



## BASIC SCIENCE AND PATHOGENESIS

*Development Of New Models And Analysis Methods, Genetics, Human Neuropathology, Molecular And Cell Biology*

*Sessions are listed in Central Daylight Time (North America). Schedule is current at time of posting. Content is listed as submitted. Session chairs are listed in bold.*

### WELCOME AND PLENARY SESSION

*Hear updates from the Alzheimer's Association and learn about the state of the field from a leading expert.*

- 10 a.m.**      **Plenary Session And Awards**  
**Proteostasis Failure In Alzheimer's Disease And Related Dementias - New Clues To Pathogenesis And Therapy**  
**Ralph A. Nixon, M.D., Ph.D.**

### LIVE SESSIONS

*Attend sessions focusing on basic science and pathogenesis and engage in live discussion.*

- 7 a.m.**      **Developing Topic Session: The Key Players In Alzheimer's Disease**  
**Maria Teresa Ferretti, Rita Cacace, Xiaohang Li, Pablo Largo-Barrientos, Wai Hang Cheng, Patricia Cogram**
- 7 a.m.**      **Emerging Concepts In Basic Science: Neuroimmune Single Cell RNA Sequencing**  
**Francisco J. Quintana, Marco Colonna, Naomi Habib**
- 7 a.m.**      **EV Or Not EV? Extracellular Propagation Of AD Pathogenic Molecules And Evaluation Of Brain Cell-Derived Extracellular Vesicles From Patient Plasma As EV Biomarkers**  
**Khalid Iqbal, Tsuneya Ikezu, Dimitrios Kapogiannis, Takashi Kudo**
- 8:30 a.m.**   **Emerging Concepts In Basic Science: Therapeutic Benefit Of Adapting Proteostasis In Neurodegeneration**  
**Anne Bertolotti, Jeff Kelly, Linda Greensmith, Susan Ackerman**
- 8:30 a.m.**   **Mechanisms Of White Matter Damage**  
**Roxana Carare, Delphine Boche, James Nicoll, Donna M. Wilcock, Victoria Johnson, Joanna M. Wardlaw**
- 8:30 a.m.**   **Microbiome In Alzheimer's Disease: Pathogenesis And Treatment Implications**  
**Jeffrey Cummings, Michael T. Heneka, Meiyu Geng, Sangram S. Sisodia, Bruce T. Lamb**
- 11:30 a.m.** **Emerging Concepts In Basic Science: Molecular Mechanisms Of Neuropathological And Clinical Heterogeneity In Alzheimer's Disease**  
**Teresa Gomez-Isla, Rudolph E. Tanzi, Thomas J. Montine, Simon Dujardin**
- 11:30 a.m.** **Immunity In The Aging Or Diseased Brain**  
**Sergio Ferreira, Jose F. Abisambra, Marina Lynch, Michal Schwartz, Jonas J. Neher**
- 11:30 a.m.** **Towards A Better Knowledge Of The Genetics Of Alzheimer's Disease, The European Alzheimer Disease Biobank (EADB) Consortium**  
**Jean-Charles Lambert, Wiesje Van Der Flier, Céline Bellenguez, Luca Kleiendam, Iris E. Jansen, Fahri Küçükali**
- 1 p.m.**      **Emerging Concepts In Basic Science: Panel Discussion**  
**Dave Morgan, Anne Bertolotti, Teresa Gomez-Isla, Francisco Quintana, Rudolph E. Tanzi, Ralph A. Nixon**
- 1 p.m.**      **Targeting Cerebrovascular Pathology In Alzheimer's Disease: The Pros And Cons Of Intensive Blood Pressure Lowering Treatment In AD**  
**Vasilis Marmarelis, Jurgen A.H.R. Claassen, Rong Zhang, Brandon Henley**

## POSTER PRESENTATIONS

Explore the latest basic science and pathogenesis research with posters from across the world. Leave comments for authors around the clock. Posters on this topic will be available on Monday, July 27, at 12 a.m.

## ON-DEMAND SESSIONS AND Q&amp;A

View the on-demand sessions and then join experts and peers for live discussions of select content in dedicated chat rooms. We recommend viewing on-demand sessions in advance — the following content will be available on Monday, July 27, at 12 a.m.

## ON-DEMAND SESSIONS

## Q&amp;A TIME

- | ON-DEMAND SESSIONS   | Q&A TIME  |
|--|-----------|
| » <b>Human Neuropathology: AD Neuropathology</b><br>Ashley I. Bush, Eleanor Drummond, <b>Jamie M. Walker</b> , Cora O'Neill, Eilis Hannon, Yiyi Ma   | 6 a.m.    |
| » <b>Genome-Metabolome-Phenome: Towards An Integrated Molecular Atlas For Alzheimer's Disease</b><br>Rima Kaddurah-Daouk, Peter J. Meikle, Maria Wörheide, Emrin Horgusluoglu-Moloch, Kwangsik Nho   | 6:30 a.m. |
| » <b>Molecular &amp; Cell Biology: Importance Of Abeta/Amyloid In Brain Changes</b><br>Soumya Mukherjee, Busarin Arunsak, Kalipada Pahan, <b>Frances K. Wiseman</b> , Cara L. Croft  | 6:30 a.m. |
| » <b>Dysregulation Of Protein Synthesis In Neurodegeneration</b><br>Lulu Jiang, Harrison Tudor Evans, Jose F. Abisambra, Jada Lewis, <b>Jürgen Götz</b> , Benjamin Wolozin   | 7 a.m.    |
| » <b>Molecular &amp; Cell Biology: Neurodegeneration Versus Neuroprotection</b><br>Anna A. Pimenova, Nikolaos Mellios, <b>Vivek K. Gupta</b> , Napatsorn Saiyasit, Shaoxun Wang, Christopher D. Morrone, <b>Alison Goate</b>                                   | 7 a.m.    |
| » <b>Development Of New Models And Analysis Methods: Multi-System Platform Models Of ADRD</b><br>Hiroki Sasaguri, Kariem Ezzat, Jean Christophe Delpech, Dean Nizetic, <b>Hugo Geerts</b> , <b>Martin Sadowski</b>   | 7:30 a.m. |
| » <b>Molecular &amp; Cell Biology: Tau-Related Mechanisms</b><br>Stephanie L. Fowler, Andrés Norambuena, Junga Alexa Woo, Daniel C. Lee, <b>Ana C. Pereira</b> , <b>Davide Tampellini</b>  | 7:30 a.m. |
| » <b>Alzheimer's Disease Apolipoprotein Pathology For Treatment Elucidation And Development: The ADAPTED Project Results</b><br>María Eugenia Sáez, Alfredo Cabrera Socorro, Janina S. Ried, Cornelia M. Van Duijn, <b>Agustín Ruiz</b> , <b>Margot Bakker</b> | 8 a.m.    |
| » <b>Molecular &amp; Cell Biology: Inflammatory And Microglia-Mediated Mechanisms In AD</b><br><b>Roisin M. McManus</b> , Catherine C. Kaczorowski, Marta Olah, David Gate, <b>Gabriela Constantin</b>   | 8 a.m.    |
| » <b>Basic Science And Pathogenesis: Inflammation: From Basic Science To Biomarkers</b><br>Victoria A. Solomon, Hongtian Stanley Yang, Harpreet Kaur, <b>Annamaria Cattaneo</b> , Moira Marizzoni, Lynn Van Olst, <b>Gabriela Constantin</b>                   | 8:30 a.m. |
| » <b>Functionalizing Genetic Variants In Alzheimer's Disease</b><br>Eduardo Marcora, Thomas S. Wingo, Michael Sasner, <b>Gregory Carter</b> , <b>Andrew Saykin</b>   | 8:30 a.m. |
| » <b>Imaging And Biomarker Correlates Of Genetic Variants Protective Against AD</b><br>Colin Groot, Yakeel T. Quiroz, Yuetiva Deming, Timothy J. Hohman, <b>Michel Grothe</b> , <b>Rik Ossenkoppele</b>  | 9 a.m.    |
| » <b>Molecular &amp; Cell Biology: Endo-Lysosomal/Trafficking Dysfunction</b><br><b>Dongming Cai</b> , Jessica E. Young, <b>Wiep Scheper</b> , Wei Qin, Cláudio Gouveia Roque  | 9 a.m.    |

### ON-DEMAND SESSIONS AND Q&A, CONTINUED

#### ON-DEMAND SESSIONS

#### Q&A TIME

|  |            |
|--|------------|
| » <b>A Multiscale Perspective On Abnormal Neuronal Activity In Early AD</b><br>Willem De Haan, Marc A. Busche, Jorge J. Palop, Fernando Maestú, Willem De Haan, Ronald Van Kesteren            | 9:30 a.m.  |
| » <b>Human Neuropathology: Non-AD Neurodegenerative Disease Neuropathology</b><br>Jun Yeop Oh, Manu J. Sharma, Audun Osland Vik-Mo, Sonia Sirisi Dolcet, Daniel Erskine, Carles Javierre Petit | 9:30 a.m.  |
| » <b>Genetics: Molecular Genetics Of AD And ADRD</b><br>Katrina Celis, Lianne M. Reus, Holly N. Cukier, Derek M. Dykxhoorn, Niccoló Tesi, Oriol Dols-Icardo, Jordi Clarimon                    | 11 a.m.    |
| » <b>The Locus Coeruleus: Nexus Of Behavioral And Cognitive Problems In Dementia</b><br>Lea Tenenholz Grinberg, Martin J. Dahl, Johannes Bohacek, Nina Engels, Heidi Jacobs                    | 11 a.m.    |
| » <b>Genetics: Genetics And Omics Of AD II</b><br>Hung-Hsin Chen, Gyungah R. Jun, Giuseppe Tosto, Julien Chapuis, Adam C. Naj, Sudeshna Das  | 11:30 a.m. |
| » <b>Impact Of CNS Insulin Signaling In Alzheimer's Disease</b><br>Elizabeth Rhea, Frederic Calon, Eugenio Barone, Konrad Talbot   | 11:30 a.m. |
| » <b>Genetics: Genetics Of Cognitive Aging, Other Dementia, And Endophenotypes</b><br>Sandra Barral, Chloé Sarnowski, Slim Karkar, Tanner Y. Jacobson, Isabel Castanho                         | Noon       |
| » <b>Lipids In AD And FTD; From Genes To Interventions</b><br>Alison M. Goate, Wenjie Luo, Todd Logan, Irina A. Pikuleva, Rik Van Der Kant, Gilbert Di Paolo                                   | Noon       |
| » <b>Basic Science And Pathogenesis: Genetics And Omics Of AD</b><br>Meghan I. Short, Yann Le Guen, Elisabeth Hens, Farzaneh S. Mirfakhar, Devanshi Patel, Justin Miller, Lindsay Farrer       | 12:30 p.m. |
| » <b>Development Of New Models And Analysis Methods: Novel Imaging Analysis</b><br>Patrick H. Lockett, Muriah D. Wheelock, Pablo F. Damasceno, Kay Jann, Xinting Ge, Parnesh Raniga            | 12:30 p.m. |
| » <b>Genetics: Genetics And Omics Of AD I</b><br>Vivek Swarup, Jorge L. Del-Aguila, Lena Duchateau, Benjamin A. Logsdon, Ornit Chiba-Falek, Jake Gockley                                       | 1 p.m.     |

**WORKSHOPS AND ASSOCIATED CONFERENCES**

On-demand workshops and associated conferences will be available on Monday, July 27, at 12 a.m. Live discussions will take place on Friday, July 31.

» **Alzheimer's Imaging Consortium**

**Neuroimaging Of Atypical AD: A First Joint PIA Session**

Laura E. Jonkman, Rosaleena Mohanty, Deepti Putcha, Joseph Therriault, Irene Sintini, Philip S.J. Weston

» **Fluid Biomarkers In Alzheimer's Disease**

Henrik Zetterberg, Markus Otto, Kaj Blennow, Ulf Andreasson, Robert Dean, Jonathan Schott, Michelle Mielke, Charlotte Teunissen

» **ISTAART Professional Interest Areas (PIAs)** See the PIA program for details.

» **NIA-AA Symposium: Enabling Precision Medicine For Alzheimer's Disease Through Open Science**

Suzana Petanceska, Anna Greenwood, Vilas Menon, Mariet Allen, Nick Seyfried, Matthias Arnold, Ben Readhead, Catherine Kaczorowski, Emrin Horgusluoglu-Moloch, Andrea Tenner, Bruce Lamb, Greg Carter, Michael Sasner, Ali Mortazavi, Kim Green, Stacey Rizzo, Paul Territo, Lorenzo Refolo, Lara Mangravite, Alan Palkowitz, Timothy Richardson, Lara Mangravite, Ben Logsdon, Opher Gileadi, Claes Wahlestedt, Marina Sirota, Stephen Wong, Olivier Lichtarge, Rong Xu, Laurie Ryan, Linda Van Eldik, Frank Longo, Mark Gurney, Judith Kelleher-Andersson, Roberta Diaz Brinton, Susan Catalano

» **NIA-AA Symposium: IMPACT Embedded Pragmatic Clinical Trials For The Improvement Of Care For People Living With Dementia And Their Care Partners**

Vince Mor, Fan Li, Jason Karlawish, Laura Hanson

» **Neuroimaging Of Atypical AD: A First Joint PIA Session**

Christopher Nugent, Yuan Luo, Soo Hun, Cristiano Paggetti, Mohammad Hossein Zoualfaghari, Sayeh Bayat, Carrie Chiusano, Ipsit V. Vahia, Kyriaki Mengoudi

» **Technology And Dementia**

Christopher Nugent, Yuan Luo, Soo Hun, Cristiano Paggetti, Mohammad Hossein Zoualfaghari, Sayeh Bayat, Carrie Chiusano, Ipsit V. Vahia, Kyriaki Mengoudi

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Visit the virtual exhibit hall and chat with exhibitors daily from 8-8:30 a.m. and 9:30-10 a.m. Central Daylight Time (North America).  
 \*List as of July 17.

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### IBL America

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Featured exhibitors include 10x Genomics; Acadia Pharmaceuticals, Inc.; Cogstate; Grifols S.A.; and Quanterix Corporation.

*Thank you to the AAIC Scientific Program Committee, comprised of international experts in a variety of topic areas, for their commitment to developing the most relevant and innovative content for the conference.*

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## KHALID IQBAL LIFETIME ACHIEVEMENT AWARD IN ALZHEIMER'S RESEARCH



**Christine Van Broeckhoven, M.D., Ph.D.**

VIB Center for Molecular Neurology, University of Antwerp, Antwerp, Belgium

## ZAVEN KHACHATURIAN AWARD



**Guy McKhann, M.D.**

Johns Hopkins University, Baltimore, Maryland, United States

## BENGT WINBLAD LIFETIME ACHIEVEMENT AWARD IN ALZHEIMER'S RESEARCH



**Francisco Javier Lopera Restrepo, M.D.**

University of Antioquia, Medellín, Colombia

## de LEON PRIZE IN NEUROIMAGING



Senior Scientist -  
de Leon Prize in Neuroimaging

**Prashanthi Vemuri, Ph.D.**  
Mayo Clinic, Rochester, Minnesota, United States

## HENRY WISNIEWSKI LIFETIME ACHIEVEMENT AWARD IN ALZHEIMER'S RESEARCH



**Steven T. DeKosky, M.D.**

Department of Neurology and UF McKnight Brain Institute, University of Florida, Gainesville, Florida, United States



New Investigator -  
de Leon Prize in Neuroimaging

**Renaud La Joie, Ph.D.**  
University of California San Francisco, San Francisco, California, United States

## INGE GRUNDKE-IQBAL AWARD FOR ALZHEIMER'S RESEARCH



**Yakeel T. Quiroz, Ph.D.**

Harvard Medical School, Massachusetts General Hospital, Boston, Massachusetts, United States

View the following on-demand sessions from our corporate sponsors. Sessions will be available beginning on Monday, July 27, at 12 a.m. Content is listed as submitted.

## THE EARLY DIAGNOSIS OF ALZHEIMER'S DISEASE: READYING THE HEALTH SYSTEM

Please join our esteemed faculty in this symposium highlighting the importance and practicalities of an early diagnosis in Alzheimer's disease (AD). With panel discussions throughout, we will explore ways in which cognitive and functional assessments, in addition to pathophysiological biomarkers of AD, may support earlier detection, referral, and diagnosis of AD. As part of this, we will discuss the challenges encompassing an early diagnosis of AD in the context of the current healthcare system and explore possible solutions to overcome these.

We look forward to welcoming you to what promises to be a thought-provoking symposium.

*Sponsored by: Biogen and Eisai*

## THE DEVELOPMENT OF THE A/T/N/X CLASSIFICATION SYSTEM FOR DIFFERENT CONTEXTS OF USE ACROSS THE ALZHEIMER'S DISEASE CONTINUUM: STATE-OF-THE-ART AND FUTURE PERSPECTIVES FOR CLINICAL PRACTICE AND THERAPY DEVELOPMENT

Join Eisai and Biogen for a virtual symposium focusing on the development of the A/T/N/x classification system across the Alzheimer's disease (AD) continuum. Our expert faculty will provide an overview of the state-of-the-art of the A/T/N/x system and will discuss the main challenges in the validation and qualification process for different contexts of use.

*Sponsored by: Eisai and Biogen*

## EMPOWERING PHYSICIANS TO ADVANCE THE FUTURE OF AD MANAGEMENT AND CARE

This symposium will highlight how improved AD management will be enabled by the response to current societal health challenges, such as the COVID-19 pandemic, as they will transform existing clinical practices. As science and technology advance at unprecedented speed, the symposium will examine the important factors to address to ensure that clinical practice can be optimized in the future and meet the expectations of people with AD and their families.

*Sponsored by: Roche*

## MANAGEMENT CHALLENGES IN DEMENTIA: IMPACT OF PSYCHOSIS ON PATIENT CARE

The management of psychosis in dementia is challenging for clinicians due to limited evidence on clinical efficacy of commonly used antipsychotics. Join Drs. Sabbagh, Ballard and Peskind, who will discuss the pathophysiologic mechanisms of dementia-related psychosis (DRP), its impact on the patient care, how to recognize symptoms and establish a diagnosis of DRP using illustrative case studies and how to set a management plan for patients with DRP with a focus on how to balance risks/benefits of established therapies as well as a review of investigational approaches.

*Sponsored by: Acadia Pharmaceuticals*

## A NEW APPROACH TO ALZHEIMER'S TREATMENT: LEARNINGS FROM THE AMBAR TRIAL

The AMBAR trial is the latest study in Grifols' Alzheimer's clinical research program, aimed at assessing whether a medical procedure consisting of plasma exchange and albumin replacement was able to slow the progression of the disease in mild to moderate patients. Join us to see the updated results of the AMBAR study.

*Sponsored by: Grifols*