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November 22, 2013

# **CURRICULUM VITAE**

# Yu-Fung Lin, Ph.D.

#### A. Personal data

Present Status: Associate Professor

Departments of Anesthesiology and Physiology and Membrane Biology University of California, Davis

Work Address: Department of Physiology and Membrane Biology

School of Medicine, Tupper Hall, Room 4144

University of California One Shields Avenue Davis, CA 95616 Phone: (530) 754-4876 Fax: (530) 752-5423

E-mail: yu-fung.lin@ucdmc.ucdavis.edu; yflin@ucdavis.edu Web: <a href="http://www.ucdmc.ucdavis.edu/physiology/faculty/lin.html">http://www.ucdmc.ucdavis.edu/physiology/faculty/lin.html</a>

## B. Major Education and Work Experiences

1980-1984	B.S., Zoology, National Taiwan University, Taipei, Taiwan
1984-1986	M.S., Zoology, National Taiwan University, Taipei, Taiwan
1986-1989	Assistant Research Fellow, Institute of Biomedical Sciences Academia Sinica, Taipei, Taiwan
1989-1995	Ph.D., Physiology The University of Michigan Medical School, Ann Arbor
1995-1997	Postdoctoral Fellow, Department of Neurology The University of Michigan Medical School, Ann Arbor
1997-2002	Postdoctoral Fellow, Howard Hughes Medical Institute University of California, San Francisco
2002-2003	Postgraduate Researcher, Department of Physiology University of California, San Francisco
2003-2011	Assistant Professor, Department of Anesthesiology and Department of Physiology and Membrane Biology University of California, Davis
2011-present	Associate Professor, Department of Anesthesiology and Department of Physiology and Membrane Biology University of California, Davis

#### C. Honors and Awards

1982	University Literary Prize (Poem) National Taiwan University, Taipei, Taiwan
1002	Ev. Chin Litanam, Drimas (Daam and Marral) T

1983 Fu-Shin Literary Prizes (Poem and Novel), Taiwan

1984-1986 Graduate Student Research Assistantship National Taiwan University, Taipei, Taiwan

1985 Ministry of Education Scholarship for

Outstanding Academic Performance, Taiwan

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1987	National Science Council Research Award for Outstanding Research Performance, Taiwan
1989-1995	Graduate Student Research Assistantship The University of Michigan, Ann Arbor
1994	Duncan McCarthy Award Michigan Chapter Society for Neuroscience
1996-1997	Lothman Fellowship The Epilepsy Foundation of America
2004, 2005, 2006, 2007	Academic Senate Research Travel Award University of California, Davis
2005-2007	UC Davis Health System Research Award University of California Health System, Davis
2006	Harrison Endowed Chair in Diabetes Research Award University of California, Davis
2007-2008	Research Insurance Grant to Promote Extramural Funding University of California, Davis
2008	Travel Award to attend Beijing Joint Conference of Physiological Sciences (Beijing, China) American Physiological Society
2009-2010	Genome Center Proteomics Core Facility Pilot Project University of California, Davis
2007-2011	American Heart Association Scientist Development Award (National Center)
2008, 2010, 2012, 2013	Academic Senate Research Travel Award University of California, Davis

# D. <u>Teaching Activities</u>

1990	Winter	Teaching Assistant of Medical Physiology 500 The University of Michigan Medical School, Ann Arbor
1991	Fall	Teaching Assistant of Human Physiology 101 The University of Michigan Medical School, Ann Arbor
2003-2004	Fall	MCIP "Meet the Faculty" Seminar Series University of California, Davis
2005-present	Fall	MCIP Graduate Course 210A (Advanced Physiology) University of California, Davis
2005	Winter	HPH400 (Human Physiology for medical students) University of California, Davis
2006-present	Fall	HPH400 (Human Physiology for medical students) University of California, Davis
2007	Spring	MCIP Graduate Course 216 (Neurophysiology Literature) University of California, Davis
2007-2008	Fall	BMB-CDB Graduate Group Faculty "Donut Talk" Series University of California, Davis
2008-present	Winter	PTX Graduate Course 202 (Principles of Pharmacology and ToxicologyCellular and Molecular Basis of Drug Action) University of California, Davis

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2008-present Spring

HPH493/SUR493 (Special Study Module for medical students: Care of Critically Ill Surgical Patient: Use of Physiological

Principles)

University of California, Davis

#### E. Funding Status

Ongoing:

Lin Seed Fund

**Completed:** 

American Heart Association (National Center)

Scientist Development Grant

"Modulation of ATP-Sensitive Potassium Channels in Ischemic

Preconditioning"
PI: Yu-Fung Lin

1/1/2007 - 12/31/2010 (no cost extension to 6/30/2011)

Genome Center Proteomics Core Facility Pilot Project, UC Davis "Molecular Physiology of K<sub>ATP</sub> Channel Modulation by Protein Phosphorylation"

PI: Yu-Fung Lin

07/01/2009 - 6/30/2010

Research Insurance Grant, UC Davis

"Modulation of ATP-Sensitive Potassium Channels by Calcium and Nicotine"

PI: Yu-Fung Lin 7/1/2007 – 9/30/2008

Health System Research Award Program, UC Davis "Modulation of Potassium Channels by Nitric Oxide and

Neuroprotection" PI: Yu-Fung Lin

07/01/2005 - 06/30/2007

Harrison Endowed Chair in Diabetes Research Award "Modulation of ATP-Sensitive Potassium Channels by Nitric Oxide and the Implication in Insulin Secretion"

PI: Yu-Fung Lin

01/01/2006 - 12/31/2006

#### **Pending:**

American Heart Association (Grant-in-Aid)

"The Role of Nitric Oxide Signaling in Modulating Cardiac ATP-

Sensitive Potassium Channels in Health and Disease"

PI: Yu-Fung Lin

National Institute of Health (R01)

"Regulation of Cardiac ATP-Sensitive Potassium Channels by

Cell Signaling in Health and Disease"

PI: Yu-Fung Lin

#### F. University and Public Services

#### <u>Department</u>:

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2007-2012 Co-organizer, Distinguished Speaker Series Seminar Committee,

Dept. of Physiology and Membrane Biology

**School of Medicine:** 

2008 Interviewer, Physician Scientist Training Program (PSTP)

2008-2011 Member, Committee for Honors and Awards 2008-present Member, Committee on Research Affairs

**University**:

2003-present Member, MCIP Graduate Group 2004-present Member, BMB Graduate Group

2004-present Member, Membership Committee, MCIP Graduate Group 2008-2012 Member, Seminar Committee, MCIP Graduate Group

2005-2009 Chair, Ph.D. Dissertation Committee for Yongping Chai (BMB

Graduate Group)

2007-2010 Member, Ph.D. Dissertation Committees for Jim Long

(Neuroscience Graduate Group)

2011-present Member, Ph.D. Dissertation Committees for Yawei Yu (BMCDB

Graduate Group)

2005-present Member in Qualifying Exam Committees for graduate students:

Benjamin Sadrian (BMB, 2005) Beverly Landgraf (MCIP, 2005, 2006) Brittany Kammerer (MCIP, 2006) Jim Long (Neuroscience, 2006) Alex Davies (BMB, 2007) Sarah Lockwood (BMB, 2008) Bethany Cumming (MCIP, 2008) Amanda Klein (MCIP, 2009) Brandon Zipp (BMB, 2009)

Pang-Yen Tseng (Comparative Pathology, 2009)

Elizabeth Martin (MCIP, 2010) Weston Powell (BMB, 2010) Yawei Yu (BMB, 2011) Linda Lee (MCIP, 2013, 2014) Cheryl Dykstra-Aiello (MCIP, 2014)

2007-2010 Member, Transportation and Parking Committee

2010-2012 Academic Senate Representative, Transportation and Parking

Administrative Advisory Committee

**Professional Service:** 

1992-present Member, Society for Neuroscience

1995-present Member, The American Physiological Society

2004-present Member, American Association for the Advancement of Science

2008-present Member, Biophysical Society

Journal Reviews

Molecular Brain Research (2004)

American Journal of Physiology (2007-present) Journal Cardiovascular Pharmacology (2008-present)

Pflugers Archiv - European Journal of Physiology (2008-present) Proceedings of the National Academy of Sciences USA (2008-

present)

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Journal of Physiology (London) (2008-present) Journal of Neuroscience (2009-present) PLoS One (2011-present)
Peer reviewer of pre-proposals for School of Medicine, UC Davis Regular Member, Peer Review Committee, American Heart Association Region III Consortium, USA Ad hoc reviewer, The Wellcome Trust Research Project, London,

**Grant Reviews** 

2007-2009

2007

2011

2013

2013

**Book Reviews** 

Chapter Reviewer, Human Physiology (Fox ST, 13th ed.),

Peer Review Study Group, American Heart Association

Peer Reviewer, Basic Science Cell Transport & Metabolism 1

McGraw-Hill Higher Education

UK

#### G. Invited lectures (since 2003)

i. Invited lec	tures (since 2003)
2003	"Nitric oxide stimulation of ATP-sensitive potassium channels: Involvement of Ras/MAP kinase signaling pathway and contribution to neuroprotection", <i>UCD School of Medicine New faculty Seminar Series</i> , UCD, Davis, CA
2004	"How does nitric oxide modulate the ATP-sensitive potassium channels: Involvement of Ras/MAP kinase signaling pathway", <i>UCD Biophysics Graduate Group</i> , Davis, CA
2004	"Modulation of ATP-sensitive potassium channels by nitric oxide: Involvement of Ras/MAP kinase signaling pathway and contribution to neuroprotection", <i>Imaging</i> , <i>Membrane Biology and Biophotonics Colloquium</i> , UCD, Sacramento, CA
2004	"Modulation of ATP-sensitive potassium channels by nitric oxide", <i>Biochemistry and Molecular Biology Graduate Group Annual Colloquium</i> , UCD, Davis, CA
2005	"The role of ATP-sensitive potassium channels in cytoprotection", <i>Grand Rounds</i> , Department of Anesthesiology, UCD, Sacramento, CA
2006	"What we have learned from the ATP-sensitive potassium channels", <i>Department of Physiology and Membrane Biology In-House Seminar Series</i> , UCD, Davis, CA
2006	"Modulation of the ATP-sensitive potassium channels", <i>Jan Lab Symposium</i> , UCSF, San Francisco, CA
2006	"Modulation of the ATP-sensitive potassium channels by PKG-mediated phosphorylation", <i>Neuroscience Conference</i> , Barrow Neurological Institute, St. Joseph Hospital and Medical Center, Phoenix, AZ
2007	"Modulation of the ATP-sensitive potassium channels by PKG-mediated phosphorylation", <i>Molecular, Cellular and Integrative Graduate Group Annual Retreat</i> , Bodega Marine Laboratory, UCD, Davis, CA
2007	"Modulation of the ATP-sensitive potassium channels by PKG and calcium", Department of Physiology and Membrane Biology In-House Seminar Series, UCD, Davis, CA
2008	"Regulation of the ATP-sensitive potassium channels by cGMP-dependent protein kinase", <i>Biophysics Graduate Group Seminars</i> , UCD, Davis, CA
2008	"Functional regulation of the ATP-sensitive potassium channel by protein kinase G-induced signaling", <i>Grand Rounds</i> , Department of Anesthesiology, UCD Health System, Sacramento, CA

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2008 "The role of reactive oxygen species in the regulation of the K<sub>ATP</sub> channel by cGMP-dependent protein kinas", *The Beijing Joint Conference of Physiological Sciences*, Beijing, China

- 2008 "Functional modulation of ATP-sensitive potassium channels by nitric oxide/cGMP/PKG signaling", *Department of Physiology and Membrane Biology In-House Seminar Series*, UCD, Davis, CA
- 2010 "Stimulation of neuronal K<sub>ATP</sub> channels by cGMP-dependent protein kinase: Involvement of ROS and the mitoK<sub>ATP</sub> channel", *Research Talk*, Department of Anesthesiology, UCD, Davis, CA
- 2010 "Molecular mechanisms of K<sub>ATP</sub> channel modulation", *Grand Rounds*, Department of Anesthesiology, UCD Health System, Sacramento, CA
- 2011 "Modulation of cardiac ATP-sensitive potassium channels by PKG-dependent signaling", *Molecular, Cellular and Integrative Graduate Group Spring Retreat*, Jesuit Retreat Center of the Sierra, UCD, Davis, CA
- 2011 "Modulation of K<sub>ATP</sub> channels by intracellular signaling: Implications in heart failure", Department of Physiology and Membrane Biology In-House Seminar Series, UCD, Davis, CA
- 2012 "Understanding calcium-dependent modulation of K<sub>ATP</sub> channels", *Department of Physiology and Membrane Biology In-House Seminar Series*, UCD, Davis, CA
- 2012 "Modulation of ATP-sensitive potassium channels by intracellular signaling in health and disease", Department of Biochemistry and Molecular Biology, Oregon Health and Science University, Portland, OR

#### H. Bibliography

#### **Publications:**

- 1. Lin, A.M.Y., Pan, C.M., Lin, Y.F., Kuo, J.S. and Chai, C.Y. A cardioinhibitory area in the midbrain central tegmental field of cats. Brain Res. Bull. *18*: 699-707, 1987.
- 2. Chai, C.Y., **Lin**, **Y.F.**, Lin, A.M.Y., Pan, C.M., Lee, E.H. and Kuo, J.S. Existence of a powerful inhibitory mechanism in the medial region of caudal medulla--with special reference to the paramedian reticular nucleus. Brain Res. Bull. *20*: 515-528, 1988.
- 3. Chai, C.Y., **Lin, Y.F.**, Wang, H.Y., Wu, W.C., Yen, C.T., Kuo, J.S. and Wayner, M.J. Inhibition of spinal reflexes by paramedian reticular nucleus. Brain Res. Bull. *25*: 581-588, 1990.
- 4. Yen, C.T., Hwang, J.C., Su, C.K., **Lin, Y.F.**, Yang, J.M. and Chai, C.Y. Differential actions of the median region of caudal medulla on autonomic nerve activities. Clin. Exp. Pharmacol. Physiol. *18*: 743-751, 1991.
- 5. Chai, C.Y., Wu, W.C., Wang, S., Su, C.K., **Lin, Y.F.**, Yen, C.T., Kuo, J.S. and Wayner, M.J. Coexistence of autonomic and somatic mechanisms in the pressor areas of medulla in cats. Brain Res. Bull. *29*: 15-26, 1992.
- 6. **Lin, Y.F.**, Browning, M.D., Dudek, E.M. and Macdonald, R.L. Protein kinase C enhances bovine α1β1γ2L GABA<sub>A</sub> receptor whole-cell currents expressed in L929 fibroblasts. Neuron *13*: 1421-1431, 1994.
- 7. **Lin, Y.F.**, Angelotti, T.P., Dudek, E.M., Browning, M.D. and Macdonald, R.L. Protein kinase C phosphorylation of the  $\beta 1$  and  $\gamma 2L$  subunits of the GABA<sub>A</sub> receptor enhances whole-cell currents expressed in L929 fibroblasts. Mol. Pharmacol. *50*: 185-195, 1996.

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8. **Lin, Y.F.**, Jan, Y.N. and Jan, L.Y. Regulation of ATP-sensitive potassium channel function by protein kinase A-mediated phosphorylation in transfected HEK293 cell. EMBO J. *19*: 942-955, 2000.

- 9. Minor, D.L., **Lin, Y.F.**, Mobley, B.C., Avelar, A., Jan, Y.N., Jan, L.Y. and Berger, J.M. The polar T1 interface is linked to conformational changes that open the voltage-gated potassium channel. Cell *102*: 657-670, 2000.
- 10. Ma, D., Zerangue, N., **Lin. Y.F.**, Collins, A., Yu, M., Jan, Y.N. and Jan, L.Y. Role of ER export signals in controlling surface potassium channel numbers. Science *291*: 316-319, 2001.
- 11. Yi, B.A., **Lin, Y.F.**, Jan, Y.N. and Jan, L.Y. Yeast screen for constitutively active mutant G protein-activated potassium channels. Neuron 29: 657-667, 2001.
- 12. Yi, B.A., Minor, D.L., **Lin, Y.F.**, Jan, Y.N. and Jan, L.Y. Controlling potassium channel activities: interplay between the membrane and intracellular factors. Proc. Natl. Acad. Sci. USA *98*: 11016-11023, 2001.
- 13. Bichet, D., **Lin, Y.F.**, Ibarra, C.A., Huang, C.S., Yi, B.A., Jan, Y.N. and Jan, L.Y. Evolving potassium channels via yeast selection reveals structural elements important for selectivity. Proc. Natl. Acad. Sci. USA *101*: 4441-4446, 2004.
- 14. **Lin, Y.F\*.**, Raab-Graham, K., Jan, Y.N. and Jan, L.Y. Nitric oxide stimulation of ATP-sensitive potassium channels: Involvement of Ras/MAPK kinase pathway and contribution to neuroprotection. Proc. Natl. Acad. Sci. USA *101*: 7799-7804, 2004. (\*corresponding author)
- 15. Mao, X., Chai, Y. and **Lin, Y.F.** Dual regulation of ATP-sensitive potassium channels by caffeine. Am. J. Physiol. Cell Physiol. *292*: C2239-C2258, 2007.
- 16. Misaki, N., Mao, X., **Lin, Y.F.**, Suga, S., Li, G.H., Liu, Q., Chang, Y., Wang, H, Wakui, M. and Wu, J. Iptakalim, a vascular  $K_{ATP}$  channel opener, closes rat pancreatic  $\beta$ -cell  $K_{ATP}$  channels and increases insulin release. J. Pharmacol. Exp. Ther. *322*: 871-878, 2007.
- 17. **Lin, Y.F.** and Chai, Y. Modulation of the ATP-sensitive potassium channel by extracellular signal-regulated kinase-mediated phosphorylation. Neuroscience *152*: 371-380, 2008.
- 18. Chai, Y. and **Lin, Y.F.** Dual regulation of the ATP-sensitive potassium channel by activation of cyclic GMP-dependent protein kinase. Pflügers Arch.-European J. Physiol. *456*: 897-915, 2008.
- 19. Chen, T.Y., **Lin, Y.F.** and Zheng, J. Electrophysiological measurements of membrane proteins, T. Jue (ed), Fundamental Concepts in Biophysics, Vol. 1, Series: Handbook of Modern Biophysics, Humana Press, Totowa, NJ, 2009.
- 20. Chai, Y. and **Lin, Y.F.** Stimulation of neuronal K<sub>ATP</sub> channels by cGMP-dependent protein kinase: Involvement of ROS and 5-hydroxydecanoate-sensitive factors in signal transduction. Am. J. Physiol. Cell Physiol. 298: C875-C892, 2010.
- 21. Chai, Y., Zhang, D.M. and **Lin, Y.F.** Activation of cGMP-dependent protein kinase stimulates cardiac ATP-sensitive potassium channels via a ROS/calmodulin/CaMKII signaling cascade. PLoS ONE *6*(*3*): e18191, 2011.
- 22. Zhang, D.M, Chai, Y., Erickson, J., Brown, J.H., Bers, D.M. and **Lin, Y.F.** Modulation of sarcolemmal ATP-sensitive potassium channels by nitric oxide via sGC/PKG/ROS/ERK1/2/CaMKII signaling in ventricular cardiomyocytes. J. Physiol. (London). *In Press*.

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## **Abstracts:**

1. **Lin, Y.F.**, Lin, A.M., Pan, C.M., Lee, E.H., Kuo, J.S. and Chai, C.Y. A potent inhibitory mechanism in the medulla---the paramedian reticular nucleus. The Second Joint Annual Conference of Biomedical Science, Taipei, Taiwan, Abstr.: 126, 1987.

- 2. **Lin, Y.F.** and Yen, C.T. The involvement of serotonergic neurons of the nucleus raphe obscrus in the control of blood pressure. The Second Joint Annual Conference of Biomedical Science, Taipei, Taiwan, Abstr.: 128, 1987.
- 3. **Lin, Y.F.**, Yen, C.T. and Chai, C.Y. The inhibitory effects of paramedian reticular nucleus on the somatic reflexes in cats. The Third Joint Annual Conference of Biomedical Science, Taipei, Taiwan, 1988.
- 4. **Lin, Y.F.**, Shih, R.S. and Chai, C.Y. The inhibitory effects of paramedian reticular nucleus on the gastric movement in cats. The Forth Joint Annual Conference of Biomedical Science, Taipei, Taiwan, 1989.
- 5. Schafer, M.K.H., **Lin, Y.F.** and Watson, S.J. Characterization of proenkephalin heteronuclear RNA in individual nuclei in the rat brain. Soc. Neurosci. Abstr. *17*: 604.7, 1991.
- 6. **Lin, Y.F.**, Greenfield Jr., L.J., Browning, M.D. and Macdonald, R.L. Protein kinase C inhibits rundown of GABA<sub>A</sub> receptor currents in mouse cortical neurons and transfected L929 cells. Soc. Neurosci. Abstr. *18*: 487.8, 1992.
- Lin, Y.F., Browning, M.D. and Macdonald, R.L. Protein kinase C increases recombinant α1β1γ2L GABA<sub>A</sub> receptor currents expressed in L929 cells. Soc. Neurosci. Abstr. 19: 469.4, 1993.
- 8. **Lin, Y.F.**, Browning, M.D. and Macdonald, R.L. Protein kinase C increases recombinant α1β1γ2L GABA<sub>A</sub> receptor currents expressed in L929 cells. 25th Annual Meeting, Society for Neurosci. Michigan Chapter, Abstr.: 5, 1994.
- 9. **Lin, Y.F.**, Browning, M.D. and Macdonald, R.L. Protein kinase C increases recombinant α1β1γ2L GABA<sub>A</sub> receptor currents expressed in L929 cells. Fifth Annual Student Research Forum, Department of Physiology, University of Michigan, 1994.
- 10. **Lin, Y.F.**, Browning, M.D., Dudek, E. M. and Macdonald, R.L. Protein kinase C enhances recombinant α1β1γ2L GABA<sub>A</sub> receptor single-channel currents expressed in L929 cells. Soc. Neurosci. Abstr. 20: 217.4, 1994.
- 11. **Lin, Y.F.** and Macdonald, R.L. Changes in single-channel properties of recombinant α1β1γ2L GABA<sub>A</sub> receptor currents expressed in L929 cells by protein kinase A phosphorylation. Soc. Neurosci. Abstr. 21: 19.10, 1995.
- 12. **Lin, Y.F.**, Kapur, J. and Macdonald, R.L. Regulation of GABA<sub>A</sub> receptor single-channel currents by protein kinase A in acutely dissociated rat hippocampal dentate granule cells. Soc. Neurosci. Abstr. 22: 762.3, 1996.
- 13. **Lin, Y.F.** and Macdonald, R.L. Single-channel kinetic properties of the GABA<sub>A</sub> receptor in acutely dissociated rat hippocampal dentate granule cells. Soc. Neurosci. Abstr. 23: 7.9, 1997.
- 14. **Lin, Y.F.**, Jan, Y.N. and Jan, L.Y. Protein kinase A-mediated phosphorylation alters the single-channel properties of truncated ATP-sensitive potassium (K<sub>ATP</sub>) channel currents transiently expressed in HEK293 cells. Soc. Neurosci. Abstr. *24*: 792.7, 1998.

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15. **Lin, Y.F.**, Jan, Y.N. and Jan, L.Y. Nitric oxide activates ATP-sensitive potassium (K<sub>ATP</sub>) channel currents transiently expressed in HEK293 cells. Soc. Neurosci. Abstr. *26*: 685.10, 2000.

- 16. **Lin, Y.F.**, Jan, Y.N. and Jan, L.Y. Ras signaling pathway is involved in the nitric oxide-mediated modulation of ATP-sensitive potassium channel function. Biophysics J. 82 (1): 594a, 2002.
- 17. **Lin, Y.F.** Functional modulation of the ATP-sensitive potassium channel by mitogen-activated protein kinase in HEK293 cells. Soc. Neurosci. Abstr. *30*: 851.8, 2004.
- 18. Xao, X., Chai, Y. and **Lin, Y.F.** Stimulation of ATP-sensitive potassium channels by caffeine. Soc. Neurosci. Abstr. *31*: 609.6, 2005.
- 19. Chai, Y. and **Lin, Y.F.** Regulation of the ATP-sensitive potassium channels by cyclic GMP-dependent protein kinase. Soc. Neurosci. Abstr. *32*: 530.7, 2006.
- 20. **Lin, Y.F.** and Chai, Y. Dual regulation of the ATP-sensitive potassium channel mediated by cyclic GMP-dependent protein kinase. FASEB J. 21: A540, 2007.
- 21. Mao, X. and **Lin, Y.F.** Calcium-dependent functional modulation of the ATP-sensitive potassium channel. Soc. Neurosci. Abstr. *33*: 43.8, 2007.
- 22. Chai, Y. and **Lin, Y.F.** Differential regulation of ATP-sensitive potassium channels by cyclic GMP-dependent protein kinase. Soc. Neurosci. Abstr. *33*: 43.9, 2007.
- 23. Lin, Y.F. Regulation of ATP-sensitive potassium channels by protein kinase G-dependent signaling. Gordon Research Conference on Ion Channels, 2008.
- 24. **Lin, Y.F.** and Chai, Y. The role of reactive oxygen species in the regulation of the ATP-sensitive potassium channels by cyclic GMP-dependent protein kinase. Acta Physiol. Sinica *60 Suppl. 1*: 70, 2008. (Beijing Joint Conference of Physiological Sciences, Beijing, China)
- 25. Chai, Y. and **Lin, Y.F.** The role of cyclic GMP-dependent protein kinase in the modulation of vascular ATP-sensitive potassium channels. Program No. 534.6, 2008 Neuroscience Meeting Planner. Washington, DC: Society for Neuroscience, 2008.
- 26. **Lin, Y.F.** and Chai, Y. Regulation of neuronal K<sub>ATP</sub> channels by signaling elicited by cGMP-dependent protein kinase activation. Biophysical Society 53rd Annual Meeting. Biophys. J. *96*(3) *Suppl. 1*: 466a, 2009.
- 27. Chai, Y and **Lin, Y.F.** Intracellular mechanisms responsible for PKG stimulation of ATP-sensitive potassium channels. Biophysical Society 54th Annual Meeting. Biophys. J. 98(3) *Suppl.* 1: 696a, 2010.
- 28. Zhang, D.M., Chai, Y., Erickson, J., Brown, J.H., Bers, D.M. and **Lin, Y.F.** Functional modulation of cardiac ATP-sensitive potassium channels by nitric oxide via intracellular signaling. Biophysical Society 57th Annual Meeting. Biophys. J. *104* (2) *Suppl. 1*:24a, 2013.
- 29. Lin, Y.F. and Zhang, D.M. Stimulation of sarcolemmal ATP-sensitive potassium channels by atrial natriuretic peptide in cardiomyocytes. Program No. 320.27, 2013 Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience, 2013. Online.
- 30. Zhang, D.M. and **Lin, Y.F.** Modulation of sarcolemmal ATP-sensitive potassium channels by atrial natriuretic peptide in ventricular cardiomyocytes. Biophysical Society 58th Annual Meeting.

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#### I. Past and Current Trainees

## **Undergraduate students:**

Jackie Ho, Neurobiology, Physiology and Behavior (NPB)

2008-2009 Sukhraj Singh Kahlon, NPB

2009-2010 Kaki Cheung, NPB 2012-2013 Samuel Ke, UC Berkeley

2013 Summer Oscar Lee, University of Washington

## Rotation graduate students:

Jennifer Lee, MCIP Graduate Group
 William Wright, BMB Graduate Group
 Amanda Klein, MCIP Graduate Group
 Lyndsey Kirk, BMB Graduate Group
 Ian Kimball, MCIP Graduate Group

## **Graduate students (advised):**

2004-2009 Yong-ping Chai, Ph.D. student, BMB Graduate Group

#### Resident (physician scientist):

2010 William Sammis, M.D., Department of Anesthesiology

# Postdoctoral fellows:

10/2009-11/2010 Yong-ping Chai, Ph.D. (current position: Postdoctoral Fellow,

Institute of Biophysics, Chinese Academy of Sciences, Beijing,

China)

8/2010-12/2012 Dai-Min Zhang, M.D., Ph.D. (current position: Cardiologist,

Department of Cardiology, The First Affiliated Hospital of Nanjing Medical University, Nanjing, Jiangsu, P.R. China)