

# G-Protein Targets Colloquium

April 17 – 18, 2009

New Orleans, LA

Organized by Alan V. Smrcka, PhD and Theresa M. Filtz, PhD

This is a satellite meeting to Experimental Biology 2009

Sponsored by: ASPET's Division for Molecular Pharmacology 

Co-Sponsored by: The American Society for Biochemistry and Molecular Biology

## Preliminary Program: Friday, April 17

### Theme I: Effector Structure and Mechanism for Regulation

#### *Mechanism of Activation of Phospholipase C Isozymes*

T. Kendall Harden, Univ of North Carolina

#### *RhoGEF Structure/Function*

John J.G. Tesmer, Univ of Michigan

#### *Molecular Basis for K<sup>+</sup> Channel Regulation by G $\beta$ $\gamma$*

Diomedes E. Logothetis, Mt Sinai Sch of Med

### Theme II: Novel G Protein Effectors and Regulatory Mechanisms

#### *G12/G13 Activation of Adenylyl Cyclase*

Lily Jiang, Univ Texas Southwestern Med Ctr

#### *A Novel Signaling Mode for $\alpha_{1A}$ -Adrenergic Receptors*

Marcos E. Milla, Roche

Talk Selected from Abstracts

### Theme III: Effector Scaffolding

#### *Cell Signaling in Space and Time*

Graeme Carnegie, Univ of Washington

#### *Molecular Chaperones for Kir3 Channel Assembly*

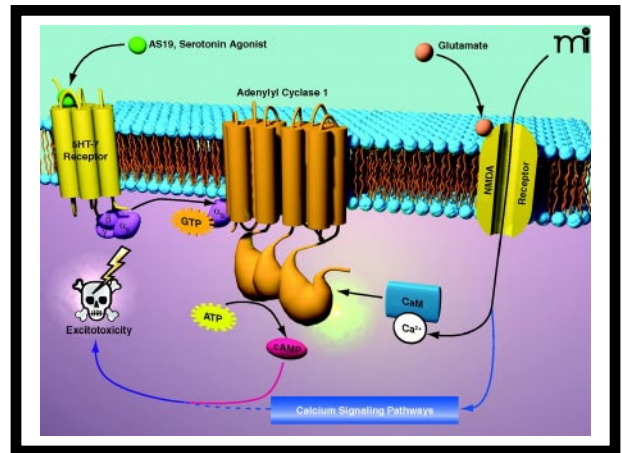
Terry Hebert, McGill Univ

Talk Selected from Abstracts

### Special Lecture on G Protein BRET Methods: Application to G Protein Effectors

#### *Use of BRET to Monitor G Protein Conformational Changes*

Michel Bouvier, Univ of Montreal



## Preliminary Program: Saturday, April 18

### Theme IV: Effector Cell Physiology and Pharmacological Targeting

#### *RhoGEF Regulation in Cells*

Phillip B. Wedegaertner, Thomas Jefferson Univ

#### *Epac in cAMP-Dependent Physiology*

Martina Schmidt, Univ Groningen

#### *Pharmacological Targeting of AC*

Yoshihiro Ishikawa, UMDNJ-New Jersey Med Sch

#### *Small Molecule Targeting of G $\beta$ -Effector Interactions*

Alan V. Smrcka, Univ of Rochester

Talk Selected from Abstracts

### Theme V: Physiological Roles of G Protein Effector Systems in vivo

#### *Adenylyl Cyclase and Longevity/Physiology*

Stephen F. Vatner, UMDNJ-New Jersey Med Sch

#### *PLC Regulation in the Heart*

Elizabeth A. Woodcock, Baker Med Res Inst

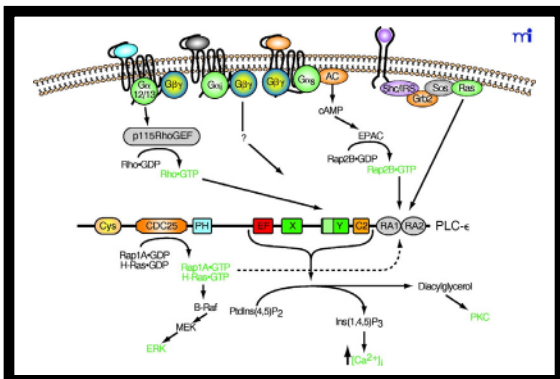
#### *Chemoattractant signaling in myeloid function*

Dianqing (Dan) Wu, Yale Univ

### Plenary Lecture:

#### *G Proteins and G Protein Targets*

Heidi Hamm, Vanderbilt Univ

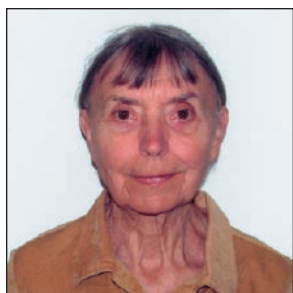


For More Information on Programming and to Register:

<http://www.aspet.org/public/meetings/meetings.html>

## Reflections

- Danieli, C., Dahamna, S., Firuzi, O., Sekfali, N., Saso, L., and Mazzanti, G. *Attractylis gummifera* L. poisoning: An ethnopharmacological review. *J. Ethnopharmacol.* **97**, 175–181 (2005).
- Kouzi, S.A., McMurtry, R.J., and Nelson, S.D. Hepatotoxicity of germander (*Teucrium chamaedrys* L.) and one of its constituent neoclerodane diterpenes teucrin A in the mouse. *Chem. Res. Toxicol.* **7**, 850–856 (1994).
- Coll, J. NMR Shift data of neo-clerodane diterpenes from the genus *Ajuga*. *Phytochem. Anal.* **13**, 372–380 (2002).
- Chatterjee, K., Zhang, J., Tao, R., Honbo, N., and Karliner, J.S. Vincristine attenuates doxorubicin cardiotoxicity. *Biochem. Biophys. Res. Commun.* **373**, 555–560 (2008).
- Zhou, S., Koh, H.L., Gao, Y., Gong, Z.Y., and Lee, E.J. Herbal bioactivation: the good, the bad and the ugly. *Life Sci.*, **74**, 935–968 (2004).
- de Sousa, D.P., Junior, E.V., Oliveira, F.S., de Almeida, R.N., Nunes, X.P., and Barbosa-Filho, J.M. Antinociceptive selectivity of structural analogues of rotundifolone: Structure-activity relationship. *Z. Naturforsch. [C]*, **62**, 39–42 (2007).
- Polya, G. *Biochemical Targets of Plant Bioactive Compounds*, p 207, Taylor & Francis, New York (2003).
- Theophrastus. Concerning Odours, Sect. 35, p 359. *Enquiry into Plants, Vol. II*. (Trans. A. Hort), Harvard University Press, Cambridge (1980).
- Chiang, L.C., Ng, L.T., Chiang, W., Chang, M.Y., and Lin, C.C. Immunomodulatory activities of flavonoids, monoterpenoids, triterpenoids, iridoid glycosides and phenolic compounds of *Plantago* species. *Planta Med.* **69**, 600–604 (2003).
- Ringbom, T., Huss, U., Stenholm, A., Flock, S., Skattebol, L., Perera, P., and Bohlin, L. Cox-2 inhibitory effects of naturally occurring and modified fatty acids. *J. Nat. Prod.* **64**, 745–749 (2001).
- Deepak, M. and Handa, S.S. Antiinflammatory activity and chemical composition of extracts of *Verbena officinalis*. *Phytother. Res.* **14**, 463–465 (2000).
- Speroni, E., Cervellati, R., Costa, S., Guerra, M.C., Utan, A., Govoni, P., Berger, A., Müller, A., and Stuppner, H. Effects of differential extraction of *Verbena officinalis* on rat models of inflammation, cicatrization and gastric damage. *Planta Med.* **73**, 227–235 (2007).
- Basile, A., Senatore, F., Gargano, R. et al. Antibacterial and antioxidant activities of *Sideritis italica* (Miller) Greuter et Burdet essential oils. *J. Ethnopharmacol.* **107**, 240–248 (2006).
- Gomez-Serranillos, M.P., El-Naggar, T., Villar, A.M., and Carretero, M.E. Analysis and retention behaviour in high-performance liquid chromatography of terpenic plant constituents (*Sideritis* spp.) with pharmacological interest. *J. Chromatogr. B Analyt. Technol. Biomed. Life Sci.* **812**, 379–383 (2004).
- Zilboorg, G. Introduction, in *Diseases that deprive man of his reason in Paracelsus, Four Treatises*, Sigerist, H.E. ed. Johns Hopkins Press, Baltimore (1996).
- Blunt, W. and Raphael, S. *The Illustrated Herbal*. Thames and Hudson, New York (1994).



**Stata Norton, PhD**, is an Emeritus Professor in the Department of Pharmacology, Toxicology, and Therapeutics, University of Kansas Medical Center, Kansas City, KS. She has published over 120 research articles, reviews, and book chapters on neuropharmacology and neurotoxicology,

especially on the effects of drugs and radiation on the developing central nervous system. Email [snorton@kumc.edu](mailto:snorton@kumc.edu); fax (913) 588 7501.

## Improving research protections means improving research quality.



**Demonstrate your organization's commitment to human research protections through accreditation.**

AAHRPP accreditation...

- improves your human research protection program
- assists your organization in achieving regulatory compliance
- helps your organization compete for sponsored research
- “raises the bar” in overall research quality
- builds and enhances public trust

**AAHRPP**  
Association for the Accreditation of  
Human Research Protection Programs, Inc.®

**FASEB**  
AAHRPP Founding Member

For information call (202)783-1112  
[www.aahrpp.org](http://www.aahrpp.org)

# SAVE THE DATE!!

## 2009 ASPET Annual Meeting at Experimental Biology 2009

### April 18 - 22

### New Orleans, Louisiana

Experimental  
Biology

2009®

#### **2009 Symposia:**

*A Renaissance in Marine Pharmacology: Preclinical Curiosity to Clinical Reality*

*Advances in Down Syndrome Neuroscience Research: Implications for Alzheimer's Disease, Dementias, & Other Cognitive Disorders*

*All Presidents' Symposium on Integrative Pharmacology*

*AMPK as a Novel Therapeutic Approach for the Treatment of Metabolic Disorders & Heart Disease*

*Discovery & Development of Oligonucleotide Therapeutics*

*Emerging Approaches to Treatment of Alzheimer's Disease*

*Endothelial Progenitor Cells & Cardiovascular Disease - From Bench to Bed Site*

*Exposure to Environmental Agent Alters Epigenetic Homeostasis*

*Gases as Neuromodulators in Sensing: From Nitric Oxide to Hydrogen Sulfide*

*Generating Proteomic Diversity in Xenobiotic Biotransformation with Alternative RNA Splicing*

*Integrating Basic Sciences & Patient Care in a Core Clerkship Curriculum*

*Metabolomics in the Search for Biomarkers for Human Health*

*microRNAs as Biological Effectors & as Pharmacological Targets in the Cardiovascular System*

*Neuroplastic & Neurodegenerative Changes Associated with Drug Abuse and Addiction*

*Receptor Signaling & Regulation in Neuropsychiatric Research*

*Regenerative Pharmacology*

*Regulation of Xenobiotic Metabolizing Enzymes in Humans: Implications for the Propagation of Health & Disease*

*Targeting Drug Metabolizing Enzymes for Effective Chemopreventive Approaches*

*The Role of Nuclear Receptors in Lipid Homeostasis*

*The Role of Insulin & Leptin in Drug Addiction and Mood*

*The Serotonin Transporter: Non Just for Neurons Anymore*

*Therapeutics in Autoimmunity: Treatment Successes & Side Effects as a Tool of Elucidating Pathogenic Pathways*

*Virally-encoded G Protein Coupled Receptors as New Drug Targets?*



Photos Courtesy of New Orleans  
Convention and Visitors Bureau

# See You in the Big Easy!!

## For more Info: [www.eb2009.org](http://www.eb2009.org)



Experimental  
Biology  
2010<sup>®</sup>

# EEB

[www.experimentalbiology.org](http://www.experimentalbiology.org)

April 24 – 28, 2010  
Anaheim Convention Center  
Anaheim, California



Photos Courtesy of AOCVCB

sponsors:

- American Association of Anatomists (AAA)
- The American Physiological Society (APS)
- American Society for Biochemistry and Molecular Biology (ASBMB)
- American Society for Investigative Pathology (ASIP)
- American Society for Nutrition (ASN)
- American Society for Pharmacology and Experimental Therapeutics (ASPET)

**Abstract Deadline:**  
**Wednesday, November 4, 2009**

2010