of Neurology**  
Department of Neurology, University of California, San Francisco
- 2010-Present **Founder and Director**  
Center for In Vivo Imaging Research  
Gladstone Institute of Neurological Disease, University of California, San Francisco

- 2008- 2012     **Associate Investigator**  
Gladstone Institute of Neurological Disease, University of California, San Francisco
- 2008-2012     **Associate Professor**  
Department of Neurology, University of California, San Francisco
- 2008- Present   **Associate Adjunct Professor**  
Department of Pharmacology, University of California, San Diego
- 2008            **Associate Professor (tenure)**  
Department of Pharmacology, University of California, San Diego
- 2003-2008     **Assistant Professor**  
Department of Pharmacology, University of California, San Diego
- 2003            **Visiting Scientist**  
Skirball Institute of Biomolecular Medicine, New York University School of Medicine
- 2002-2003     **Research Associate**  
Skirball Institute of Biomolecular Medicine, New York University School of Medicine  
In the lab of Professor Moses V. Chao
- 2000-2002     **Research Associate**  
The Rockefeller University, New York, NY  
In the lab of Professor Dean S. Strickland
- 1998-2000     **Postdoctoral Fellow**  
State University of New York, Stony Brook, NY  
Supervisor: Professor S. Strickland
- 1996            **Visiting Scientist**  
University of Vienna, Vienna, Austria  
Supervisor: Professor H. Lassmann
- 1994-1998     **Graduate Research Student**  
Hellenic Pasteur Institute, Athens, Greece  
Supervisors: Dr. L. Probert/G. Kollias
- 1993-1994     **Undergraduate Research Student**  
National Hellenic Research Foundation, Athens, Greece  
Supervisor: Professor K. Sekeris

## RESEARCH FUNDING

### NIH/NINDS R35 NS097976-01 Research Program Award

**“Neurovascular Interactions: Mechanisms, Imaging, Therapeutic potential”**

PI: Katerina Akassoglou

\$725,000 direct costs per year, \$5.8M total direct costs.

Funding period: 09/01/2016 – 08/31/2024

**National Multiple Sclerosis Society, RG 4985A3**

“Role of fibrinogen in the inhibition of oligodendrocyte differentiation”

PI: Katerina Akassoglou , \$150,000 direct cost per year

Funding Period: 04/01/2014 – 03/31/2017

**Conrad N. Hilton Foundation**

“Coagulation factors as biomarkers and therapeutic targets in progressive multiple sclerosis”

PI; Katerina Akassoglou, co-I: Jorge Oksenberg

\$250,000 per year

Funding period: 01/01/2015 – 06/30/2017

**Pending Grants**

**Department of Defense (DoD)**

“Fibrin as an inhibitor of remyelination: Mechanisms, functions, and therapeutic applications in multiple sclerosis”

PI: Katerina Akassoglou

\$200,000 direct costs per year, \$600,000 total direct cost

Funding period: 07/01/2017 – 06/31/2020 *Selected for Funding, Award Pending*

**NIH R01**

“Mechanisms of fibrin action in CNS B cell lymphoma”

PI: Jae Ryu, co-I: Katerina Akassoglou

\$250,000 direct costs per year

Funding period: 07/01/2016 – 06/31/2021

**Completed Grants**

**Lundbeck A/S Research Agreement**

“Developing therapeutics for neurodegenerative diseases”

PI: Katerina Akassoglou, Proprietary

Funding period: 07/01/2010 - 10/15/2016

**NIH/NINDS, 2R01 NS052189-11**

“Mechanisms of fibrin action in multiple sclerosis”

PI: Katerina Akassoglou, \$394,577 direct costs per year

Funding period: 07/15/2005 - 08/31/2016 (*consolidated in R35*)

**NIH/NINDS, 2R01 NS051470-10**

“Mechanisms and functions of p75 neurotrophin receptor signaling in astrocytes”

PI: Katerina Akassoglou, \$237,956 direct costs per year NCE

Funding period: 03/18/2005 - 03/31/2017 (*to be consolidated in R35*)

**NIH/NINDS R21 NS082976**

“Mechanisms of Fibrin Action in Neuronal Functions”

PI: Katerina Akassoglou, \$150,000 direct costs year 1 and \$125,000 year 2

Funding Period: 04/01/2014 – 12/31/2016 (*consolidated in R35*)

**NIH/NINDS EUREKA, R01 NS066361**

“Imaging signal transduction in the living mouse brain using the two-photon microscopy”

PI: Katerina Akassoglou, \$200,000 direct costs per year

Funding period: 07/01/2009 - 06/30/2014

**Fast Forward, National Multiple Sclerosis Society**

“Small molecule inhibitors of microglia activation”

PI: Katerina Akassoglou, \$243,305 direct costs over one year

Funding period: 06/20/2011 - 04/01/2013

**NIH/NINDS, 2R01 NS044025**

“Neonatal stroke: The role of microglia”

PI: Zena Vexler, UCSF; Co-Investigator: Katerina Akassoglou

\$18,000 direct costs per year, Funding period: 04/01/2013 - 03/31/2016

**NIH/NINDS, R21 NS08005**

“Blood-brain barrier function after neonatal and pediatric experimental stroke”

PI: Zena Vexler, UCSF; Co-Investigator: Katerina Akassoglou

\$18,628 direct costs per year, Funding period: 07/1/2012 - 06/30/2014

**NIH/NINDS, 3R01 NS051470 Supplement**

“Mechanisms and functions of p75 neurotrophin receptor signaling in astrocytes”

PI: Katerina Akassoglou

\$25,185 direct costs over one year, Funding period: 09/01/2012 - 03/31/2013

**NIH/NINDS, R21 NS071347**

“Function of LRP-1 in multiple sclerosis”

PI: Alban Gaultier, UCSD; Co-Investigator: Katerina Akassoglou

\$3,667 direct costs per year, Funding period: 01/01/2012 - 05/31/2013

**Lundbeck A/S Research Agreement**

“Lundbeck Center for Neurovascular and Immuno-Imaging”

PI: Katerina Akassoglou, Proprietary, Funding period: 07/01/2010 - 03/31/2012

**UCSF Diabetes and Endocrinology Research Center (DERC), P30 DK063720**

“Study the role of the neurotrophin receptor in p75 neurotrophin in insulin resistance”

PI: Katerina Akassoglou, \$50,000 direct costs over one year

Funding period: 04/01/2011 - 03/31/2012

**Fidelity Foundation**

“Advancing *in vivo* microscopy at the Gladstone Institutes”

PI: Katerina Akassoglou, \$495,000 direct costs over one year

Funding period: 08/1/2010 - 07/31/2012

**NIH/NINDS, R01 NS052189 Supplement**

“Mechanisms of fibrin action in multiple sclerosis”

PI: Katerina Akassoglou, \$55,450 direct costs over one year

Funding period: 07/01/2010 - 06/30/2011

**The Bechtel Foundation**

“Two photon laser microscope - Bechtel gift”

PI: Katerina Akassoglou, \$250,000 direct costs per year

Funding period: 03/11/2009 - 03/10/2010

**The Dana Foundation Program in Brain and Immuno-Imaging**

“*In vivo* imaging of microglia responses to blood-brain barrier disruption”

PI: Katerina Akassoglou, \$100,000 direct costs over three years

Funding period: 07/01/2007 - 03/31/2010

**UCSF Liver Center Pilot Grant**

“Study of the evolutionary conserved functions of neurotrophins”

PI: Katerina Akassoglou, \$30,000 direct costs per year

Funding period: 06/01/2009 - 05/31/2010

**National Multiple Sclerosis Society RG-3782**

“A strategy to inhibit microglia activation in inflammatory demyelination”

PI: Katerina Akassoglou, \$129,239 direct costs per year,

Funding period: 04/01/2006 - 03/31/2009

**ASPET Summer Undergraduate Research Fellowship Training Grant**

Institutional Grant, PI: Katerina Akassoglou, \$27,000 direct costs

Funding period: Summers of 2007, 2008, and 2009

**Christopher Reeve Foundation AA2-0601-2**

“Fibrin depletion as a therapeutic strategy for spinal cord injury”

PI: Katerina Akassoglou, \$62,500 direct costs over one year

Funding period: 01/01/2007 - 12/31/2007

**NIH/NINDS, R01 NS051470 Supplement**

Minority supplement for predoctoral student Benjamin D. Sachs

PI: Katerina Akassoglou, \$39,500 direct costs over one year

Funding Period: 07/01/2006 - 06/30/2007

**ASPET Summer Undergraduate Research Fellowship Training Grant**

Institutional Grant, Co-PI: Katerina Akassoglou, \$14,000 direct costs

Funding period: Summers of 2005 and 2006

**UCSD Academic Senate**

“Fibrin mechanisms in CNS inflammation”

PI: Katerina Akassoglou, \$10,000 direct costs over one year

Funding period: 12/01/2004 - 11/30/2005

**The Wadsworth Foundation Young Investigator Award**

“Fibrin in demyelination and remyelination”

PI: Katerina Akassoglou, \$75,000 direct costs per year

Funding period: 03/01/2002 - 02/28/2005

**National Multiple Sclerosis Society**

“Fibrin in demyelination and remyelination”

RG-3370, PI: Katerina Akassoglou, \$286,200 direct costs over three years

Funding period: 10/01/2002 - 09/30/2005

**HONORS & AWARDS**

- 2016 **Research Program Award (R35), NINDS**
- 2016 **Board of Scientific Councilors (BSC) NIDCR & NEI** (ad hoc member)
- 2016 **Secretary/Treasurer**, Molecular Pharmacology Division, American Society for Pharmacology and Experimental Therapeutics (ASPET) (elected officer)
- 2015 **The Marilyn Hilton Award for Innovation in MS Research**
- 2014 **American Neurological Association (ANA) Fellow**
- 2012 **Chair, Gordon Research Conference** on Plasminogen Activation and Extracellular Proteolysis, Ventura, CA 2014.
- 2013- **Executive Committee, American Society for Pharmacology and Experimental Therapeutics (ASPET)** (Member)
- 2011- **Faculty of 1000**, Neuronal and Glial Cell Biology Section (Member)
- 2009 **Exceptional Unconventional Research Enabling Knowledge Acceleration Award EUREKA**, National Institutes of Health
- 2009 **Vilcek Prize for Creative Promise in Biomedical Research**  
Finalist award, Vilcek Foundation
- 2008 **John J. Abel Award in Pharmacology**  
American Society of Pharmacology and Experimental Therapeutics (ASPET) & Eli Lilly
- 2007 **Presidential Early Career Award for Scientists and Engineers (PECASE)**  
National Science and Technology Council, Executive Office of the President of the United States, The White House
- 2006 **Young Investigator Award**, International Fibrinogen Society
- 2002 **Young Investigator Award**, International Society for Neurochemistry
- 2000 **Young Investigator Award**, International Society for Fibrinolysis and Proteolysis
- 1999 **Human Frontier Science Program (HFSP) Postdoctoral Fellowship**
- 1998 **Women in Neuroimmunology Award**, International Society of Neuroimmunology
- 1998 **Young Investigator Award**, European League Against Rheumatism (EULAR)
- 1997 **Best Poster Award**, UK Multiple Sclerosis Society
- 1996 **Young Investigator Award**, University of Ioannina, Greece
- 1996 **European Molecular Biology Organization (EMBO) Short-Term Fellowship**
- 1990-1993 **Hellenic State Fellowship Foundation**, Best Undergraduate Student Annual Fellowship

**PATENTS**

1. **“Method of treating degenerative disorders of the nervous system”**  
Patent number: US8,569,242 *Licensed*  
Inventor: Katerina Akassoglou
2. **“Monoclonal antibodies to fibrin”**  
Patent number: US 08877195 *Licensed*  
Inventor: Katerina Akassoglou
3. **“Compositions and methods for in vitro assays of fibrin activity”**  
Inventors: Katerina Akassoglou, Jae Kyu Ryu, Anke Meyer-Franke  
US Provisional Serial No 61/926,313 *Licensed*

4. **“Inhibitors of PDE4 and methods of use”**  
Patent Number: US 12377478, WO/2008/022153  
Inventors: Katerina Akassoglou, Moses Chao, Miles Houslay
5. **“Compositions and methods for regulating glucose metabolism”**  
WO 2013101645 A1  
Inventor: Katerina Akassoglou, Patent filed December 2011
6. **“Animal models of neuroinflammation and neurodegeneration”**  
Inventors: Katerina Akassoglou and Jae Kyu Ryu  
Patent filed November 2012
7. **“In vitro assays for inhibition of microglial activation”**  
Inventors: Katerina Akassoglou, Anke Meyer Franke, Chris Wilson, Kean-Hooi Ang, Michelle Arkin  
US Provisional Serial No 61/926,314
8. **“Methods of promoting CNS neuronal repair by inhibiting lrp-1”**  
WO 2012149111 A1  
Inventors: Katerina Akassoglou, Wendy M. Campana, Alban Gaultier, Steven L. Gonias, Travis Stiles
9. **“Methods of treating neurodegeneration”**  
Inventors: Katerina Akassoglou, Jae Kyu Ryu  
US Provisional filed: September 25, 2016

#### INVITED SEMINARS

1. **2018 Gordon Research Conference (GRC) on Plasminogen Activation and Extracellular Proteolysis**, Ventura, CA, *February 11-16, 2018*. Neurobiology & Extracellular Proteolysis. *Discussion Leader*.
2. **MSParis2017 – the 7th Joint ECTRIMS – ACTRIMS Meeting**, 25 – 28 October 2017, Paris, France. The blood brain barriers in MS. *Chair*
3. **Society for Neuroscience (SfN) Annual Meeting 2017**. Minisymposium: In Vivo Imaging of CNS Injury and Disease. *Scheduled for November 11 – 15, 2017. Speaker, co-Chair*
4. **San Jose State University**, San Jose, CA. Neurovascular interactions: Mechanisms, imaging, therapeutics. *Scheduled for September 13, 2017*.
5. **XXVI Congress of the International Society of Thrombosis and Hemostasis (ISTH)**, Berlin, Germany. Coagulation and Fibrinolysis at the Neurovascular Interface. *Scheduled for July 8-14, 2017. State-of-the-Art Speaker*
6. **XIII European Meeting on Glial Cell Function in Health and Disease**, Edinburgh, UK July 8-11, 2017.
7. **University of Rome, La Sapienza**, Rome, Italy. Neurovascular interactions: Mechanisms, imaging, therapeutics. *Scheduled for July 6 2017*.
8. **14th International Conference on Innate Immunity**. Aegean Conferences, Heraklion, Greece, *Scheduled for June 19-25, 2016*. Innate immunity in neurodegeneration. *Organizer, Chair, Speaker*
9. **Weill Cornell Medicine in NYC, Brain and Mind Research Institute (BMRI)**, New York, NY. Neurovascular interactions: Mechanisms, imaging, therapeutics. *Scheduled for May 11 2017*.
10. **Endowed Laura Sheard Graduate Lecture University of Washington**, Seattle, WA. Neurovascular interactions & Repair: Mechanisms, imaging, therapeutics. *Scheduled for May 9 2017*.

11. **Baylor College of Medicine**, Houston, TX, Neurovascular interactions & Repair: Mechanisms, imaging, therapeutics. *Scheduled for April 28 2017.*
12. **Baylor College of Medicine**, Houston, TX, Neurovascular interactions & Inflammation: Mechanisms, imaging, therapeutics. *Scheduled for April 27 2017.*
13. **National Academies of Sciences, Engineering, and Medicine**, Washington, DC. Forum on Neuroscience and Nervous System Disorders, Biomarkers of Neuroinflammation Workshop. Neuroimaging Biomarkers-Current Initiatives and Opportunities. *March 20-21, 2017.*
14. **Yale School of Medicine Immunobiology Seminar Series**, New Haven, CT. Neurovascular interactions: Mechanisms, imaging, therapeutics. *Scheduled for March 9, 2017.*
15. **UCSF Memory and Aging Center (MAC)**, San Francisco, CA. Fibrin in neurologic diseases. *March 3, 2017.*
16. **RegenMed SA**, San Antonio, TX. Neurovascular interactions: Inflammation and Repair. *February 16, 2016. Keynote Speaker.*
17. **Gordon Research Conference: Neuroimmune Communication in Health & Disease**. January 15-20, 2017, Ventura, CA
18. **New York Academy of Sciences Symposium “Alzheimer’s viewed as a neurovascular disorder: New treatment perspectives”**. New York, NY, December 6, 2016. Fibrin in neurodegeneration: From mechanisms to treatments.
19. **32nd Congress of the European Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS)**. London, UK, September 14-17, 2016. Mechanisms of innate immune system-mediated tissue damage.
20. **Neuroscience Symposium: Translational Neuroimmunology**, University of Texas San Antonio. San Antonio, Texas, July 22, 2016. *Keynote Speaker*
21. **13th International Conference on Innate Immunity**. Aegean Conferences, Rhodos, Greece, June 23-28, 2016. Innate immunity in neurodegeneration. *Organizer, Chair, Speaker*
22. **NIH-wide Seminar Series Inflammatory Disease Interest Group**, National Institutes of Health, Bethesda, MD, June 7, 2016.
23. **Trans-Agency Blood Brain Interface Workshop NHLBI-DOD**. National Institutes of Health, Bethesda, MD, June 7, 2016.
24. **NGF 2016**, Monterey, CA May 19, 2016. Regulation of nuclear pore complex dynamics by the p75 neurotrophin receptor. *April 18, 2016.*
25. **Gladstone Institutes**, University of California, San Francisco, March 22, 2016. Neurovascular interactions: Mechanisms, imaging, and therapeutics.
26. **Gladstone Institute of Neurological Disease (GIND) & UCSF Memory and Aging Center (MAC) Joint Symposium**. Role of the Immune System in Cognitive and Neurodegenerative Disorders, November 4, 2015, San Francisco, CA. *Chair.*
27. **Cardiovascular Research Institute (CVRI)**, University of California, San Francisco, November 12, 2015. Neurovascular interactions: Mechanisms, imaging, therapeutics.
28. **International Neurochemistry Society**, Cairns, Australia, August 23-27, 2015. Neurovascular interactions: Mechanisms, imaging, and therapeutics. *Symposium Co-chair.*
29. **11<sup>th</sup> International Conference on Cerebral Vascular Biology**, Paris, France, July 6-9, 2015. Fibrinogen-induced perivascular microglial clustering in Multiple Sclerosis.
30. **Roche**, Basel, Switzerland, June 30, 2015. Neurovascular interactions: Mechanisms, imaging, and therapeutics.



31. **12th International Conference on Innate Immunity**, Aegean Conferences, Chania, Greece, June 19-24, 2015. Fibrin: A new link between Innate and Adaptive Immunity *Chair, Speaker*
32. **Gordon Research Conference: Neurotrophic Factors**, Newport, RI, May 31-June 5, 2015. Neurotrophins and metabolism.
33. **The 9<sup>th</sup> ASO International Meeting (AIM): Thrombosis, Hemostasis, and Vascular Science**, Kumamoto, Japan, May 14-16, 2015. Coagulation factors in neurologic diseases: Mechanisms, imaging, and therapeutic potential.
34. **Ohio State University**, Columbus, OH, April 2-7, 2015. Neurovascular Mechanisms of Inflammation and Neurodegeneration.
35. **The Rockefeller University**, New York, NY, April 24, 2015. Neurovascular interactions: Mechanisms, imaging, therapeutics.
36. **Lundbeck**, Paramus, NJ, April 22, 2015. Fibrin as a therapeutic target in neurologic diseases.
37. **46<sup>th</sup> Annual American Society for Neurochemistry (ASN) Meeting**, Atlanta, GA, March 14-18, 2015
38. **Neurovascular and Immuno-Imaging Symposium**, Gladstone Institutes, San Francisco, CA, March 10, 2015. Neurovascular Interactions: mechanisms, imaging, therapeutics. *Speaker, Organizer*
39. **Gordon Research Conference: Glia**, Ventura, CA, March 1-6, 2015. Microglia and the BBB.
40. **Brain Club, University of California, San Francisco**, San Francisco, CA February 25, 2015. Neurovascular interactions: Mechanisms, imaging, therapeutics.
41. **24<sup>th</sup> Adler Symposium on “Microbiome, Metabolism, and the Neuroinflammation: Role in Alzheimer’s Disease and Neurodegeneration,” The Salk Institute**, San Diego, CA, February 2-4, 2015. BBB, microglia, neurovascular dysfunction in neurological disease.
42. **Blood Research Institute**, Milwaukee, WI, October 14, 2014. Fibrin in neurologic diseases: Mechanisms, imaging, and therapeutic potential.
43. **The University of Notre Dame**, Notre Dame, IN, October 13, 2014. Neurovascular interactions: Mechanisms, imaging, and therapeutic potential.
44. **University of California, Davis Annual Research Symposium**, Davis, CA, September 19, 2014. Neurovascular interactions: Mechanisms, imaging, and therapeutic potential. *Distinguished lecturer*
45. **2014 Joint ACTRIMS-ECTRIMS Meeting**, Boston, MA, September 10-13, 2014. Fibrin and microglia in multiple sclerosis.
46. **Genentech**, South San Francisco, CA, September 2, 2014. Neurovascular interactions: Mechanisms, imaging, therapeutics.
47. **Gordon Research Conference: Hemostasis**, Waterville Valley, NH, July 27-31, 2014. Fibrin in neurologic diseases.
48. **International Fibrinogen Society (IFRS) Meeting**, Marseille, France, July 9-11, 2014. Fibrin in neurologic diseases. *State-of-the-art Lecture*.
49. **Gordon Research Conference: Barriers of the CNS**, New London, NH, June 16, 2014. BBB disruption in neurologic diseases: Mechanisms, imaging, and therapeutic potential.
50. **11th International Conference on Innate Immunity**, Aegean Conferences, Olympia, Greece, June 8, 2014. Fibrin and Innate Immunity: Mechanisms, imaging, and therapeutics *Session Chair*
51. **4th Annual Gladstone/DZNE Workshop**, Bonn, Germany, May 11-14 2014. Neurovascular interactions: Mechanisms, imaging, therapeutics.

52. **UofL Seminar Series in Neuroscience, University of Louisville**, Louisville, KY, January 23, 2014. Neurovascular interactions: Mechanisms, imaging, therapeutics.
53. **Emory University School of Medicine**, Atlanta, GA, January 22, 2014. Neurovascular interactions: Mechanisms, imaging, and therapeutic potential.
54. **Press Conference, Society for Neuroscience Annual Meeting**, San Diego, CA, November 10, 2013. A potential early detection method in multiple sclerosis.
55. **Mini-symposium on “Inflammation-induced axonopathy: Insights into the neurodegenerative aspects of multiple sclerosis,” University of Michigan**, Ann Arbor, MI, November 8, 2013. Neurovascular interactions: Mechanisms, imaging, and therapeutic potential.
56. **McGill University**, Montreal, Canada, October 24, 2013. Neurovascular interactions in neuroinflammation: Mechanisms, imaging, and therapeutic potential.
57. **Neuroimmunology Branch, National Institute of Neurological Disorders and Stroke (NINDS)**, Bethesda, MD, September 10, 2013. Neurovascular interactions: Mechanisms, imaging, therapeutics.
58. **UAB Symposium on Multiple Sclerosis, University of Alabama at Birmingham**, Birmingham, AL, May 15-17, 2013. The role of microglia in EAE and MS.
59. **2013 Stauffer Symposium, University of Southern California**, Los Angeles, CA, April 17-18, 2013. Neurovascular interactions: Mechanisms, imaging, and therapeutic potential.
60. **3rd Annual Gladstone/DZNE Workshop – “From Science to Therapeutics: The Best Way Forward,” San Francisco, CA**, April 15-17, 2013. Targeting fibrin in neurologic disease.
61. **University of Virginia**, Charlottesville, VA, March 21, 2013. Neurovascular interactions in neuroinflammation: Mechanisms, imaging, and therapeutic potential.
62. **Special Symposium on Vascular Biology, Ludwig-Maximilians-University**, Munich, Germany, March 14-15 2013. Neurovascular interactions in neuroinflammation: Mechanisms, imaging, and therapeutic potential.
63. **Karolinska Institute**, Stockholm, Sweden, February 15, 2013. Neurovascular interactions in neuroinflammation: Mechanisms, imaging, and therapeutic potential.
64. **6th International Workshop on “Cell Communication in Health & Disease – Bridging the Gap,” Medical University of Vienna**, Vienna, Austria, February 14, 2013. The role of fibrin in microglial activation and axonal damage in neuroinflammation.
65. **Hellenic Pasteur Institute**, Athens, Greece, February 11, 2013. Neurovascular interactions in neuroinflammation: Mechanisms, imaging, and therapeutic potential.
66. **Mini-symposium on “Brain Immunology: Peripheral Triggers of CNS disease,” Society for Neuroscience Annual Meeting**, New Orleans, LA, October 13-17, 2012. The inflammatory role of fibrin in the nervous system. *Speaker, Chair.*
67. **Nancy Davis Foundation for Multiple Sclerosis 19th Annual Race to Erase MS**, Los Angeles, CA, May 18, 2012. BBB disruption and microglial dynamics in neuroinflammation.
68. **2012 Gordon Research Conference (GRC) on Plasminogen Activation and Extracellular Proteolysis**, Ventura, CA, February 12-17, 2012. Fibrin in multiple sclerosis. *Discussion Leader, Vice Chair.*
69. **5th Annual Regional Symposium On Glial-Neuronal Interactions in Health and Disease**, Center for Glial-Neuronal Interactions, UC Riverside, January 27, 2012. BBB disruption and microglial dynamics in neuroinflammation.

70. **Society for Neuroscience Neurobiology of Disease Workshop: “The brain under siege: The biology of glia and neurons in autoimmune attack of the CNS,”** Washington, DC, November 11, 2011. The blood brain barrier in neurological disease.
71. **2nd Annual California Multiple Sclerosis Research Forum,** San Francisco, CA, August 5-6, 2011. Fibrin in multiple sclerosis.
72. **UCSF QB3 Brain Club,** San Francisco, CA, March 23, 2011. Multiple sclerosis: Mechanisms and challenges.
73. **NAWM Workshop,** Naples, FL, January 6-8, 2011. Fibrin in normal appearing white matter.
74. **Blood Brain Barrier - Cold Spring Harbor Laboratories (CSHL) Meeting,** Cold Spring Harbor, NY, December 8-11, 2010. Fibrinogen mechanisms and functions in nervous system disease.
75. **New York Academy Sciences (NYAS) Symposium on Neuroinflammation,** New York, NY, October 26, 2010. Fibrinogen signal transduction as a mediator and therapeutic target in inflammation: Lessons from multiple sclerosis.
76. **Stanford University,** Palo Alto, CA, August 11, 2010. Neurovascular mechanisms of inflammation and tissue repair.
77. **1st Annual California Multiple Sclerosis Research Forum,** Newport Beach, CA, March 5-6, 2010. Fibrinogen as a mediator and therapeutic target in inflammatory demyelination.
78. **2010 Gordon Research Conference (GRC) on Plasminogen Activation and Extracellular Proteolysis,** Ventura, CA, February 14-19, 2010. Molecular determinants of neurovascular dynamics. *Discussion Leader.*
79. **Multiple Sclerosis Spanish Preceptorship Program,** University of California, San Francisco, CA. 2010. Microglia in Multiple Sclerosis.
80. **University of California Davis,** December 10, 2009. Molecular determinants of neurovascular dynamics.
81. **American Neurological Association (ANA) 2009 Annual Meeting,** Baltimore, MD, October 11-14, 2009. *In vivo* imaging of microglia at the neurovascular interface. *State-of-the-Art Lecture.*
82. **XXII Congress of the International Society on Thrombosis and Haemostasis (ISTH),** Boston, MA, July 11-16, 2009. Fibrinogen signal transduction in neurologic disease. *State-of-the-Art Lecture, Session co-chair.*
83. **FASEB Conference “Proteases in Hemostasis and Vascular Biology,”** Carefree, AZ, June 7-12, 2009. Neurovascular mechanisms of inflammation and tissue repair.
84. **Myelin Repair Foundation (MRF) Seminar,** San Francisco, CA, April 22, 2009. Spinal cord imaging via 2 photon microscopy.
85. **Molecular & Cellular Biology of Plasminogen Activation - Cold Spring Harbor Laboratories (CSHL) Meeting,** Cold Spring Harbor, NY, March 31-April 4, 2009. Fibrinogen links vascular damage with glial scar formation through regulation of the TGF- $\beta$ /Smad signaling pathway. *Session Chair.*
86. **Multiple Sclerosis Spanish Preceptorship Program,** University of California, San Francisco, CA. 2009. Microglia in Multiple Sclerosis.
87. **Neuroimmunology Seminar Series, Department of Neurology, University of California, San Francisco,** San Francisco, CA, December 15, 2008. Fibrinogen and inflammation: A causative role for blood proteins in nervous system disease.
88. **Lundbeck,** Copenhagen, Denmark, September 15, 2008. Fibrinogen as a therapeutic target in multiple sclerosis.

89. **Biomedical Research Foundation, Academy of Athens**, Athens, Greece, September 12, 2008. Neurovascular mechanisms of inflammation, fibrosis and tissue repair.
90. **International NGF Meeting: Life and Death in the Nervous System**, Kfar Blum, Upper Galilee, Israel, September 4-8, 2008. Tissue repair, scar formation and the pursuit of p75 neurotrophin receptor.
91. **University of North Carolina at Chapel Hill**, Chapel Hill, NC, May 15, 2008. Fibrinogen mechanisms and functions in nervous system disease.
92. **Weill Cornell Medical College**, New York, NY, May 13, 2008. Molecular determinants of neurovascular communication.
93. **1st Annual Conference on Advances on MS, MS Center at SUNY Stony Brook**, Stony Brook, NY, May 12, 2008. Fibrinogen mechanisms and functions in multiple sclerosis.
94. **The J. David Gladstone Institutes 11th Annual Scientific Retreat**, Asilomar Conference Grounds, Pacific Grove, April 30, 2008. Neurovascular mechanisms of inflammation, fibrosis and tissue repair.
95. **Experimental Biology 2008**, San Diego, CA, April 5-9, 2008. p75 neurotrophin receptor in liver regeneration.
96. **Gordon Research Conference: Plasminogen Activation & Extracellular Proteolysis**, Ventura, CA, February 10-15, 2008. Fibrinogen functions in the nervous system.
97. **The Vollum Institute**, Portland, OR, December 3, 2007. Molecular determinants of neurovascular communication.
98. **University of California, San Francisco**, San Francisco, CA, October 25, 2007. Fibrinogen mechanisms and functions in inflammatory demyelination.
99. **University of California, Santa Barbara**, Santa Barbara, CA, October 19, 2007. Molecular determinants of neurovascular communication.
100. **Beckman Research Institute of the City of Hope**, Duarte, CA, October 18, 2007. Molecular determinants of neurovascular communication.
101. **Cardiovascular Science Conference Series**, La Jolla, CA, October 12, 2007. Molecular determinants of neurovascular communication.
102. **Myelin Repair Foundation Annual Meeting**, Montreal, Canada, September 26, 2007. Role of microglia in multiple sclerosis.
103. **Brain Research Institute, University of Vienna**, Vienna, Austria, September 24, 2007. Fibrinogen mechanisms and functions in inflammatory demyelination.
104. **Max Planck Institute for Neurobiology**, Munich, Germany, September 21, 2007. Fibrinogen as a signaling molecule and a therapeutic target for inflammation and neuroprotection in multiple sclerosis.
105. **Gladstone Institute of Neurological Disease**, San Francisco, CA, July 27, 2007. Molecular determinants of neurovascular communication.
106. **Life Sciences 2007**, Glasgow, UK, July 8-12, 2007. Interactions of the p75 neurotrophin receptor with phosphodiesterases.
107. **University of West Virginia**, Morgantown, WV, April 4, 2007. Functional interactions between p75 neurotrophin receptor with phosphodiesterases.
108. **Mount Sinai School of Medicine**, New York, NY, November 9, 2006. Fibrinogen in multiple sclerosis: Novel signaling pathways, novel therapeutic targets for inflammatory demyelination.

109. **18th International Society for Fibrinolysis and Proteolysis Meeting, San Diego, CA**, August 20-25, 2006. Neurobiology. *Session Chair*.
110. **Gordon Research Conference: Cyclic Nucleotide Phosphodiesterases**, University of New England, Biddeford, ME, June 4-9, 2006. Targeting cAMP degradation to p75 neurotrophin receptor via direct recruitment of phosphodiesterases.
111. **NIDCR/National Institutes of Health**, Bethesda, MD, May 10, 2006. Neurogenic fibrosis: Mechanisms, Functions, Disease.
112. **Brain Research Institute, University of Vienna**, Vienna, Austria, April 26, 2006. Fibrin/Mac-1-mediated microglia activation: Novel ligands, novel therapeutic targets for inflammatory demyelination.
113. **Gordon Research Conference: Plasminogen Activation and Extracellular Proteolysis**, Ventura, CA, February 19-24, 2006. Neurogenic regulation of plasminogen activation.
114. **Hillcrest Medical Center, UCSD**, San Diego, CA, October 14, 2005. Fibrin mechanisms and functions in nervous system pathology.
115. **National Multiple Sclerosis Society, San Diego Chapter**, La Jolla, CA, July 28, 2005. Fibrin in multiple sclerosis.
116. **Cardiovascular Science Conference Series**, La Jolla, CA, April 29, 2005. Neurogenic fibrosis: Mechanisms, functions, disease.
117. **17th International Society for Fibrinolysis and Proteolysis Meeting**, Melbourne, Australia, March 21-25, 2004. The neurotrophin receptor p75<sup>NTR</sup> as a regulator of plasminogen activation. *Session Co-chair*.
118. **National Multiple Sclerosis Society, San Diego Chapter**, San Diego, CA, June 23, 2004. Fibrin mechanisms and functions in nervous system pathology.
119. **La Jolla Mesa Signaling Group**, La Jolla, CA, March 9, 2004. Mechanisms of fibrin action in the nervous system.
120. **Salk Institute for Biological Studies**, San Diego, CA, December 4, 2003. Neurotrophin interactions with the extracellular matrix for the regulation of tissue repair.
121. **Biomedical Sciences Research Center Alexander Fleming**, Athens, Greece, September 9, 2003. Neurotrophin interactions with the extracellular matrix for the regulation of tissue repair.
122. **VI European Meeting on Glial Cell Function in Health and Disease**, Berlin, Germany, September 5, 2003. Fibrin functions and signaling in nervous system regeneration. *Session Co-Chair*.
123. **Burhnam Institute**, La Jolla, CA, August 18, 2003. Fibrin functions and signaling in nervous system regeneration.
124. **University of California, San Diego**, La Jolla, CA, September 24, 2002. Fibrin functions and signaling in nervous system regeneration.
125. **Gordon Research Conference: Thrombolysis, Fibrinolysis and Extracellular Proteolysis**, Ventura, CA, February 17-22, 2002. Nervous system pathologies: The fibrin perspective.
126. **Skirball Institute of Biomolecular Medicine**, NYU School of Medicine, New York, NY, February 27, 2002. Nervous system pathologies: The fibrin perspective.
127. **Centre Hospitalier Universitaire Vaudois**, Lausanne, Switzerland, June 22, 2001. The role of fibrin in nervous system damage and regeneration: Insights for therapeutic intervention.
128. **Nara Institute of Science and Technology**, Nara, Japan, June 30, 2000. Regulation of neuronal regeneration by extracellular proteolysis: Insights for therapeutic intervention.

129. **State University of New York**, Stony Brook, NY, March 15, 2000. The PA/plasmin system in neuronal regeneration: Insights for therapeutic intervention.
130. **Hellenic Pasteur Institute**, Athens, Greece, September 20, 1999. The PA/plasmin system in neuronal regeneration: Insights for therapeutic intervention.
131. **MRC, Royal Postgraduate Medical School, Department of Mouse Embryology**, London, UK, November 13, 1997. TNF in CNS inflammation and demyelination studied in transgenic mice.
132. **Molecular Pathology, Hellenic Society of Anatomic Pathology**, Athens, Greece, November 1, 1997. Application of transgenic and knock out systems to neuropathology.
133. **Institute of Cell Biology and Immunology, University of Stuttgart**, Stuttgart, Germany, July 3, 1997. TNF-triggered CNS pathology: Differential role for the two TNF receptors.
134. **Institute of Neurology, University of Vienna**, Vienna, Austria, September 27, 1996. TNF-triggered CNS pathology in transgenic mice.
135. **Demyelination and Remyelination, Philippe Laudat Conferences INSERM**, Aix-Les-Bains, France, September 23-28, 1995. Constitutive expression of TNF in the CNS of transgenic mice induces chronic inflammatory neurological disease.

#### REVIEWER FOR SCIENTIFIC JOURNALS

Nature, Neuron, Science, Journal of Experimental Medicine, Journal of Neuroscience, Brain, Journal of Clinical Investigation, Annals of Neurology, Proc Natl Acad Scie USA, Journal of Cell Biology, Trends in Neuroscience, Molecular Pharmacology, Glia, Journal of Neurobiology, EMBO Journal, Neurotoxicity Research, Journal of Neuroimmunology, Developmental Neurobiology, Journal of Biomedicine and Biotechnology, FASEB Journal, Experimental Neurology, Molecular Neurobiology, Thrombosis and Hemostasis, FEBS Journal, Journal of Neurochemistry, Neuroscience, Journal of Biological Chemistry, Neuroscience Letters, Gastroenterology, Hepatology, Journal of Neuroscience Methods, Brain Pathology, BMC Neuroscience, Neuropharmacology, Acta Neuropathologica, Neuromolecular Medicine, Cell Reports, Nature Communications, Science Translational Medicine, Blood Journal, Trends in Immunology, Annals of Neurology

#### ADVISORY PANELS & CONSULTING

- |         |  |
|---------|--|
| 2017    | <b>Neurology Central</b> , Expert Panel Member   |
| 2017    | <b>Alzheimer's Drug Discovery Foundation (ADDF)</b> , advisory panel member  |
| 2017    | <b>Juno Therapeutics</b> , Neurotoxicity Advisory Board  |
| 2016    | <b>National Institute of Dental and Craniofacial Research (NIDCR)</b> , Board of Scientific Counselors (BSC) adhoc member                          |
| 2016    | <b>National Eye Institute (NEI)</b> , Board of Scientific Counselors (BSC) adhoc member  |
| 2014-16 | <b>Lundbeck</b> , consultant   |
| 2010-13 | <b>Lundbeck</b> , consultant   |
| 2012    | <b>Research Investments in the Sciences and Engineering (RISE) Program</b> , UC Davis, External Scientific Advisory Committee member, 2012         |
| 2012    | <b>National Institute of Dental and Craniofacial Research (NIDCR)</b> , Board of Scientific Counselors (BSC) adhoc member                          |
| 2010    | <b>National Institutes of Health, Big Think Meeting, Big Ideas for Translation of Basic Research</b> , Washington, DC. Invited by Francis Collins. |

## REVIEWER FOR FUNDING AGENCIES

### National Funding Agencies

- NIH Hemostasis and Thrombosis (HT) Study Section (Member 2013-2019)
- NIH Directors New Innovator Award Study Section (ad hoc, 2012)
- NIH Exceptional Unconventional Research Promoting Knowledge Acceleration (EUREKA) Study Section (ad-hoc)
- NIH/NINDS Neurodifferentiation, Plasticity and Regeneration (NDPR) Study Section (ad-hoc)
- National Multiple Sclerosis Society Fellowship Advisory Committee (Reviewer 2011-2013 and 2015-2017)
- National Multiple Sclerosis Society Pilot grant reviewer 2005-2008
- North Carolina Biotechnology Center
- Alzheimer's Association
- Wings for Life Spinal Cord Research Foundation

### International Funding Agencies

- Review Panel for European Research Council (ERC, 2013)
- German Research Foundation (DFG) 2014, 2015
- French National Research Agency (ANR) 2015
- National Science Centre, Poland
- Israel Science Foundation
- Moldovan-US Bilateral Grants Programme
- Alzheimer's Research Trust, Cambridge, UK (Expert Referee Panel)
- Biotechnology and Biological Sciences Research Council (BBSRC), UK
- Medical Research Scotland, UK
- French Research Multiple Sclerosis Association ARSEP (Association pour la Recherche sur la Sclérose En Plaques)
- Sapienza University of Rome Grant Program
- A-STAR Duke-NUS/Singhealth Academic Clinical Programme

## EDITORIAL BOARD MEMBER

- Cellular Signalling
- IntraVital
- Molecular Pharmacology

## SYMPOSIA ORGANIZER

- 2015- **International Innate Immunity Conference**, Organizing Committee Member
- 2015 **Microglia-Vascular Interactions Symposium**, International Neurochemistry Society Annual meeting, Cairns, Australia. Co-Chair
- 2015 **XVth International Workshop-Cellular and Molecular Biology of Plasminogen Activation**, International Committee Member
- 2015 **Symposium: Neurovascular and Immuno-Imaging**, Gladstone Institutes, San Francisco, CA. Chair & Organizer

- 2012 **Gordon Research Conference (GRC) on Plasminogen Activation and Extracellular Proteolysis**, Ventura, CA. Chair
- 2012 **Mini-Symposium: “Brain Immunology: Peripheral Triggers of CNS Disease” Society for Neuroscience Annual Meeting**. Chair
- 2011 **XIIIth International Workshop on Molecular and Cellular Biology of Plasminogen Activation**, Clare College, Cambridge, UK, July 9-13, 2011. Abstract Review Advisory Committee.
- 2010 **Gordon Research Conference (GRC) on Plasminogen Activation and Extracellular Proteolysis**, Ventura, CA. Vice-Chair.
- 2006 **UCSD Pharmacology Department Seminar Series “Molecular and cellular neurobiology as the foundation for drug development”**. Organizer, Chair.
- 2006 **XIXth International Fibrinogen Workshop**, University of Surrey, Guilford, UK, June 23-26, 2006. Reviewer.
- 2006 **18th International Society for Fibrinolysis and Proteolysis Meeting**, San Diego, CA, August 27-31, 2006. Local Scientific Organizing Committee Member
- 2005 **San Diego Chapter National Multiple Sclerosis Society Fundraising Symposium**. Co-Organizer and Keynote Lecturer. Raised \$100,000 for the NMSS.
- 2003 **Scientific Symposium: “Interactions between Glial Cells and Blood Proteins in the Pathophysiology of the Nervous System,”** VI European Meeting on Glial Cell Function in Health and Disease, Berlin, Germany, September 3-6, 2003. Organizer, Chair.

#### DIVERSITY ACTIVITIES

- 2016 **Power Hour: Committed to inclusion and the professional development of women in science, Gordon Research Conferences**, February 15, 2016. Ventura, CA. Organizer
- 2014- **Mentor**, First Generation to College (FG2C) UCSF program
- 2013-2014 **Member**, Gladstone Diversity TaskForce
- 2010-2012 **Member**, Diversity Committee, Gladstone Institutes.
- 2007 **Women In Bioscience (WIB) and Association for Women in Science (AWIS) Annual Conference**, Invited Speaker: “Postdoc: Making the right choice” at the 2007, Salk Research Institute, La Jolla, CA, May 19, 2007.
- 2004-2008 **Director**, Summer Undergraduate Research Fellows (SURF) Program, Department of Pharmacology, UCSD. Increased minority student participation to 35% by raising matching funds for minority recruitment.
- 2000-2002 **Draper Interdisciplinary Master’s Program in Humanities and Social Thought**, New York University, New York, NY. Completed Courses on Gender Studies, Anthropology of Gender, History of Science (no degree).

#### SOCIETY MEMBERSHIPS

- 1999 **International Society of Neuroimmunology**
- 2001 **New York Academy of Sciences**
- 2001 **Society For Neuroscience**
- 2002 **American Society for Cell Biology**
- 2004 **International Society for Fibrinolysis and Proteolysis**
- 2005 **American Society for Pharmacology and Experimental Therapeutics (ASPET)**



- 2014 **American Neurological Association (ANA)**  
 2016 **International Society for Neurochemistry**

### **OTHER ACTIVITIES**

- 2010 **Discussion Leader & Poster Judge**, 2010 Gordon Research Conference on Plasminogen Activation and Extracellular Proteolysis, Ventura, CA, February 14-19, 2010.
- 2009 **Associate Member**, UCSF Liver Center, San Francisco, CA.
- 2008 **Bay Area Alzheimer's Disease Research Symposium Poster Judge**, The J. David Gladstone Institutes, University of California, San Francisco, CA.
- 2008 **Poster Judge**, Gordon Research Conference, Plasminogen Activation & Extracellular Proteolysis, Ventura, CA.
- 2007 **Career Panel**, "Expectations of a first academic job" at the NIH-sponsored Postdoctoral Program Institutional Research and Academic Career Development Award (IRACDA) National Annual Meeting, San Diego, CA, June 11, 2007.
- 2006 **Career Panel**, "Postdoc-assistant professor transition" at the Institutional Research and Academic Career Development Award Meeting (IRACDA), UCSD, La Jolla, CA, November 2006.
- 2003 **Judge**, NYC Science and Engineering Fair (NYCSEF), New York Academy of Sciences Educational Program, New York, NY, February 9, 2003.

### **UNIVERSITY SERVICE**

#### **Faculty Search Committees**

- 2014 **Member**, Search Committee for the Joint Faculty Search of the UCSF Departments of Anatomy and Physiology.
- 2014 **Member**, Committee for the Donnie Smith Chair in Multiple Sclerosis Research UCSF
- 2011 **Member**, Search Committee for the UCSF Debbie and Andy Rachleff Distinguished Professorship in Neurology II (Chair, Jorge Oksenberg).
- 2008 **Member**, Search Committee for Neurology/GIND Faculty Appointment (Chair, Lennart Mucke).
- 2006-2007 **Member**, Search Committee for Neurooncology Faculty Appointment, UCSD Pathology Department (Chair, Harry Powell).
- 2005 **Member**, Search Committee for UCSD Pathology Department (Chair, Steven Gonias).

#### **Other University Committees**

- 2013-14 **Member**, Gladstone Faculty Meeting Agenda Planning Committee
- 2013-14 **Member**, Inside UCSF Focus Group
- 2011 - 2013 **Member**, Committee on Community, UCSF (Mission Bay).
- 2011 **Member**, UCSF Dana Program Internal Selection Committee
- 2010 **Member**, Admissions Committee, UCSF Neuroscience Graduate Program.
- 2009 **Chair**, Committee for In Vivo Imaging Center for Gladstone/UCSF.
- 2005-2008 **Member**, Space Committee, Department of Pharmacology, UCSD.
- 2004-2008 **Liaison**, Representing the UCSD Pharmacology Department's to ISP (Independent Study Project), UCSD School of Medicine.
- 2004-2008 **Alternate Representative Member**, Pharmacology Department, UCSD Academic Assembly.

- 2003-2005 **Member**, Admissions Committee for the Biomedical Sciences (BMS) Graduate Program, University of California, San Diego.
- 2005-2007 **Chair**, Pharmacology Seminar Series Organizing Committee, Department of Pharmacology, UCSD.
- 2003-2004 **Member**, Pharmacology Seminar Series Organizing Committee, Department of Pharmacology, University of California, San Diego, CA.
- 2001 **Member**, Summer Undergraduate Research Fellows (SURF) Committee, The Rockefeller University, New York, NY.
- 2001 **Member**, Exploratory Committee, The Rockefeller University Postdoctoral Association, New York, NY.

### **Other University Service**

- 2016 **Participant**, Neurology retreat, Neuro2025
- 2009 **Participant**, UCSF MS Center Meeting And Tour.  
VIP Guest: Katherine Feinstein, San Francisco Superior Court Judge.
- 2009 **Participant**, National Multiple Sclerosis Society Northern California Chapter Luncheon.
- 2008- **Participant**, UCSF Neurology Department Seminar Series (weekly).
- 2008- **Participant**, GIND Research in Progress Seminar (RIPS) (weekly).
- 2008-Present **Member**, Neuroscience Graduate Program, University of California, San Francisco (Chair, Louis Reichardt).
- 2008-Present **Member**, Immunology Graduate Program, University of California, San Francisco (Chair, Abul Abbas).
- 2008 **Website Co-Designer**, Gladstone Institute of Neurological Disease (GIND) Website.
- 2008 **Participant**, Aird Professorship Dinner, UCSF Neurology Department for Alastair Compston.
- 2003-2007 **Member**, Molecular Pathology Graduate Program, University of California, San Diego.
- 2003-2008 **Member** of the Biomedical Sciences (BMS) Graduate Program of the University of California, San Diego (Chairs: Alexandra Newton & Don Cleveland).
- 2005 **Member**, Career Panel, Biomedical Sciences (BMS) Retreat, Lake Arrowhead, CA.
- 2004-2007 **Website Creator & Director**, UCSD Pharmacology Department Website.

### **Seminar Host**

- 2017 Chenghua Gu, Harvard, GIND Seminar Series, Gladstone Institutes
- 2017 Dorian McGovern, NINDS, UCSF Immunology Seminar Series.
- 2017 Laurie Dempsey, Nature Immunology, UCSF & Gladstone Institutes
- 2016 Patrizia Cassacia, Mt Sinai, GIND Seminar Series, Gladstone Institutes
- 2016 Coastantino Iadecola, Weill Cornell, GIND Seminar Series, Gladstone Institutes
- 2016 David Attwell, UCL, GIND Seminar Series, Gladstone Institutes
- 2015 Daniel Reich, NINDS, Neuroimmunology Seminar Series, UCSF
- 2014 Beth Stevens, Harvard, GIND Seminar Series, Gladstone Institutes
- 2014 Niccolo Terrando, Karolinska, Neuroimmunology Seminar Series, UCSF
- 2013 Sarkis Mazmanian, Caltech, GIND Seminar Series, Gladstone Institutes.
- 2013 Robyn Klein, Washington U, GIND Seminar Series, Gladstone Institutes.
- 2012 Jerold Chun, Scripps, GIND Seminar Series, Gladstone Institutes.

- 2011 Ted Abel, U Penn, GIND Seminar Series, Gladstone Institutes.  
 2010 Hans Lassmann, Neuroimmunology Journal Clubs and Research Talks, UCSF.  
 2009 Jerry Silver, GIND Seminar Series, Gladstone Institutes.  
 2004-2008 Hosted 12 speakers of the UCSD Pharmacology Seminar Series: Wen-Biao Gan, Marc Tessier-Lavigne, Mark Tuszynski, Greg Lemke, Ben Cravatt, Tony Yaksh, Mark Elissman, Moses V. Chao, Fred Gage, Morris Birnbaum, Miles D. Houslay, Silvio Gutkind.

### **Internal Informal Seminars**

- 2012 **Invited Seminar**, Immunology Faculty Seminar Series, UCSF.  
 2010 **Speaker**, UCSF Neurology residents.  
 2010 **Speaker**, UCSF Multiple Sclerosis Center Retreat.  
 2008-2010 **UCSF Invited Internal Seminars:** Neuroscience Faculty Breakfast, Immunology Graduate Program Seminar Series, Gladstone Institutes Faculty Lunch Seminar, Neuroscience Graduate Program Annual Retreat, Gladstone Annual Retreat, Neuroimmunology Seminar Series, Neural Injury and Repair Series, Center for Cerebrovascular Research (CCR) Seminar Series.  
 2009 **Invited Seminar**, Science for Admin Seminar Series, Gladstone Institutes.  
 2009 **Invited Presentation**, Biolink Teacher Group Lecture and Visit, Gladstone Institutes.

### **TEACHING**

- 2016 **UCSD BIOM/PHARM 255**  
 Course organizer, Joan Heller Brown  
 Lecture title: "Multiple Sclerosis"
- 2015 **UCSF NS201B. Basic Concepts for Cellular and Developmental Neuroscience**  
 Course organizer, Eric Huang  
 Lecture title: "Microglia"
- 2015 **UCSD BIOM/PHARM 255**  
 Course organizer, Joan Heller Brown  
 Lecture title: "Multiple Sclerosis"
- 2015 **UCSF NS201B. Basic Concepts for Cellular and Developmental Neuroscience**  
 Course organizer, Eric Huang  
 Lecture title: "Microglia"
- 2014 **UCSF NS219. Neuroscience Mini Course**  
 UCSF, Course Organizers: Li Gan, Susanna Rosi  
 Lecture Title: "Neuroinflammation"
- 2013 **UCSD BIOM 255. Molecular Basis of Drug Action and Disease Therapy**  
 UCSD, Course Organizer: Joan Heller Brown  
 Lecture Title: "Multiple sclerosis"
- 2012 **UCSD BIOM 255. Molecular Basis of Drug Action and Disease Therapy**  
 UCSD, Course Organizer: Joan Heller Brown  
 Lecture Title: "Multiple sclerosis"

**UCSF NS219. Topics in Basic or Translational Neuroscience (Mini Course)**

UCSF, Course Organizers: Li Gan, Susanna Rosi

Lecture Title: “Neuroinflammation in multiple sclerosis”

**UCSF Immunology Graduate Program: Journal Club Speaker**

UCSF, Course Organizer: Tony DeFranco

Lecture Title: “Role of commensal microbiota in CNS disease”

2010

**UCSD Principles of Pharmacology (POP)**

UCSD Medical School

Medical Student Conference on Alzheimer’s Disease

**UCSD BIOM 255. Drugs and Disease: Nervous System Disease and Therapy**

UCSD, Course Organizers: Joan Heller Brown, Nigel Calcutt

Lecture Title: “Multiple sclerosis”

2009

**UCSF 170.09. Current Topics in Medical Science**

University of California, San Francisco (UCSF) Medical School

Medical Scientist Training Program (MSTP)

**UCSD BIOM 255. Drugs and Disease: Nervous System Disease and Therapy**

UCSD, Course Organizers: Joan Heller Brown, Nigel Calcutt

Lecture Title: “Multiple sclerosis”

**UCSD NEU 221. Peripheral Nerve & Schwann Cell Biology**

UCSD, Course Organizer: Wendy Marie Campana

Lecture Title: “Fibrinogen and schwann cells after PNS injury”

2008

**UCSF Neuroscience Graduate Program:** New Student/Faculty Lunch Seminar, Student NSF Fellowship Writing Course, Journal Club Speaker, Journal Club faculty coach for two graduate students.

**UCSD Principles of Pharmacology (POP)**

UCSD Medical School

Lectures on asthma, histamines and antihistamines

Medical Student Conference on Vascular Pharmacology

**UCSD Disease of the Nervous System**

UCSD, Course Organizers: Sam Pfaff, Marty Goulding, Kuo- Fen Lee

Lecture Title: “Multiple sclerosis”

**UCSD Drugs and Disease**

UCSD BMS Graduate Program

Lecture Title: “Multiple sclerosis”

2007

**UCSD Drugs and Disease**

UCSD BMS Graduate Program

Journal Club on *Rho GTPases***The Biology of Inflammation: New Frontiers in Drugs and Disease**

UCSD BMS Graduate Program

Course Directors: Michael Karin, Tony Yaksh

Lecture Title: “Microglia”

**Principles of Pharmacology (POP)**

UCSD Medical School

Lectures on asthma, histamines and antihistamines

Medical Student Conference on Autacoids

**UCSD Drugs and Disease**

UCSD BMS Graduate Program

Lecture Title: “Multiple sclerosis” and Journal Club

2006

**Molecular and Cellular Neurobiology as the Foundation for Drug Development**

UCSD Course Director

BMS Seminar graduate course offered Winter 2006

Lectures on “Topographic neural maps,” “Adult neurogenesis,” “Neurotrophin receptor signaling” Seminars by: Marc Tessier-Lavigne, Genentech; Mark Tuszynski, UCSD; Greg Lemke, Salk; Ben Cravatt, Scripps; Tony Yaksh, UCSD; George Koob, Scripps; Mark Ellisman, UCSD; Moses V. Chao, NYU; Fred Gage, Salk

**Principles of Pharmacology (POP)**

UCSD Medical School

Lectures on asthma, histamines and antihistamines

**UCSD Drugs and Disease**

UCSD BMS Graduate Program

Lecture Title: “Multiple sclerosis”

2004-2005

**Molecular Pathology UCSD / Burnham Graduate Program**

Course Path 220: Neurodegenerative Diseases

Lecture Title: “Multiple sclerosis” (2 hour lecture, 2 hour journal club)

2005

**Principles of Pharmacology (POP)**

UCSD Medical School

Eye/neuromuscular junction conference

**LAB MEMBERS**

**Current**

***Staff Research Scientists***

Jae Kyu Ryu, Ph.D., University of Vancouver, Canada

June 2013-Present

Race to Erase MS Young Investigator Award July 1 2016 – June 30 2018

American Heart Association Scientist Development Grant July 2016 – June 2019

Mario Merlini, PhD, University of Zurich, Switzerland

December 2016 – Present

***Assistant Clinical Professor***

Mark Petersen, M.D., Stanford University

UCSF Department of Pediatrics Assistant Professor in Neonatology

Pediatric Scientist Development Program Fellow (2012-2015), \$102,330 per year

Pediatrics NIH K12 Award 2015-2016

September 2009-Present

***Research Scientists***

Victoria Rafalski, Ph.D., Stanford University

March 2013-Present

UCSF Immunology NIH Training Grant Postdoctoral Fellow, 06/01/2013 – 05/31/2014

American Heart Association Postdoctoral fellow 07/01/2014 – 06/30/2016

Sophia Bardehle, Ph.D., Ludwig-Maximilians University, Munich, Germany

November 2013 – Present

DFG (German Research Foundation) Postdoctoral Fellow 08/01/2014 – 07/31/2016

NMSS Postdoctoral Fellow 08/01/2016 – 07/31/2019

***Postdoctoral Scientists***

Andrew Mendiola, PhD. University of Texas, San Antonio

Starting June 2017

***Clinical Fellows***

Terry Dean, MD/PhD, Johns Hopkins University

UCSF Department of Pediatrics Clinical Fellow

June 2016 - Present

Michael Wu, MD/PhD

UCSF Department of Anesthesiology

January 2017 -

***Research Associates***

Belinda Cabriga, Saint Anne School of Medical Sciences, Lucena City, Philippines

November 2011-Present

Pamela Rios Coronado, BA, UC Berkeley

November 2014-present

**PAST TRAINEES**

***Postdoctoral Scientists***

Ryan A. Adams, Ph.D., University of California, San Diego

2003-2007, National Multiple Sclerosis Society Postdoctoral Fellow

*Current Position: Senior Scientist, aTyr Pharma, San Diego, CA*

Fred Robinson, Ph.D., University of California, San Diego

2006-2008, NIH/NINDS K99/R00 Award, co-mentor with Dr. Jack Dixon

*Current Position: Assistant Professor, Vollum Institute, OHSU, Portland, OR*

Jerry Lu, Ph.D. M.D., Anderson Cancer Center, Houston, TX

2006-2008, UCSD/NIH Cardiovascular Training Grant Postdoctoral Fellow

*Current Position: Scientist, Biological Dynamics*

Christian Schachtrup, Ph.D., University of Muenster, Germany

2005-2010, DFG (German Research Foundation) Postdoctoral Fellow

*Current Position: Group Leader, Institute of Anatomy and Cell Biology, University of Freiburg, Germany*

Dimitrios Davalos, Ph.D., New York University (NYU), New York, NY

2005-2010, Postdoc Fellow; National Multiple Sclerosis Society Postdoctoral Fellowship

2010-2015, Staff Research Scientist; Nancy Davis Young Investigator Award & AHA Scientist Development Grant

*Current Position: Assistant Professor, Department of Neuroscience, Lerner Research Center, Cleveland Clinic, Cleveland, OH.*

Natacha Le Moan, Ph.D., Orsay University, Paris, France

2008-2012, National Multiple Sclerosis Society Postdoctoral Fellow

*Current Position: Director of Translational Research, Omniox, San Francisco, CA*

Kim Baeten, Ph.D., University of Aberdeen, Scotland, UK

March 2010 – March 2013

*Current Position: Deputy Director & Research Development Fellow at UC Berkeley, Office of the Vice Chancellor for Research*

Jae Kyu Ryu, Ph.D., University of Vancouver, Canada

June 2008-May 2013

American Heart Association Postdoctoral Fellow, 07/01/2009 - 06/30/2011

National Multiple Sclerosis Society Postdoctoral Fellow, 07/01/2011 – 06/30/2014

*Current Position: Staff Research Scientist, Gladstone Institutes*

Mario Merlini, Ph.D., University of Zürich, Switzerland

March 2011-2014

Swiss National Science Foundation Postdoctoral Fellow, 03/01/2011 – 02/28/2013

*Current Position: Staff Research Scientist, Gladstone Institutes*

Bernat Baeza-Raja, Ph.D., University of Barcelona, Spain

June 2007-January 2016

Spanish Research Foundation Postdoctoral Fellow, 09/01/2007 - 08/31/2009

*Current Position: Senior Scientist, Second Genome*

### ***Graduate Students Thesis Advisor/Thesis Committee Chair***

Melissa Passino, Biomedical Science Program, UCSD, January 2004 - March 2007

Ph.D. Dissertation: “Beyond the name: p75 neurotrophin receptor as a regulator of hepatic stellate cell differentiation in liver repair”

2007 Best Thesis Award UCSD Pharmacology Department.

*Current Position: Senior Research Associate, Therapeutics Projects Group at Broad Institute, MIT, Boston, MA*

Benjamin Sachs, Biomedical Science Program, UCSD, January 2004 - June 2008

Ruth L. Kirschstein National Research Service Awards for Individual Predoctoral Fellow (F31)

Ph.D. Dissertation “The regulation of cAMP by the p75 neurotrophin receptor-a novel mechanism for inhibition of scar resolution after injury”

2008 Best Thesis Award UCSD Pharmacology Department.

*Current Position: Assistant Profesor, Department of Phychiatry, Villanova University, Villanova, PA.*

### ***Medical Fellow***

Sara Gonias Murray, University of California, San Francisco

2009-2010, Howard Hughes Medical Institute (HHMI) Medical Student Research Fellow

*Current Position: Resident, Department of Internal Medicine, UCSF*

### ***Visiting Scientists***

Stefka Gyoneva, B.S., Graduate Student, Emory University, Atlanta, GA

June 2011-2013

Ruth L. Kirschstein NRSA Individual Fellowship Co-mentor

*Current Position: Scientist, Richard Ransohoff group, Biogen.*

Teresa Pais, Ph.D., Assistant Professor, University of Porto, Portugal

October 2011-December 2011

European Molecular Biology Organization Short-Term Fellowship, 10/01/2011 - 12/31/2011

Ioanna Plastira, Graduate Student, University of Gratz Austria

February – August 2015

### ***Thesis Committee Chair***

John Silbereis, Neuroscience Graduate Program, UCSF, Advisor: David Rowitz, July 2010 – Feb 2014

### ***Thesis Committee Member***

David Arthur, Biological Sciences, UCSD, Advisor: Paul Insel, 2003-2005

Ph.D. Dissertation, November 2005

Alejandra Negro, Molecular Pathology, UCSD, Advisor: Kuo-Fen Lee, 2004-2006

Ph.D. Dissertation, September 2006

Joshua Gregory, Biomedical Sciences Program, UCSD, Advisor: Nigel Calcutt, 2005-2008

Ph.D. Dissertation, June 2008

Katie Wilkinson, Biomedical Sciences Graduate Program, UCSD, Advisor: Frank Powell, 2007-2009

Ph.D. Dissertation, May 2009

Yun C. Yung, Biomedical Sciences Graduate Program, UCSD, Advisor: Jerold Chun, 2007-2010

Ph.D. Dissertation, October 2010

David Lin, Biomedical Sciences Graduate Program, UCSD, Advisor: Jerold Chun, 2007-2011

Ph.D. Dissertation, December 2011

Jill Larimore, Neuroscience Graduate Program, UCSF, Advisor: Paul Muchowski, 2008-2012



Paul Larkin, Neuroscience Graduate Program, UCSF, Advisor: Paul Muchowski, 2010-2012  
Travis Stiles, Biomedical Sciences Graduate Program, UCSD, Advisor: Steven Gonias, Oct 2010-2013  
Alex Perez, Bioengineering Graduate Program, UCSD, Advisor: Mark Ellisman, March 2011

***External Thesis Committee Member***

Dimitrios Davalos, Neuroscience Program, New York University (NYU), Advisor: Wenbiao Gan,  
Ph.D. Dissertation, August 2005  
Anna Kruyer, The Rockefeller University, Advisor; Sidney Strickland, PhD Dissertation April 2015

***Minor Thesis Committee Member***

Lisa R. Gallegos, Biomedical Science Program, UCSD, September - December 2004  
Tiffany Poon, Biomedical Science Program, UCSD, September - December 2005  
Daniel Goff, Biomedical Science Program, UCSD, September - December 2007  
Tresa McGranahan, Neuroscience Graduate Program, UCSD, January - March 2008  
Karuna Meda, Neuroscience Graduate Program, UCSF, July 2012  
Bridget LaMonica, Neuroscience Graduate Program, UCSF, March 2012

***Rotation Students***

Erin Malone, Oral & Craniofacial Sciences Graduate Program, UCSF, February – April 2016  
Kai Lin (Karin) Lin, Neurosciences Program, UCSF, January - March 2013  
Mihir Vohra, Neurosciences Program, UCSF, October - December 2011  
Alexandra (Frances) Loucks, Neurosciences Program, UCSF, August - October 2008  
Diane Bushman, Biomedical Sciences Program, UCSD, September - December 2007  
John Yamauchi, Biomedical Sciences Program, UCSD, February - April 2007  
Eveline J. Sun, Biomedical Sciences Program, UCSD, September - December 2006  
Stephen J. Cheng, Biomedical Sciences Program, UCSD, September - December 2006  
Katherine Ruby, Biomedical Sciences Program, UCSD, January - March 2006  
Morgan O'Hayre, Biomedical Sciences Program, UCSD, September - December 2005  
Linda Woo, Molecular Pathology Program, UCSD, April - June 2005  
Anna Batorsky, Biological Sciences, UCSD, April - May 2005  
Janean Low, Biomedical Sciences Program, UCSD, January - March 2005  
Elyssa Berg, Biomedical Science Program, UCSD, April - May 2004

***Supervisor***

Maya Ellisman, Research Associate March 2016 – August 2016  
*Current Position: Graduate Student, UCSD*  
Ioanna Plastira, Visiting Graduate Student, University of Gratz, February 2015 – August 2015.  
Eirini Vagena, Visiting Graduate Student, University of Glasgow, September 2010 – October 2014  
*Current Position: Postdoctoral fellow, UCSF*  
Eirini Vagena, Research Assistant, UCSF, October 2008 - August 2010  
*Current Position: Graduate Student, University of Glasgow, UK*  
Adrienne Andres, Research Assistant, UCSD, July 2007 - May 2008  
*Current Position: Graduate Student, University of California, Irvine, CA*  
Tal Nuriel, Research Assistant, New York University, March 2002 - May 2004  
*Current Position: Postdoc Fellow, Columbia University, New York, NY*  
Zsuzsana Pearson, Rotation, New York University, October 2002 - January 2003  
Brian Malester, Graduate Student, New York University, June 2002 - October 2003

Pinar Akpinar, Rotation, The Rockefeller University, September - December 2001  
Wei-Ming Yu, Graduate Student, The Rockefeller University, July 2000 - March 2001  
Mansi Kothari, Rotation, SUNY at Stony Brook, February - May 1999  
Cheng-Yu Liang, Rotation, SUNY at Stony Brook, Tober 1998 - February 1999

### ***Undergraduate Students***

Wanjiru Kamaudevers, CIRM Scholar Berkeley City College, July 2015 – May 2016  
Justin Chan, Columbia University, New York, NY, June-Aug. 2013; May – Aug. 2014; June-Aug. 2015  
*Current Position: MD/PhD Student, UC Irvine*  
Robin Simmons, University of California, Santa Barbara, July-August 2012  
Alex Santillan, Minority Access to Research Careers (MARC) Fellow, June - August 2011  
Daniel Houslay, Summer Undergraduate Research Fellow, August - October 2010  
*Current Position: Graduate Student at the University of Cambridge, UK*  
Valeria Yartseva, Summer Undergraduate Research Fellow, June - August 2007  
*Current Position: Senior Scientific Researcher, Genentech*  
Margaret Timmers, Summer Undergraduate Research Fellow, June - August 2006  
*Current Position: Scientist, Biodesy*  
Julliane McCall, Summer Undergraduate Research Fellow, May - September 2005  
*Current Position: Science Policy Advisor to the California State Senate, Sacramento, CA*  
Diana Lee, UCSD, Course 199, Lab Training, UCSD, January - April 2004  
Peter Nguyen, Course 199, Lab Training, UCSD, January - June 2004  
George Spenzouris, State University of NY at Stony Brook, March - June 2000

### ***High School Student Interns***

Jennie Ling, Gladstone Summer High School Intern, June - August 2011 and 2012  
*Current Position: College Student at Wellesley College, Wellesley, MA*  
Dimitri Smirnoff, Student Intern, January 2010 - June 2011  
*Current Position: Intern at California Academy of Sciences, San Francisco, CA*

## **BIBLIOGRAPHY**

### **Publications**

1. Shaw M, Gao Z, McElhinney K, Thornton S, Flick M, Lane A, Degen JL, Ryu JK, Akassoglou K, Mullins E. Plasminogen deficiency delays the onset and protects from demyelination and paralysis in autoimmune neuroinflammatory disease. *J Neurosci* 2017, *in press*
2. Czirr E, Castello NA, Mosher KI, Castellano JM, Hinkson IV, Lucin KM, Baeza-Raja B, Ryu JK, Li L, Farina SN, Belichenko NP, Longo FM, Akassoglou K, Britschgi M, Cirrito JR, Wyss-Coray T. Microglial complement receptor 3 regulates brain A $\beta$  levels through secreted proteolytic activity. *J Exp Med* 2017, *in press*
3. Mendiola AS, Garza R, Cardona SM, Lira SA, Akassoglou K, Cardona AE. Fractalkine Signaling and Systemic Inflammation are required for Perivascular Microglia Clustering and Fibrinogen Deposition in Diabetic Retinopathy. *Front Cell Neurosci* 2017, 10:303
4. Bardehle S, Rafalski VA, Akassoglou K. Finding the “ubiquitous” threads in infection and autoimmune neuroinflammation. *Nat Immunol* 2017, *in press*
5. Zhang M-D, Barde S, Yang T, Lei B, Eriksson LI, Mathew JP, Bakalkin G, Ernfors P, Akassoglou K, Harkany T, Hökfelt T, Terrando N. Orthopedic surgery modulates neuropeptides and BDNF expression at the spinal and hippocampal levels. *Proc Natl Acad Sci USA* 2016, 113:E6686–E6695

6. [Akassoglou K](#), Agalliu D, Chang CJ, Davalos D, Grutzendler J, Hillman EMC, Khakh BS, Kleinfeld D, McGavern D, Nelson SJ, Zlokovic BV. Neurovascular & Immuno-Imaging: From Mechanisms to Therapies. Proceedings of the Inaugural Symposium. **Front Neurosci** 2016, 10:46
7. Baeza-Raja B, Sachs BD, Li P, Christian F, Vagena E, Davalos D, Le Moan N, Ryu JK, Sikorski SL, Chan JP, Scadeng M, Taylor SM, Houslay MD, Baillie GS, Saltiel AR, Olefsky JM, [Akassoglou K](#). p75 neurotrophin receptor regulates energy balance in obesity. **Cell Rep** 2016, 14:255-268.
8. Bardehle S, Rafalski VA, [Akassoglou K](#). Breaking boundaries – Coagulation and fibrinolysis at the neurovascular interface. **Front Cell Neurosci** 2015, 9:354.
9. Ryu JK, Petersen MA, Murray SG, Baeten KM, Meyer-Franke A, Chan JP, Vagena E, Bedard C, Machado MR, Rios PE, Prod'homme T, Charo IF, Lassmann H, Degen JL, Zamvil SS, [Akassoglou K](#). Blood coagulation factor fibrinogen promotes autoimmunity and demyelination via chemokine release and antigen presentation **Nat Commun** 2015, 6:8164.
10. Schachtrup C, Ryu JK, Mammadzada K, Khan AS, Carlton PM, Perez A, Christian F, Le Moan N, Perez A, Vagena E, Baeza-Raja B, Rafalski V, Chan PJ, Nitschke R, Houslay MD, Ellisman MH, Wyss-Coray T, Palop JJ, [Akassoglou K](#). Nuclear pore complex remodeling by the cleaved p75 neurotrophin receptor controls TGF- $\beta$  signaling and astrocyte functions **Nat Neurosci** 2015, 18(8):1077-80.
11. Le Moan N, Baeten K, Bedard C, Syme C, Rafalski V, [Akassoglou K](#). Hypoxia Inducible Factor-1 $\alpha$  expression in astrocyte- and/or myeloid cells is not required for autoimmune demyelinating disease **eNeuro** 2015 2(2). pii: e0050.
12. Lim H, Kang SG, Ryu JK, Fei M, Lee IS, Kehasse A, Shirakawa K, Yokoyama M, Schnölzer M, Kasler H, Kwon H-S, Gibson BW, Sato H, [Akassoglou K](#), Xiao C, Littman DR, Ott M, Verdin EM. SIRT1 deacetylates ROR $\gamma$ t and enhances Th17 cell generation. **J Exp Med** 2015 212(5):607-17.
13. [Akassoglou K](#). Coagulation takes center stage in inflammation. **Blood** 2015, 125(3):419-20.
14. Terrando N, Yang T, Ryu JK, Monaco C, Feldmann M, Ma D, [Akassoglou K](#), Maze M. Stimulation of the alpha 7 nicotinic acetylcholine receptor protects against neuroinflammation after tibia fracture and endotoxemia in mice. **Mol Med** 2014, 20:667-75.
15. Gyoneva S, Davalos D, Biswas D, Garnier E, Loth F, [Akassoglou K](#), Traynelis SF. Systemic inflammation regulates microglial responses to tissue damage. **Glia**, 2014, 62:1345-60.
16. Davalos D, Baeten KM, Whitney MA, Mullins ES, Friedman B, Olson ES, Ryu JK, Smirnov DS, Petersen MA, Bedard C, Degen JL, Tsien RY, [Akassoglou K](#). Early detection of coagulation activity in neuroinflammatory disease. **Ann Neurol** 2014, 75:303-308.
17. Baeza-Raja B, Eckel-Mahan K, Zhang L, Vagena E, Tsigelny IF, Sassone-Corsi P, Ptáček LJ, [Akassoglou K](#). p75 neurotrophin receptor is a clock gene that regulates oscillatory components of circadian and metabolic networks. **J Neurosci**. 2013. 33:10221-34.
18. Chen W, Guo Y, Walker EJ, Shen F, Jun K, Oh SP, Degos V, Lawton MT, Tihan T, Davalos D, [Akassoglou K](#), Nelson J, Pile-Spellman J, Su H, Young WL. Reduced mural cell coverage and impaired vessel integrity after angiogenic stimulation in the Alk1-deficient brain. **Arterioscler Thromb Vasc Biol**. 2013. 33:305-10
19. Shimazu T, Hirschey MD, Newman J, He W, Shirakawa K, Le Moan N, Grueter CA, Lim H, Saunders LR, Stevens RD, Newgard CB, Farese RV Jr, de Cabo R, Ulrich S, [Akassoglou K](#), Verdin E. Suppression of oxidative stress by  $\beta$ -hydroxybutyrate, an endogenous histone deacetylase inhibitor. **Science**. 2013. 339:211-4

20. Gut P, Baeza-Raja B, Andersson O, Hasenkamp L, Hsiao J, Hesselson D, Akassoglou K, Verdin E, Hirschey MD, Stainier DY. Whole-organism screening for gluconeogenesis identifies activators of fasting metabolism. **Nature Chem Biol.** 2013. 9:97-104
21. Davalos D, Ryu JK, Merlini M, Baeten KM, Le Moan N, Petersen MA, Deerinck TJ, Smirnoff DS, Bedard C, Hakozaki H, Gonias Murray S, Ling JB, Lassmann H, Degen JL, Ellisman MH, Akassoglou K. Fibrinogen-induced perivascular microglial clustering is required for the development of axonal damage in neuroinflammation. **Nat Commun.** 2012; 3:1227
22. Kwan W, Träger U, x Davalos D, Chou A, Andre R, Miller A, Giorgini F, Cheah C, Möller T, Stella N, Akassoglou K, Tabrizi SJ, Muchowski PJ. Mutant huntingtin impairs the migration of immune cells in Huntington's disease **J Clin Invest.** 2012. 122:4737-47
23. Merlini M, Davalos D, Akassoglou K. *In vivo* imaging of the neurovascular interface. **IntraVital** 2012. 1:1–8
24. Baeza-Raja B, Akassoglou K. p75<sup>NTR</sup> and glucose homeostasis: The sweet side of neurotrophin receptor signaling. **Cell Cycle.** 2012. 11:3151-2
25. Baeza-Raja B, Li P, Le Moan N, Sachs BD, Vagena E, Schachtrup C, Davalos D, Bridges D, Saltiel AR, Olefsky JM, Akassoglou K. p75 neurotrophin receptor regulates glucose homeostasis and insulin sensitivity. **Proc Natl Acad Sci USA.** 2012. 109:5838-43.
26. Le Moan M, Baeza-Raja B, Akassoglou K. p75<sup>NTR</sup> and hypoxia: A breath of fresh air in neurotrophin receptor signaling. **Cell Cycle.** 2012. 11:829-30
27. Davalos D, Akassoglou K. *In vivo* imaging of the mouse spinal cord using two-photon microscopy. **J Vis Exp.** 2012. (59). pii: 2760.
28. Davalos D, Akassoglou K. Fibrinogen as a key regulator of inflammation in disease. **Semin Immunopathol.** 2012. 34:43-62
29. Pearn M, Hu Y, Niesman IR, Patel HH, Drummond JC, Roth DM, Akassoglou K, Patel PM, Head BP. Propofol neurotoxicity is mediated by p75 neurotrophin receptor activation. **Anesthesiology.** 2012. 116:352-61
30. Terrando N, Eriksson L, Ryu JK, Yang T, Monaco C, Feldmann M, Fagerlund MJ, Charo IF, Akassoglou K, Maze M. Resolving postoperative neuroinflammation and cognitive decline. **Ann Neurol.** 2011. 70:986-95.
31. Le Moan N, Houslay DM, Christian F, Houslay MD, Akassoglou K. Oxygen-dependent cleavage of the p75 neurotrophin receptor triggers stabilization of HIF-1 alpha. **Mol Cell.** 2011. 44:476-90.
32. Baeten KM, Akassoglou K. Extracellular matrix and matrix receptors in blood-brain barrier formation and stroke. **Dev Neurobiol.** 2011. 71:1018-39.
33. Schachtrup C, Le Moan N, Passino M, Akassoglou K. Hepatic stellate cells and astrocytes: Stars of scar formation and tissue repair. **Cell Cycle.** 2011. 10:1764-71.
34. Drew PJ, Shih AY, Tsai PS, Knutsen P, Davalos D, Blinder P, Akassoglou K, Kleinfeld D. Chronic imaging and optical manipulation of cortical cells and microvessels through a large-area polished and reinforced thinned-skull. **Nat Methods.** 2010. 7:981-4.
35. Schachtrup C, Ryu JK, Helmrick MJ, Vagena E, Galanakis DK, Degen JL, Margolis RU, Akassoglou K. Fibrinogen triggers astrocyte scar formation by promoting availability of active TGFβ after vascular damage **J Neurosci.** 2010. 30:5843-54.
36. Ryu JK, Davalos D, Akassoglou K. Fibrinogen signal transduction in the nervous system. **J Thromb Haemost.** 2009. S1:151-4.

37. Friedman B, Schachtrup S, Tsai PS, Shih AY, [Akassoglou K](#), Kleinfeld D, Lyden P. Acute loss of aquaporin 4 in relation to vascular injury after stroke, **Stroke**. 2009. 40:2182-90.
38. Gaultier A, Wu X, Le Moan N, Takimoto S, Mukandala S, [Akassoglou K](#), Campana MW, Gonias SL. Low density lipoprotein receptor-related protein-1 is an essential receptor for myelin phagocytosis. **J Cell Sci**. 2009. 122:1155-62.
39. Xu M, Remillard CV, Sachs BD, Makino A, Platoshyn O, Yao W, Dillmann WH, [Akassoglou K](#), Yuan JX. p75 neurotrophin receptor regulates agonist-induced pulmonary vasoconstriction. **Am J Physiol Heart Circ Physiol**. 2008. 295:1529-38.
40. Rius J, Guma M, Schachtrup C, [Akassoglou K](#), Zinkernagel AS, Nizet V, Johnson RS, Haddad GG & Karin M. NF- $\kappa$ B links innate immunity to the hypoxic response through transcriptional regulation of HIF-1 $\alpha$ . **Nature**. 2008. 453:807-11.
41. Davalos D, Lee JK, Smith WB, Brinkman B, Ellisman MH, Zheng B, [Akassoglou K](#). Stable *in vivo* imaging of densely populated glia, axons and blood vessels in the mouse spinal cord using two-photon microscopy. **J Neurosci Methods**. 2008. 169:1-7. *Selected for Cover*.
42. Xu M, Platoshyn O, Makino A, Dillman WH, [Akassoglou K](#), Remillard CV, Yuan JX. Characterization of agonist-induced vasoconstriction in mouse pulmonary artery. **Am J Physiol Heart Circ Physiol**. 2008. 294:220-8.
43. Adams RA, Schachtrup C, Davalos D, Tsigelny I, [Akassoglou K](#). Fibrinogen signal transduction as a mediator and therapeutic target in inflammation: Lessons from multiple sclerosis. **Curr Med Chem**. 2007. 14:2925-36.
44. Sachs BD, [Akassoglou K](#). Regulation of cAMP by the neurotrophin receptor p75NTR: insight into drug design of selective phosphodiesterase inhibitors. **Biochem Soc Trans**. 2007. 35:1273-77.
45. Schachtrup C, Lu P, Lee JK, Jones L, Sachs BD, Ju J, Zheng B, [Akassoglou K](#). Fibrinogen inhibits neurite outgrowth via  $\beta$ 3 integrin-mediated transactivation of the EGF receptor. **Proc Natl Acad Sci USA**. 2007. 104:11814-9.
46. Sachs B.D., Baillie GS, McCall JR, Passino MA, Schachtrup C, Wallace DA, Dunlop AJ, MacKenzie KF, Klussmann E, Lynch MJ, Sikorski SL, Nuriel T, Tsigelny I, Zhang J, Houslay MD, Chao MV, [Akassoglou K](#). p75 neurotrophin receptor regulates tissue fibrosis through inhibition of plasminogen activation via a PDE4/cAMP/PKA pathway. **J Cell Biol**. 2007. 177:1119-32.
47. Passino MA, Adams, RA, Sikorski SL, [Akassoglou K](#). Regulation of hepatic stellate cell differentiation by the neurotrophin receptor p75NTR. **Science**. 2007. 315:1853-56.
48. Adams RA, Bauer J, Flick MJ, Sikorski SL, Nuriel T, Lassmann H, Degen JL, [Akassoglou K](#). The fibrin-derived  $\gamma$ 377-395 peptide inhibits microglia activation and reverses relapsing paralysis in central nervous system autoimmune disease. **J Exp Med**. 2007. 204:571-82. *Selected for Cover*.
49. Arthur DB, [Akassoglou K](#), Insel PA. P2Y2 and TrkA receptors interact with Src family kinase for neuronal differentiation. **Biochem Biophys Res Commun**. 2006. 347:678-82.
50. Arthur DB, Georgi S, [Akassoglou K](#), Insel PA. Inhibition of apoptosis by P2Y2 receptor activation: Novel pathways for neuronal survival. **J Neurosci**. 2006. 26:3798-804.
51. Arthur DB, [Akassoglou K](#), Insel PA. P2Y2 receptor activates NGF/TrkA receptor signaling to enhance neuronal differentiation. **Proc Natl Acad Sci USA**. 2005. 102:19138-43.
52. [Akassoglou K](#). Nerve growth factor-independent neuronal survival: A role for NO donors. **Mol Pharmacol**. 2005. 68:952-5.
53. Adams, R. A., Passino M, Sachs B, Nuriel T, [Akassoglou K](#). Fibrin mechanisms and functions in nervous system pathology. **Mol Interven**. 2004. 4:163-76.

54. Akassoglou K, Adams, R. A., Bauer J, Mercado P, Tseveleki V, Lassmann H, Probert L, Strickland S. Fibrin depletion decreases inflammation and delays the onset of demyelination in a tumor necrosis factor transgenic mouse model for multiple sclerosis. **Proc Natl Acad Sci USA**. 2004. 101:6698-703.
55. Akassoglou K, Malester B, Xu J, Tessarollo L, Rosenbluth J, Chao MV. Brain-specific deletion of neuropathy target esterase/swisscheese results in neurodegeneration. **Proc Natl Acad Sci USA**. 2004. 101:5075-80.
56. Akassoglou K, Akpinar P, Murray S, Strickland S. Fibrin is a regulator of Schwann cell migration after sciatic nerve injury. **Neurosci Lett**. 2003. 338:185-8.
57. Akassoglou K, Douni E, Bauer J, Lassmann H, Kollias G, Probert L. Transmembrane TNF signaling through the p75 TNFR induces ischaemia in the CNS of transgenic mice. **Proc Natl Acad Sci USA**. 2003. 100:709-14.
58. Akassoglou K, Yu W-M, Akpinar P, Strickland S. Fibrin inhibits peripheral nerve regeneration by arresting Schwann cell differentiation. **Neuron**. 2002. 33: 861-75.  
*Editor's Choice: Myelination: Fibrin Regulates Schwann Cells. Sci. STKE*. 2002. 2002:tw107.
59. Akassoglou K, Strickland S. Nervous system pathologies: The fibrin perspective. **Biol Chem**. 2002. 383:37-45.
60. Probert L, Akassoglou K. Glial expression of cytokines in transgenic animals: How do these models reflect the "normal situation?" **Glia**. 2001. 36:212-9.
61. Brodsky S, Chen J, Lee A, Akassoglou K, Goligorsky MS. Plasminogen-dependent and -independent effects of plasminogen activators and inhibitor-1 on ex vivo angiogenesis. **Am J Physiol Heart Circ Physiol**. 2001. 281:H1784-92.
62. Probert L, Eugster HP, Akassoglou K, Bauer J, Frei K, Lassmann H, Fontana A. TNFR1 signalling is critical for the development of demyelination and the limitation of T-cell responses during immune-mediated CNS disease. **Brain**. 2000. 123:2005-19.
63. Akassoglou K, Kombrink KW, Degen JL, Strickland S. Tissue plasminogen activator-mediated fibrinolysis protects from axonal demyelination after sciatic nerve injury. **J Cell Biol**. 2000. 149:1157-66.
64. Akassoglou K, Bauer J, Kassiotis G, Lassmann H, Kollias G, Probert L. Transgenic models of TNF induced demyelination. **Adv Exp Med Biol**. 1999. 468:245-59.
65. Aloe L, Properzi F, Probert L, Akassoglou K, Kassiotis G, Micera A, Fiore M. Learning abilities, NGF and BDNF brain levels in two lines of TNF-alpha transgenic mice, one characterized by neurological disorders, the other phenotypically normal. **Brain Res**. 1999. 840:125-37.
66. Kassiotis G, Bauer J, Akassoglou K, Lassmann H, Kollias G, Probert L. A tumor necrosis factor-induced model of human primary demyelinating diseases develops in immunodeficient mice. **Eur J Immunol**. 1999. 29:912-17.
67. Akassoglou K, Bauer J, Kassiotis G, Pasparakis M, Lassmann H, Kollias G, Probert L. Oligodendrocyte apoptosis and primary demyelination induced by local TNF/p55TNF receptor signaling in the CNS of transgenic mice: Models for multiple sclerosis with primary oligodendroglialopathy. **Am J Pathol**. 1998. 153:801-13.
68. Probert L, Akassoglou K, Kassiotis G, Pasparakis M, Alexopoulou L, Kollias G. TNF $\alpha$  transgenic and knock out models of CNS inflammation and degeneration. **J Neuroimmunol**. 1997. 72:137-41.

69. Akassoglou K, Probert L, Kontogeorgos G and Kollias G. Astrocyte, but not neuron-specific, transmembrane TNF triggers inflammation and degeneration in the CNS of transgenic mice. **J Immunol.** 1997. 158:438-45.
70. Douni E, Akassoglou K, Alexopoulou L, Georgopoulos S, Haralambous S, Hill S, Kassiotis G, Kontoyiannis D, Pasparakis M, Plows D, Probert L, Kollias G. Transgenic and knock out analysis of the role of TNF in immune regulation and disease pathogenesis. **J Inflamm.** 1996. 47:27-38.
71. Fiore M, Probert L, Kollias G, Akassoglou K, Alleva E, Aloe L. Neuro-behavioral alterations in developing transgenic mice expressing TNF- $\alpha$  in the brain. **Brain Behav Immun.** 1996. 10:126-38.
72. Probert L, Akassoglou K, Alexopoulou L, Douni E, Haralambous S, Hill S, Kassiotis G, Kontoyiannis D, Pasparakis M, Plows D, Kollias G. Dissection of the pathologies induced by transmembrane and wild-type tumor necrosis factor in transgenic mice. **J Leukoc Biol.** 1995. 59:518-25.
73. Probert L, Akassoglou K, Pasparakis M, Kontogeorgos G, Kollias G. Spontaneous inflammatory and demyelinating disease in transgenic mice showing central nervous system-specific tumor necrosis factor  $\alpha$  expression. **Proc Natl Acad Sci USA.** 1995. 92:11294-98.

### **Book Chapters**

1. Cardona AE, Ransohoff R, Akassoglou K. Microglia. In **Comprehensive Developmental Neuroscience**. Edts:John Rubenstein and Pasko Rakic Elsevier 2013, Chapter 41, pp. 803-817.
2. Davalos D, Akassoglou K. Imaging microglia in the central nervous system: Past, present and future. In **Central Nervous System Diseases and Inflammation**. TE Lane et al. (eds.). Springer, 2008, pp. 45-57.
3. Akassoglou K, Kassiotis G, Kollias G, Probert L. Role for TNF in CNS inflammation, demyelination and neurodegeneration studied in transgenic mice. In **Neuroimmunodegeneration**. Edited by P. Wong, B. Lynn. Landes Bioscience, 1998, pp. 133-49.
4. Akassoglou K, Probert L, Kollias G. Applications of transgenic and knock out systems in the study of nervous system pathology. In **Archives of Hellenic Pathology**. 1997. 11:111-16. (article in Greek).