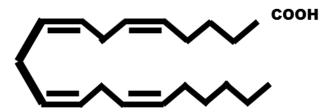
### **WELCOME TO**

# THE 16<sup>TH</sup> INTERNATIONAL WINTER EICOSANOID CONFERENCE

## March 13-16, 2016

## **Hyatt Regency Baltimore on the Inner Harbor**

300 Light Street Baltimore, MD 21202



#### The 16<sup>th</sup> International Winter Eicosanoid Conference March 13-16, 2016 Hyatt Regency Baltimore on the Inner Harbor

#### **ORAL PRESENTATIONS**

MONDAY/TUESDAY: CONSTELLATION E/F (2<sup>nd</sup> Floor)
WEDNESDAY: MARYLAND SUITE (2<sup>nd</sup> Floor)

Registration: Sunday, March 13<sup>th</sup> 5:00 pm - 8:00 pm Harborview Room

Mon & Tues, March 14<sup>th</sup>-15<sup>th</sup>

Wednesday, March 16<sup>th</sup>

7:15 am - 5:00 pm

Constellation Foyer

8:00 am - 12:30 pm

Maryland Suite Foyer

**Exhibitors:** Sunday – Wednesday - Atrium, 2<sup>nd</sup> Floor

Continental Breakfast available 7:00 am-8:30 am: Monday/Tuesday - Constellation Foyer

Wednesday - Harborview

## POSTER SESSIONS MARYLAND SUITE (2<sup>nd</sup> Floor)

Poster Session I Sunday, March 13<sup>th</sup> 6:00 pm – 7:30 pm

Poster Session II Monday, March 14<sup>th</sup> 6:00 pm – 7:30 pm

Poster Session III Tuesday, March 15<sup>th</sup> 4:45 pm – 6:15 pm

#### ~

## TRAINEE ROUNDTABLES PRATT/CALVERT/ CAMDEN/LOMBARD (3<sup>rd</sup> Floor)

Monday, March 14<sup>th</sup> 7:15-8:15 am

**Tuesday, March 15<sup>th</sup>** 7:15-8:15 am

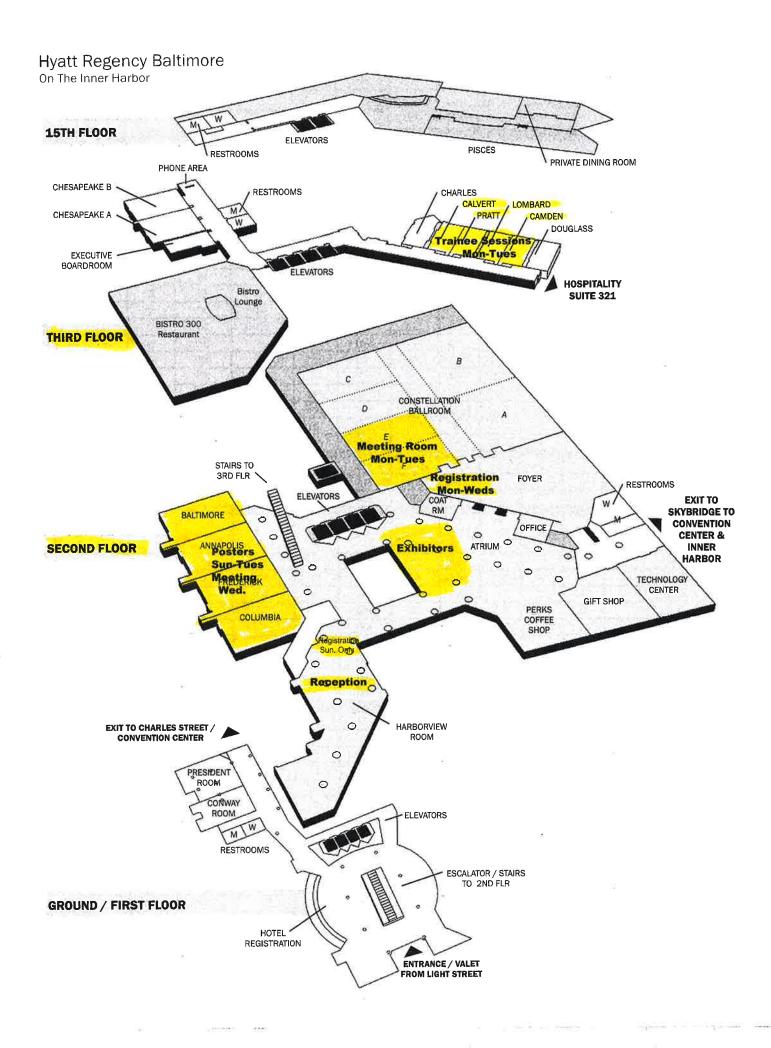


#### **CONFERENCE DINNER AND AWARDS**

Tuesday, March 15<sup>th</sup> 8:00 pm

McCormick & Schmick's

Pier 5 Inner Harbor 711 Eastern Avenue



## We gratefully acknowledge the following Institutions for their support of the 16<sup>th</sup> International Winter Eicosanoid Conference.

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Mong-Heng Wang, PhD Georgia Regents University

**Guodong Zhang, PhD** University of Massachusetts-Amherst

Poster Awards will be presented for Outstanding Poster Presentations

Cancer

Cardiovascular

**Diabetes** 

**Inflammation** 

**Mechanism-Structure-Genetics** 

Renal

\*

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SENIOR INVESTIGATOR Bruce D. Hammock, PhD University of California-Davis

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Dao Wen Wang, MD, PhD
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**NIEHS-NIH** 

**Ankit Gilani** 

New York Medical College

Jiong Hu

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# Prostaglandins and Other Lipid Mediators (POLM)

## **2016 Young Investigator Award Recipients**

Gabrielle Fredman, PhD
Albany Medical College

**Austin M. Guo, PhD**New York Medical College

Yael Gus-Brautbar, PhD
Beth Israel Deaconess Medical Center/Harvard

Xuehong Liu, PhD
Oregon Health and Science University

\*\*\*\*\*\*\*\*\*\*\*\*\*\*

## John C. McGiff, Memorial Lecture Award

**Bruce D. Hammock, Ph.D.**University of California - Davis

#### **SUNDAY, MARCH 13, 2016**

6:00-8:00 pm Welcome Reception

Harborview Room (2<sup>nd</sup> Floor)

6:00–7:30 pm Poster Session I

**Maryland Suite (2<sup>nd</sup> Floor)** 

#### **MONDAY, MARCH 14, 2014**

7:15-8:15 am Trainee Roundtable: Pratt/Calvert/ Camden/Lombard (3<sup>rd</sup> Floor)

Women in Science/Industry/Senior Investigator (Academia)

### ORAL PRESENTATIONS: CONSTELLATION E/F (2<sup>nd</sup> Floor)

8:15 am **Opening Remarks** 

Darryl C. Zeldin, MD, NIH/NIEHS, Research Triangle Park, NC

## SESSION I: EPOXYGENASE METABOLITES – NEW OPPORTUNITIES FOR TRANSLATIONAL RESEARCH

Co-Chairs: John D. Imig, PhD, Medical College of Wisconsin, Milwaukee, WI Jorge H. Capdevila, PhD, Vanderbilt University, Nashville, TN

8:20 am Nabil J. Alkayed, MD, PhD, Oregon Health and Science University, Portland, OR *Epoxygenase Metabolites and Cerebral Vascular Cognitive Impairment* 

8:45 am John M. Seubert, MSc, PhD, University of Alberta, Edmonton AB, Canada *Cardiac Mitochondria, Epoxyeicosanoids and PPAR Signaling* 

9:10 am Jamie L. Lahvic, BA, Boston Children's Hospital, Harvard Medical School, Boston, MA

Eicosanoids Signal via GPR132 to Enhance Developmental Hematopoiesis and Marrow

Transplant

9:35 am William B. Campbell, PhD, Medical College of Wisconsin, Milwaukee, WI *New Developments in the Search for EET Receptors* 

10:00 am Chen Chen, MD, PhD, Huazhong University of Science and Technology, Wuhan, China CYP2J2 and its Metabolites (EETs) Attenuate Cardiac Hypertrophy by Activating AMPKa2 and Enhancing Nuclear Translocation of Akt1

10:15 am Coffee Break (20 min)

#### SESSION II: EICOSANOIDS IN CANCER: FROM BIOLOGY TO DRUG DISCOVERY

Co-Chairs: Kenneth V. Honn, PhD, Wayne University School of Medicine, Detroit, MI Imad Shureiqi, MD, MS, University of Texas MD Anderson Cancer Center, Houston, TX

10:35 am Imad Shureiqi, MD, MS, University of Texas MD Anderson Cancer Center, Houston, TX ALOX15 as a Suppressor of Inflammation and Cancer: Missed in the Link

Guodong Zhang, PhD, University of Massachusetts Amherst, Amherst, MA 11:00 am P450-derived Eicosanoids on Cancer Progression 11:25 am Emily R. Finch, PhD, Pennsylvania State University, University Park, PA The Role of Endogenous Lipid Mediators in Models of Experimental Leukemia 11:50 am Molly M. Gilligan, BS/BA, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA Control of Hematological Cancer Progression with Resolvins 12:05 pm Lunch Break (1 hr, 30 min) **SESSION III: RESOLVINS** Co-Chairs: Charles N. Serhan, PhD, DSc, Harvard Institutes of Medicine, Brigham & Women's Hospital and Harvard Medical School, Boston, MA Dipak Panigrahy, MD, Beth Israel Deaconess Medical Center/Harvard, Boston, MA Charles N. Serhan, PhD, DSc, Harvard Institutes of Medicine, Brigham & Women's Hospital, 1:35 pm and Harvard Medical School, Boston, MA Elucidation of Novel Resolution Mediators in Human Tissues Richard P. Phipps, PhD, University of Rochester, Rochester, NY 2:20 pm Resolvins Blunt Tobacco Smoke-induced Lung Inflammation and Injury, and Increase Alternatively Activated M2 Macrophages with Pro-resolving Properties 2:45 pm Matthew Spite, PhD, Harvard Medical School and Brigham & Women's Hospital, Boston, MA Inflammation-resolving Lipid Mediators in Wound Healing and Ischemic Revascularization 3:10 pm Nan Chiang, PhD, Harvard Institutes of Medicine, Brigham & Women's Hospital and Harvard Medical School, Boston, MA Resolvin D2 Receptor in Resolution of Bacterial Infections and Organ Protection 3:35 pm Coffee Break (20 min) **SESSION IV: 20-HETE** Co-Chairs: Michal L. Schwartzman, PhD, New York Medical College, Valhalla, NY Samuel M. Poloyac, PharmD, PhD, University of Pittsburgh, Pittsburgh, PA 3:55 pm Victor Garcia, PhD, Yale University, New Haven, CT The 20-HETE Receptor 4:20 pm Richard J. Roman, PhD, University of Mississippi Medical Center, Jackson, MS 20-HETE and the Development of Vascular Cognitive Impairments Petra Rocic, PhD, New York Medical College, Valhalla, NY 4:45 pm 20-HETE is a Major Regulator of Coronary Collateral Growth in Metabolic Syndrome 5:10 pm Ayman O. El-Kadi, PhD, Qatar University, Doha, Qatar, and University of Alberta, Edmonton, AB, Canada

20-Hydroxyeicosatetraenoic Acid is a Potential Therapeutic Target in Cardiovascular

Diseases

5:35 pm	Mong-Heng Wang, PhD, Georgia Regents University, Augusta, GA Interaction of 20-HETE and COX-2 in Rofecoxib-induced Stroke Event
5:50 pm	End of Monday Sessions
6:00-7:30	pm Poster Session II (Maryland Suite – 2 <sup>nd</sup> Floor)
	*******************
	<b>TUESDAY, MARCH 15, 2016</b>
7:15-8:15	am Trainee Roundtable: Pratt/Calvert/ Camden/Lombard (3 <sup>rd</sup> Floor) Government/Overseas/Junior Investigator
ORAL PRI	ESENTATIONS: CONSTELLATION E/F (2 <sup>nd</sup> Floor)
SESSION V	V: ROLE OF EPOXYLIPID MEDIATORS IN DISEASE
Co-Chairs:	Bruce D. Hammock, PhD, University of California-Davis, Davis, CA
o churs.	Nabil J. Alkayed, MD, PhD, Oregon Health and Science University, Portland, OR
8:30 am	Fawaz G. Haj, D.Phil, University of California-Davis, Davis, CA
	ER Stress as a Possible Unifying Mechanism for the Action of EETs and Other Regulatory
	Lipids for Diabetes and Associated Diseases
8:55 am	Kip M. Connor, PhD, Harvard Medical School/Massachusetts Eye and Ear, Boston, MA
	Cytochrome P450 Lipid Metabolites Regulate Choroidal Neovascularization
9:20 am	Qian Ren, MD, Chiba University Center for Forensic Mental Health, Chiba, Japan
	Gene Deficiency and Pharmacological Inhibition of Soluble Epoxide Hydrolase Confers
	Resilience to Repeated Social Defeat Stress: Role of BDNF-TrkB Signaling
9:45 am	John D. Imig. DhD. Madical College of Wissensin, Milwaykoe, WI
9.43 aiii	John D. Imig, PhD, Medical College of Wisconsin, Milwaukee, WI Epoxylipids and Soluble Epoxide Hydrolase Inhibition on Kidney Fibrosis
	Epoxyupius una Soluble Epoxiae Hydroiase Innibilion on Kainey Fibrosis
10:10 am	Andrew G. Horti, PhD, Johns Hopkins Medical Institutions, Baltimore, MD
	<sup>18</sup> F-FNDP for Brain PET Imaging of Soluble Epoxide Hydrolase (sEH)
10:25 am	Coffee Break (20 min)
10.25 am	Correct Dream (20 mm)
SESSION V	VI: THERAPEUTIC POTENTIAL OF OMEGA-3 FATTY ACID-DERIVED CYP
<b>DEBBIOI</b>	EPOXYGENASE METABOLITES
Co-Chairs:	Wolf-Hagen Schunck, Max-Delbrück Center for Molecular Medicine, Berlin, Germany
	Camille Falck, University of Texas Southwestern Medical Center, Dallas, TX
10:45 pm	Aditi Das, PhD, University of Illinois Urbana-Champaign, Urbana IL
•	Discovery of Novel Omega-3 Endocannabinoid Epoxides Emanating from the Cross-Talk
	between the Endocannabinoid and Cytochrome P450 Metabolic Pathways

Joan Clària, PhD, Hospital Clinic-University of Barcelona, Barcelona, Spain

Omega-3's Benefits in Obesity and Liver Disease

11:10 am

- 11:35 am Anne Konkel, PhD, OMEICOS Therapeutics GmbH, Berlin, Germany

  Development of Omega-3 Epoxyeicosanoid-like Drugs for the Treatment of Atrial

  Fibrillation
- 12:00 pm Ryoji Yanai, MD, PhD, Yamaguchi University Graduate School of Medicine, Yamaguchi, Japan CYP-generated Metabolites of Omega-3 Fatty Acids Promote Choroidal Neovessel Resolution
- 12:25 pm Sarah Dziumbla, MSc, Institute for Vascular Signalling, Centre for Molecular Medicine, Goethe University, Frankfurt, Germany

  \*Omega-3 Diol 19,20-Dihydroxydocosapentaeonic Acid Regulates Vascular Permeability in Diabetic Retinopathy\*
- 12:40 pm **Lunch Break (1 hr, 30 min)**

#### SESSION VII: YOUNG INVESTIGATORS SESSION

- Co-Chairs: Claus Schneider, PhD, Vanderbilt University School of Medicine, Nashville, TN John M. Seubert, PhD, University of Alberta, Edmonton AB, Canada
- 2:10 pm Claus Schneider, PhD *Introduction of Young Investigator Session*
- 2:15 pm Gabrielle Fredman, PhD, Albany Medical College, Albany, NY (POLM YI Awardee)

  Atherosclerosis Progression is Associated with a Decrease in Pro-Resolving Mediators and Can Be Mitigated by Restoring Resolvin D1
- 2:30 pm Yael Gus-Brautbar, PhD, Beth Israel Deaconess Medical Center/Harvard Medical School, Boston, MA (*POLM YI Awardee*)

  20-HETE Promotes Pancreatic Cancer Growth and Metastasis via Regulation of Inflammatory Signaling
- 2:45 pm Xuehong Liu, PhD, The Knight Cardiovascular Institute/Oregon Health & Science University, Portland, OR (POLM YI Awardee)

  Function Screening for G-Protein-coupled Receptor Targets of 14,15-Epoxyeicosatrienoic Acid
- 3:00 pm Austin M. Guo, PhD, New York Medical College, Valhalla, NY (*POLM YI Awardee*) **20-HETE Contributes to Ischemia-induced Angiogenesis**
- 3:15 pm Fan Fan, MD, MS, The University of Mississippi Medical Center, Jackson, MS

  Functional Variants of CYP4A11 and CYP4F2 are Associated with Cognitive Impairment
  and Related Dementia Endophenotypes in the Elderly
- 3:30 pm Ling-Yun Chu, PhD, China Medical University and National Health Research Institutes, Taiwan Fibroblasts Inhibit Cancer Cell Epithelial Mesenchymal Transition and Metastasis by Release of COX-2 Suppressing Tryptophan Metabolite(s)
- 3:45 pm Coffee Break (20 min)

#### JOHN C. McGIFF MEMORIAL LECTURE

4:05 pm	Michal L. Schwartzman, PhD, New York Medical College, Valhalla, NY Overview & Tribute to John C. McGiff, MD
4:10 pm	Darryl C. Zeldin, MD, NIEHS/NIH, Research Triangle Park, NC Introduction of Awardee & Presentation – Bruce D. Hammock, PhD
4:15 pm	Bruce D. Hammock, PhD, University of California-Davis, Davis, CA Epoxide Hydrolase Inhibitors as Biochemical Probes and Drug Candidates
4:40 pm	End of Tuesday Sessions
4:45-6:15	pm Poster Session III (Maryland Suite – 2 <sup>nd</sup> Floor)
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8:00 pm

#### Conference Dinner and Awards Presentations McCormick & Schmick's, Pier 5, 711 Eastern Avenue

#### WEDNESDAY, MARCH 16, 2016

### ORAL PRESENTATIONS: MARYLAND SUITE (2<sup>nd</sup> Floor)

#### SESSION VIII: NEW VISTAS ON ENDOCANNABINOID SIGNALING

Co-Chairs: Daniele Piomelli, PharmD, PhD, University of California-Irvine, Irvine, CA Arthur A. Spector, MD, NIAAA/NIH, Bethesda, MD

8:30 am Bora Inceoglu, PhD, University of California-Davis, Davis, Ca
Structurally and Mechanistically Diverse Bioactive Lipid Mediators Cooperate to Dampen
Signaling Cascades that Mediate Neuropathic Pain

- 8:55 am Nicholas V. DiPatrizio, PhD, University of California-Riverside School of Medicine, Riverside, CA *Gut-Brain Endocannabinoid Signaling in Health and Disease*
- 9:20 am Kwang-Mook Jung, PhD, University of California-Irvine, Irvine, CA *Lipid Abnormalities in the BTBR Mouse Model of Autism*
- 9:45 am Brian C. Shonesy, PhD, Vanderbilt University School of Medicine, Nashville, TN Diacylglycerol Lipase and 2-Arachidonoyl Glycerol Signaling in the Striatum
- 10:10 am **Coffee Break (20 min)**

#### **SESSION IX: INFLAMMATION**

- Co-Chairs: Richard P. Phipps, PhD, University of Rochester Medical Center, Rochester, NY Ingrid Fleming, PhD, VRC for Molecular Medicine, Goethe University, Frankfurt, Germany
- 10:30 am Michael A. Holinstat, PhD, University of Michigan, Ann Arbor, MI

  12(S)-HETrE, a 12-Lipoxygenase-derived Eicosanoid with Therapeutic Potential to Prevent
  Thrombosis In Vivo
- 10:55 am Claus Schneider, PhD, Vanderbilt University School of Medicine, Nashville, TN A Biosynthetic Cross-over of the 5-LOX and COX-2 Pathways
- 11:20 am Carolyn J. Baglole, PhD, McGill University, Montreal, Quebec, Canada

  Emerging Paradigms for the Regulation of Cyclooxygenase Expression and their

  Implications for Chronic Lung Disease
- 11:45 am K. Sandeep Prabhu, PhD, Pennsylvania State University, University Park, PA *Endogenous Cyclopentenone Prostaglandin J2 in the Resolution of Inflammation*
- 12:10 pm Closing Remarks Dr. Darryl Zeldin
- 12:15 pm End of Conference