8th Annual Angioma Alliance

CCM SCIENTIFIC MEETING

November 15-16, 2012

 $\begin{array}{c} {\rm Double Tree\ Bethes da-Washington,\ DC} \\ {\it Ballroom\ D} \end{array}$

DAY 1	THURSDAY, NOVEMBER 15 TH
7:45	WELCOME & OPENING REMARKS Amy Akers & Sara Sukalich – Angioma Alliance
SESSION	N 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	N 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 Rep Lant — Sick Kids Research Institute

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	10:40	Novel Endothelial Signaling in CCM Rebecca Stockton – University of California Los Angeles
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	11:00	
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	11:20	DISCUSSION OF SESSIONS I & II
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	12:00	Lunch Oz Restaurant
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	Session I	
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	1:00	
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	1:20	CCM
permeability and modifies inflammatory responses in vivo. Angela Glading – University of Rochester 2:20 CCM2 intersects a novel pathway of cytokine mediated vascular instability	1:40	repertoire in Human Cerebral Cavernous Malformation (CCM)
instability	2:00	permeability and modifies inflammatory responses in vivo.
	2:20	instability

Session IV – Lesion Genesis

2:40

COFFEE BREAK

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	e Friday, November 16 th
8:30	WELCOME Connie Lee – Angioma Alliance & CCM3 Action
Session	N 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	N 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 V	II – Panel Discussion of Clinical Trails for CCM
1:00	Biomarkers Issam Awad – University of Chicago
1:10	Recruitment Strategies

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

Trials & Research Consortia

Leslie Morrison – University of New Mexico

Claudia Moy – NINDS office of Clinical Research

1:50 OPEN DISCUSSION

1:20

3:00 CLOSE OF MEETING

MEETING SPONSORS

ANGIOMA ALLIANCE
NATIONAL INSTITUTE OF NEUROLOGICAL DISORDERS & STROKE
CCM3 ACTION
INNOLYST (PATIENT CROSSROADS)

**Trainee Travel Award Winner