## **Agenda**

# ARISE III: THE MIDDLE MENINGEAL ARTERY (MMA): A PATHWAY TO INNOVATIVE TREATMENTS

New Perspectives on

Migraine Management, Transarterial, Transvenous Csdh Removal, New Generation of Liquid Embolics and Requirements

AI, Robotics (Remote vs in Hospital), Pros and Cons,
Adaptation Into Clinical World

Preclinical Data (Simulation vs Biological Systems)

ARISE starts with a one full day meeting focusing on cuttingedge clinical and research study designs, analytic methods, novel drugs/devices, biomarkers, and outcomes. The specific sessions included in the program are:

- SESSION 1: Intracerebral hemorrhage (ICH) NEW DATA,
   NEW LANDSCAPE. NEW APROACHES
- SESSION 2: Cerebral Venous Diseases: NEW DATA, NEW LANDSCAPE, NEW APROACHES
- SESSION 3: Intracranial Atherocclusive Disease (ICAD):
   NEW DATA, NEW LANDSCAPE, NEW APROACHES
- SESSION 4: REGULATORY PERSPECTIVE ON KEY CLINICAL TRIAL ISSUES

The second day of the ARISE is focused on the consensus process to develop recommendations. Participating experts from academia, industry and regulatory institutions are divided into 3 groups for preparation of the consensus recommendations. They are provided equal opportunity to contribute to a facilitated discussion process, during which recommendations developed by leading academic thought leaders in ICH, ICAD, and CVD are presented, openly discussed, and may

be amended, expanded, replaced, and refined by the group. Each of the 3 content groups then present their recommendations to the entire assembly. Writing committees draft the manuscripts for review of the group and the resulting articles are then published.\*The program is preliminary and could be subject to changes

## 7:00 - 8:00 ammorning Networking

Location: Metropolitan Galleries 4-6 Foyer 8:00 - 8:15
amacademia/Industry/Fda/Nih Roundtable on Middle Meningeal
ARTERY(MMA): A PATHWAY TO INNOVATIVE TREATMENTS, NEUROAI/ROBOTICS/AUTOMATION AND NON-CLINICAL REQUIREMENTS IN NEUROIR

Location: Metropolitan Galleries 1-3

Chairs: Ajay Wakhloo, TUFTS University School of Medicine, USA Adam Arthur, University of Tennessee, USA

Introduction: Marc Fisher, Beth Israel Deaconess, Harvard
Medical School, Boston, MA 8:15 - 11:00 amSESSION 1: MIDDLE
MENINGEAL ARTERY (MMA): A PATHWAY TO INNOVATIVE
TREATMENTSLocation: Metropolitan Galleries 1-3

Chairs: Arthur Adam, University of Tennessee, TN Fawaz Al-Mufti, New York Medical College, NY

8:15 - 8:35

#### REFRACTORY MIGRAINE

08:15 - 08:25 Presentation by **Adnan Qureshi**, University of Missouri, School of Medicine, Columbia, MO

08:25 — 08:35 Comments by **Italo Linfante**, Miami Cardiac and Vascular Institute and Baptist Neuroscience Institute, Miami, FL

## 8:35 - 9:00

## ENDOVASCULAR ACCESS TO SUDURAL SPACE AND BRAIN SURFACE

08:35 - 08:45 Presentation by **Luis Savastano**, University of California, San Francisco, CA

08:45 - 08:55 Presentation by **Jose Morales,** Pacific Neuroscience Institute, CA

08:55-09:00 Comments by **Pedro Lylyk**, University of Buenos Aires, Argentina

9:00 - 9:30

## MMA INFUSIONS/EMBOLIZATION FOR HA

09:00 - 09:20 Presentation by **Peter Kan**, UTMB, Galveston, TX 09:20 - 09:30 Comments by **Akash Patel**, Baylor University, Houston, TX

9:30 - 9:50

## REQUIREMENTS FOR A NOVEL LIQUID EMBOLIC AGENT

09:30-09:40 Presentation by **Upma Sharma**, Arsenal, Boston, MA 09:40-09:50 Comments by **David Altschul**, Montefiore Medical Center, NY

## 09:50 - 11:00 ROUNDTABLE PANEL DISCUSSION

Chris Kellner, Mt Sinai, NYC, NY;

Mark Bain, Cleveland Clinic, Cleveland, OH;

**David Fiorella,** Stonybrook University School of Medicine, Stonybrook, NY

Violiza Inoa, Semmes Murphey Clinic, TN

Raul Nogueira, UPMC Stroke Institute, PA

Nagesh Uppuluri, Terumo Neuro, USA

Sudha Iyer, Medtronic, USA

Scott Janis, NIH, USA 11:00 - 11:15 amBREAK

## Location: Metropolitan Galleries 4-6 Foyer 11:15 am— 1:30 pm

## SESSION 2: NON-CLINICAL REQUIREMENTS IN NEURO-IR

## <u>Location: Metropolitan Galleries 1-3</u>

Chairs: Matthew Gounis, UMASS Chan School of Medicine, Worcester, MA

Ajay Wakhloo, TUFTS University School of Medicine, Boston, MA

11:15 - 11:45

## **VALUE OF BIOLOGICAL SYSTEMS**

11:15 — 11:30 Presentation by **Ram Kadirvel**, Mayo Clinic, Rochester, MN

11:30-11:45 Comments by **Juhana Frosen**, Tampere University and University Hospital Tampere, Finland

11:45 - 12:30

## **VALUE OF SIMULATED USE EXPERIMENTATION**

11:45 - 12:00 Presentation by **Steven Kreuzer**, University of Texas at Austin

12:00 - 12:15 Comments by **Demetrius Lopes**, Advocate Health, Chicago, IL

12:15 — 12:30 Comments by **Ramesh Grandhi**, University of Utah, Salt Lake City, UT

12:30 - 1:30

## **ROUNDTABLE PANEL DISCUSSION**

Vania Anagnostakou, UMASS Chan School of Medicine, Worcester, MA;

Carlos Pena, University of Buffalo, NY;

Patrick Brouwer, JNJ, USA

Angelo Delgado, Stryker, USA

Giovanni Ughi, Spryte Medical, USA

Francesca Bosetti, NIH, USA 1:30 - 2:30 pmBREAK

<u>Location: Metropolitan Galleries 4-6 Foyer</u> 2:30 - 5:00 pmSESSION 3: AI & ROBOTICS<u>Location: Metropolitan Galleries 1-3</u>

Chairs: Vitor Pereira, University of Toronto and St. Michael's Hospital, Canada

Ferdinand Hui, Queen's University Medical Group, Honolulu, HI David Liebeskind, University of California, Los Angelis, CA

2:30 - 3:15 THE EU AI ACT 2024: IMPLICATIONS FOR U.S. HEALTH CARE

2:30-2:45 Introduction to AI by **Andrew Menard,** Johns Hopkins, MA

2:45 — 3:00 Presentation by **Mathias Unberath**, Johns Hopkins, MA

3:00 - 3:15 Comments by **Joshua Hirsch**, MGB, Harvard Medical School, Boston, MA

## 3:15 - 3:50 ROBOTICS

3:15 — 3:30 Presentation by **Omar Choudhri**, University of Penn, PA

3:30 — 3:50 Presentation by **Max van Apeldoorn**, Philips, Boston, MA

3:50 - 4:50

## **ROUNDTABLE PANEL DISCUSSION**

**Yasmin N Aziz,** University of Cincinnati College of Medicine, OH;

Ameer Hassan, University of Texas, Austin, TX;

Aquill Turk, University of South Carolina-Greenville, SC;

Michael Froehler, Vanderbilt University Medical Center

J Mocco, Mt. Sinai, New York, NY

Mathias Unberath, Johns Hopkins, MA

Sean Kyne, Philips, USA

Andre Cesarski, ViZ AI, USA

Mark Ashby, Medtronic, USA

Kerstin Mueller, Siemens, USA

Clinton Wright, NIH, USA 5:15 - 6:15 pmSESSION 4: REGULATORY PERSPECTIVE ON KEY CLINICAL TRIAL ISSUES Location:

Metropolitan Galleries 1-3

Chairs: Adnan Siddiqui, State University of New York, USA;
Ricardo Hanel, Baptist Health, USA;
Xiaolin (Lin) Zheng, FDA, USA

5:15-5:35 FROM BENCH TO FIRST-IN-HUMAN: WHAT IS NEEDED FOR AN EARLY FEASIBILITY STUDY IDE?

Xiaolin (Lin) Zheng, FDA, USA

• Understanding the transition from bench research to the

initial stages of human trials.

- Identifying the critical elements required to initiate Early Feasibility Study IDEs in the U.S.
- FDA Panel (CDER & CDRH) Answers to Stroke Community Questions

5:35 - 6:15

**ROUNDTABLE PANEL DISCUSSION** 

Panelists:

Adnan Siddiqui, State University of New York, USA; Philipp Taussky, BIDMC/Harvard Medical School, USA; Ricardo Hanel, Baptist Health, USA; Guilherme Dabus, Miami Cardiac and Vascular Institute and Baptist Neuroscience Institute, USA; David Altschul, Montefiore Medical Center, USA; Adel Malek, Tufts Medical Center, USA; Xiaolin (Lin) Zheng, FDA, USA; Gabriela Suarez-Mier, FDA, USA; Amy Smith, MicroVention, USA 6:30 — 9:30 pmEVENING OF NETWORKING: BUILDING CONNECTIONS AND OPPORTUNITIES FOLLOWED BY SPECIAL PRESENTATION

Location: Metropolitan Galleries 4-6 Foyer

Introduction:Adam Arthur, University of Tennessee, TN

**BRAIN COMPUTER INTERFACE** 

Thomas Oxley, CEO Synchron, New York, NY 7:00 - 8:00 amMORNING NETWORKING

<u>Location: Metropolitan Galleries 4-6 Foyer</u> 8:00 - 10:45 amWORKSHOPS TO DEVELOP CONSENSUS RECOMMENDATIONS

Participants are divided into three groups — each to develop recommendations for planned publication in a major scientific journal.

Location: Metropolitan Galleries 1-3

Workshop #1

MIDDLE MENINGEAL ARTERY (MMA): A PATHWAY TO INNOVATIVE TREATMENTS

Moderators: Peter Kan, UTMB, Galveston, TX
Edgar Samaniego, University of Iowa, Iowa City, IA
Matthew Amans, UCSF, CA

**Location: Dupont** 

Workshop #2
NON-CLINICAL REQUIREMENTS IN NEURO-IR

Moderators: Ricardo Hanel, Baptist Health, Jacksonville, FL
Matthew Gounis, University of Massachusetts Chan School of
Medicine, Worcester, MA
Dorothea Altschul, St. Joseph's Health, New Jersey, NJ

**Location: Dupont** 

Workshop #3
AI & ROBOTICS

Moderators: Vitor Pereira, University of Toronto and St. Michael's Hospital, Canada Brian Hoh, University of Florida, Gainesville, FL Andrew Menard, John Hopkins

10:45 - 11:00 amBREAK

<u>Location: Metropolitan Galleries 4-6 Foyer</u> 11:00 am - 12:00 pmWORKSHOP CHAIRS PRESENT RECOMMENDATIONS TO FULL ASSEMBLY

<u>Location: Metropolitan Galleries 1-3</u>DRAFTING OF CONSENSUS STATEMENT IS INITIATED

Chaired by Adam Arthur, University of Tennessee, USA

Ajay K Wakhloo, TUFTS University School of Medicine, USA

12:00 - 12:15 pmCLOSING COMMENTS AND ADJOURNMENT