

Wednesday, November 6th 2019

- 4 PM - 5:30 PM *Arrival and Registration*
- 5:30 PM–6:30 PM *Welcome Reception (Crown Ballroom)*
- 6:30 PM-7:30 PM *Dinner (Crown Ballroom)*
- 7:45 PM–8 PM **Opening Remarks** (Crown Ballroom/Conference Room)
Chair – Natalia Krupenko, Ph.D.
- 8 PM–9PM **Keynote Speaker**
Rosalind Coleman, MD
University of North Carolina at Chapel Hill
Title: **Acyl-CoA Channeling via Protein Assemblies**
- 9 PM–12 AM *Social Time and Preliminary Poster Viewing*
(Crown Ballroom)

Thursday, November 7th 2019

- 7 AM–8 AM *Breakfast (Crown Ballroom)*
- 8:00–10:00 AM **Oral Session I** (Crown Ballroom/Conference Room)
Advances in Lipid Science
Co-Chairs: **Shai White-Gilbertson and Saurav Majumder**
- 8:00 AM **Visualization of Ceramide-Associated Proteins in Ceramide-Rich Platforms Using a Cross-Linkable Ceramide Analog and Proximity Ligation Assays With Anti-ceramide Antibody**
Tripathi P., Jiang X., Zhu Z., Qin H., Zhong L., Elsherbini A., Karki S., Crivelli S.M., Zhi W., Wang G., Spassieva S.D. and Bieberich E.
- 8:15 AM **Structure and Regulation of Phospholipase D1**
Bowling F. and Airola M.
- 8:30 AM **A Novel Multi-domain Phosphatidylinositol-Transfer Protein Senses Specific Phosphoinositide Pools On *Toxoplasma* Secretory Dense Granules**
Grabon A., Arabiotorre Duran A., and Bankaitis VA.

- 8:45 AM **Mammalian ORMDL Proteins Respond Stereospecifically to Ceramide Species to Regulate *de novo* Sphingolipid Biosynthesis**
John Vio Suemitsu, Deanna Davis, Ph.D., and Binks Wattenberg, Ph.D.
- 9:00 AM **Association of A β with astrocyte-derived and ceramide-enriched exosomes mediates A β mitotoxicity in neurons which is prevented by novel ceramide analogs**
Ahmed Elsherbini, Alexander Kirov, Michael B. Dinkins, Sanjib Karki, Simone M. Crivelli, Guanghu Wang, Haiyan Qin, Zhihui Zhu, Priyanka Tripathi, and Erhard Bieberich
- 9:15 AM **Structural Basis for Lipin Phosphatidic Acid Phosphatase Activity and Membrane Association**
Khayyo, V.I. and Airola, M.V.
- 9:30 AM **Elucidating the role of 3-OH fatty acids in the pathogenicity of *Pseudomonas aeruginosa***
Kgotle E., Pohl C., Albertyn J. and Sebolai O.
- 9:45 AM **Fatty Acid Uptake in *Trypanosoma brucei*, an early branching eukaryote**
Vollbeer B., Pulido-Gomez S., Walkowiak O., Ammar M., Raja S., Fant C., Spangler D., and Paul K.
- 10:00 – 10:15 AM *Coffee Break with Light Refreshments*
- 10:15 – 12:15 AM **Oral Session II (Crown Ballroom/Conference room)**
Regulation of Lipid Metabolism and Biological Role of Lipids
Co-Chairs: **Priyanka Tripathi and Jason Newton**
- 10:15 AM **HINTing at the Functional Diversification of Sec14 PITP Lipid Binding Domains**
Ashutosh Tripathi, Ahmad J. Obaidullah, Glen E Kellogg, Vytas A. Bankaitis
- 10:30 AM **1-Deoxysphingolipids affect actincytoskeleton regulation in neuronal-type cells**
Lakyn McCaffrey, Susana Munoz Gil, Laura Goins, and Stefka Spassieva
- 10:45 AM **Sphingosine Kinase 1 Is A Possible Inhibitor of Mitochondrial Biogenesis**

Yolander Valentine, Andrea Anderson, Johana Lambert & L. Ashley Cowart

11:00 AM **A Novel Role for Phosphatidylinositol Transfer Protein α in AKT Signaling**
McDermott M. I., Diz R., Hur S., Lete M. G., Miles J., Park Y. S., Applebee C. J., Clifford S. C., Wakelam M. J. O. W., Larijani B., and Bankaitis V.A.

11:15 AM **Long-chain Acyl-CoA Synthetase 6 Regulates Brain Docosahexaenoic Acid (DHA) Metabolism and is Required for Neuroprotection**
Regina F Fernandez, Sora Q Kim, Jessica M Ellis

11:30 AM **Aryl hydrocarbon receptor (AHR), a positive regulator of sphingolipid levels, is required for proper myelination in mice.**
Saurav Majumder, Mari Kono, Y. Terry Lee, Colleen Byrnes, Cuiling Li, Galina Tuymetova, and Richard L. Proia

11:45 PM **S1P signaling in neuron-glia interactions and synaptic connectivity**
Sandeep K. Singh, Tomasz Kordula and Sarah Spiegel

12:00 PM **Probing the Role of P4-ATPase-Dependent Glucosylceramide Transport in *Candida albicans* Virulence**
Bhawik K. Jain, Grant Nation and Todd R. Graham

12:15 - 1:15 PM *Lunch (Crown Ballroom)*

1:15 – 4 PM *Free Time*

4 PM – 6PM *Poster Session, Reception (Crown Ballroom)*

6 PM- 6:30 PM **Award Presentations: Journal of Lipid Research Young Investigator Award, Travel Awards, poster Awards and Photo Contest Award (Crown Ballroom/Conference room)**

6:30 PM- 7:30 PM **Keynote Speaker**
Richard Kolesnick, MD
Sloan Kettering Institute, Memorial Sloan Kettering Cancer Center, NY, NY
Title: **Anti-ceramide Antibodies as Therapeutics**

7:30 PM – 8:45 PM

*SERLC Banquet
(Crown Ballroom)*

9 PM – 11 PM

*Whitewater Bluegrass Music and Dancing
(Crown Ballroom)*

11 PM- 12 AM

*Social Time/Additional Poster Viewing
(Crown Ballroom)*

Friday, November 8th 2019

7 AM – 8 AM

Breakfast (Expo center)

8:15 AM – 10 AM

Oral Session III (Expo center/Conference room)

Lipids in Disease

Co-Chairs: **Aby Grabon and Alexis Stamatikos**

8:15 AM

A specialized lipid mediator approach to neuropathology in the ts65dn mouse model of down syndrome

Eric Hamlett, Aurélie Ledreux, Marianne Schultzberg, and Ann-Charlotte Granholm

8:30 AM

The critical role of ceramide in apoptosis and asthma exacerbation

James, B., Oyeniran, C., Sturgill, J., Bieberich, E., Cook-Mills, J., Spiegel, S.

8:45 AM

CerS6 affects plasma sphingolipid response to both dietary fat and folic acid

Keri Barron and Natalia Krupenko

9 AM

Dietary inulin decreases circulating ceramides by suppression of neutral sphingomyelinase expression and activity

Pan Deng, Jessie B. Hoffman, Michael C. Petriello, Chun-Yan Wang, Xu-Sheng Li, Maria P. Kraemer, Andrew J. Morris, Bernhard Hennig

9:15 AM

Reduced iPLA₂ β expression in Splenocytes Lowers Type I Diabetes Development

Taylor D. White, Alexander J. Nelson, Ying Gai-Tusing, Daniel J. Stephenson, Christopher L. Cardona, Margaret A. Park, Charles E. Chalfant, Sasanka Ramanadham

9:30 AM

The Role of Sphingomyelin Synthases in Exosome Release by Fat-loaded Hepatocytes

Raykova R., Deevska G., and Nikolova-Karakashian M.

- 9:45 AM **Loss of Carnitine Palmitoyltransferase-2 in skeletal muscle results in long-chain acylcarnitine accumulation along with disruptions in mitochondrial and contractile function.**
Pereyra, A.S., Mesa-Sanchez D., Amorese, A.J., Fisher-Wellman, K., Spangenburg, E.E., Laskin, J. and Ellis, J.M.
- 10 AM – 10:15 AM *Coffee Break*
- 10:15 AM–12:15 PM **Oral Session IV (Expo Center/Conference Room)**
Lipids In Cancer
Co-Chairs: **Pan Deng and Mark McDermot**
- 10:15 AM **Acid Sphingomyelinase Signaling is Obligate for ENT1 Functionalization and Gemcitabine Uptake**
Ganju A. and Kolesnick R
- 10:30 AM **Tamoxifen is a candidate anti-neosis drug due to an off target effect on acid ceramidase**
Shai White-Gilbertson, Caroline Whitlock, Ping Lu, Christian Jones, Stephanie Chiodini, Deborah Hurley, Chandrika Rao, Arabinda Das, James Norris, Joseph Delaney, Christina Voelkel-Johnson
- 10:45 AM **Sphingolipid Alterations in Non-Small Cell Lung Cancer**
April Boyd, Madisyn Rigsby, Claudia de Paulis, Santiago Lima
- 11:00 AM **L-serine supplementation reduces 1-deoxysphingolipid production in cells**
Brittany Sears, Laura Goins, and Stefka Spassieva
- 11:15 AM To be chosen from Late Breaking Abstracts
- 11:30AM-12:00 PM **JLR Young Investigator Award Lecture**
Jason Newton, Virginia Commonwealth University
Niemann-Pick Type C Disease: At the Crossroads of Dysfunctional Lipid Metabolism
- 12:00 – 12:30 PM **Business Meeting**
Co-Chairs: Santiago Lima, Ph.D., Jamie Sturgill, Ph.D.
Selection of 2020 Co-Chair
- 12:30– 1:30 PM *Lunch (Expo Center)*
- 1:30 PM *Conference adjourns*

