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.

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

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

10:20 ***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

10:40 ***Cutaneous Features of the CCM1-CHM Cohort***
Leslie Morrison – University of New Mexico

11:00 ***Outcome after surgical or conservative management of cerebral cavernous malformations: a prospective, population-based cohort study***
Margaret A. Horne** - University of Edinburgh

11:20 DISCUSSION OF SESSION V & VI

12:00 LUNCH | OZ RESTAURANT

Session VII – Panel Discussion of Clinical Trails for CCM

1:00 ***Biomarkers***
Issam Awad – University of Chicago

1:10 ***Recruitment Strategies***
Leslie Morrison – University of New Mexico

1:20 ***Trials & Research Consortia***
William Young – University of California San Francisco

1:30 ***Food & Drug Administration Perspective***
Gumei Liu – Rare Diseases Program Office of New Drugs

1:40 ***National Institutes of Health Perspective***
Claudia Moy – NINDS office of Clinical Research

1:50 OPEN DISCUSSION

3:00 CLOSE OF MEETING

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