8th Annual Angioma Alliance

CCM Scientific Meeting

November 15-16, 2012

DoubleTree Bethesda – Washington, DC

Ballroom D

Day 1 | Thursday, November 15th

7:45 Welcome & Opening Remarks
Amy Akers & Sara Sukalich – Angioma Alliance

Session I – Proteomics, Structure & Function
Doug Marchuk, Session Chair

8:00 New insights into the structure and function of CCM proteins
Titus Boggon – Yale University School of Medicine

8:20 Proteomics characterization of CCM complexes
Anne-Claude Gingras – Samuel Lunenfeld Research Institute

8:40 Structural Basis of the Junctional Anchorage of the Cerebral Cavernous Malformations Complex
Alexandre Gingras – University of California San Diego

Session II – Signaling
Brent Derry, Session Chair

9:00 Defining the Ccm3 signaling pathway in a zebrafish model of CCM disease
Bilge Yoruk** – Sick Kids Research Institute

9:20 CCM3 and senescence
Juan Zalvide – University of Santiago de Compostela

9:40 Coffee Break

10:00 CCM3 functions in brain development
Angeliki Louvi – Yale School of Medicine

10:20 CCM3 regulates endosome recycling in the C. elegans excretory cell
Ben Lant – Sick Kids Research Institute
10:40  **Novel Endothelial Signaling in CCM**  
Rebecca Stockton – University of California Los Angeles

11:00 **Further Studies of Fasudil Treatment in Murine Models of Cerebral Cavernous Malformation Disease**  
Robert Shenkar – University of Chicago

11:20 **DISCUSSION OF SESSIONS I & II**

12:00 Lunch | Oz Restaurant

**SESSION III – VASCULAR BIOLOGY & INFLAMMATION**  
**BRANT WEINSTEIN, SESSION CHAIR**

1:00 **The CCM2 paralogue CCM2L opposes canonical cerebral cavernous malformation signaling in endothelial cells during cardiovascular growth**  
Xiangjian Zheng – University of Pennsylvania

1:20 **Loss of Notch signaling in the adult endothelium: implications for CCM**  
Andreas Fischer – German Cancer Research Center Heidelberg (DKFZ)

1:40 **The recombinant antibody construction and restricted B cell repertoire in Human Cerebral Cavernous Malformation (CCM)**  
Changbin Shi – University of Chicago

2:00 **Decreased KRIT1 expression leads to increased vascular permeability and modifies inflammatory responses in vivo.**  
Angela Glading – University of Rochester

2:20 **CCM2 intersects a novel pathway of cytokine mediated vascular instability**  
Dean Li – University of Utah

2:40  **COFFEE BREAK**

**SESSION IV – LESION GENESIS**  
**KEVIN WHITEHEAD, SESSION CHAIR**

3:00 **Novel insights into the relationship between KRIT1 and ROS homeostasis: KRIT1 loss-of-function causes a ROS-dependent upregulation of transcription factors involved in oxidative stress response**  
Saverio Francesco Retta – University of Torino
3:20  
*Exploring the Implications of a Two-Hit Mechanism in Cerebral Cavernous Malformations*
David McDonald** - Duke University Medical Center

3:40  
*CCM3-dependent EC-SMC/pericyte interactions in CCM lesion development mouse models and mechanistic studies*
Wang Min – Yale University

4:00  
*Angiogenesis is Required for Cavernous Malformation Development*
Kevin Whitehead – University of Utah

4:20  
*DISCUSSION OF SESSIONS III & IV*

5:00  
*END OF DAY 1*

7:00  
*DINNER | BALLROOM C*

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**DAY 2 | Friday, November 16th**

8:30  
*WELCOME*
Connie Lee – Angioma Alliance & CCM3 Action

SESSION V – MAGNETIC RESONANCE IMAGING TECHNOLOGIES

*Leslie Morrison, Session Chair*

8:40  
*Quantitative Iron Burden as a Biomarker of Cumulative Hemorrhages in Cerebral Cavernous Malformations: Studies in Mouse and Man*
Luying (Ryan) Li** – West China Medical School of Sichuan University & University of Chicago

9:00  
*Novel Magnetic Resonance Imaging Biomarkers of Human CCM Disease: Dynamic Contrast-Enhanced Quantitative Perfusion*
Abdul Ghani Mikati** – University of Chicago

9:20  
*White Matter Hyperintensities in CHM CCM1*
Blaine Hart – University of New Mexico

9:40  
*COFFEE BREAK*

SESSION VI – CLINICAL STUDIES

*Issam Awad, Session Chair*

10:00  
*Spectrum of Human Causative Mutations in the KRIT1, CCM2 and PDCD10 Genes*
James Weber – PreventionGenetics
Clinical Factors Associated with Lesion Count in Familial Cerebral Cavernous Malformation Type 1 Patients with the Common Hispanic Mutation
Hélène Choquet** – University of California San Francisco

Cutaneous Features of the CCM1-CHM Cohort
Leslie Morrison – University of New Mexico

Outcome after surgical or conservative management of cerebral cavernous malformations: a prospective, population-based cohort study
Margaret A. Horne** - University of Edinburgh

Discussion of Session V & VI

Lunch | Oz Restaurant

Session VII – Panel Discussion of Clinical Trails for CCM

Biomarkers
Issam Awad – University of Chicago

Recruitment Strategies
Leslie Morrison – University of New Mexico

Trials & Research Consortia
William Young – University of California San Francisco

Food & Drug Administration Perspective
Gumei Liu – Rare Diseases Program Office of New Drugs

National Institutes of Health Perspective
Claudia Moy – NINDS office of Clinical Research

Open Discussion

Close of Meeting

Meeting Sponsors

Angioma Alliance
National Institute of Neurological Disorders & Stroke
CCM3 Action
Innolyst (Patient Crossroads)

**Trainee Travel Award Winner