View this email in your browser

Boston University Chobanian & Avedisian School of Medicine: Evans Center for Interdisciplinary Biomedical Research

Newsletter * Fall * 2024



Boston University Interdisciplinary Biomedical Research Office BU IBRO www.bu.edu/research/ibro

Save the Date: Friday, March 28, 2025; Save the Dom Researchers Forum, facilitated by the Evans Center IBR

655 Commonwealth Ave | Computer Data Sciences Center | All DoM faculty are invited(basic/translational/clinical investigators)

Department of Medicine Researchers Forum (RF) Initiated in 2022 by the Evans
Center for Interdisciplinary Biomedical Research; RF Co-directors: Drs.
KarenJacobson, Kim Vanuytsel, George Murphy & Francesca Seta and mentored by
Drs. Katya Ravid & David Salant -Admin.Assistant to the RF: Robin MacDonald



has launched a new series of

TechTalks: "From Evolving Technologies to Discoveries"

Register at https://www.bumc.bu.edu/evanscenteribr/2024/04/17/tech-talks/

Monday, June 24, 2024

(high interest & well received) Dr. Lou Gerstenfeld: SomaLogic, a protein array to identify disease biomarkers and inducers

Monday, September 9, 2024

(high interest & well received) Dr. Ruben Dries: Spatial Transcriptomics – means to identify gene expression in context of tissue environment

Monday, November 4, 2024

Dr. George Murphy: Next generation iPSC technologies: New avenues for biological discovery

Monday, January 13th, 2025

Dr. Weining Lu and ARC co-director Al expert: Application of Artificial Intelligence in Medicine- The Case of Digital Pathology

Monday, February 24th, 2025

Dr. Lei Hou: Precision medicine through genetic/epigenomic/gene regulatory networks

Please let us know what other technologies you wish to learn more about by contacting Robin MacDonald [remac@bu.edu] with suggestions.

Shining Light on ARCs Thursday, Oct 10, 2024 <u>DoM Evans Days</u> October 10-11, 2024

ARCs Presentation, 2-3p: Powering Women's Health Research at BU **David Coleman Prize** winner introduced by Drs. K. Ravid & D. Salant



The Evans Center once again welcomes the <u>Hariri Institute</u> to Hiebert Lounge for the next Digital health/digital medicine in-person seminars. Tentative dates are being explored for <u>January 2025</u>. Watch for more details.

View Booklet: Linking Research and Researchers

New and Continuing ARCs and ARC Programs 2024/2025 ARCs(3)

- (Yr 1) Innovative Technology and Novel Biomarker Discovery and Development for Disease Diagnosis and Treatment (B4D-ARC)
 Co-Directors: Drs. Weining Lu, Manju Subramanian, Joel Henderson, Liangliang Hao
- (Yr 2) Tuberculosis Interdisciplinary Approach to Research Alliance (TIARA) Co-Directors: Drs. Karen Jacobson, C. Robert Horsburgh, Laura White
- (Yr 2) Musculoskeletal Biology Over a Lifespan
 Co-Directors: Drs. Paola Divieti Pajevic, LaDora Thompson, David Felson

BIT-ARC, Year 1

Developing an artificial intelligence digital pathology diagnostictool for proteinuric kidney disease

Co-Directors: Drs. Weining Lu* (primary contact), Chao Zhang, Joel Henderson, William Tomlinson, Vijaya Kolachalama

ARC Programs (6)

- Respiratory Viruses: A focus on COVID-19 ARC Program Co-Directors: Markus Bosmann, Mohsan Saeed
- Thrombosis and Hemostasis ARC Program
 Co-Directors: Vipul Chitalia, Katya Ravid, Jean Francis

Director: Belinda Borrelli, Co-Directors: Joanne Murabito, Daniel Fulford

- Precision Medicine for Alzheimer Disease and Related Disorders ARC Program Co-Directors: Lindsay Farrer, Rhoda Au, Alice Cronin-Golomb
- Fibrosis ARC: Connecting Tissues and Investigators (FCTI) ARC Program Co-Directors: Maria Trojanowska, Irving Bigio, Bob Varelas
- A Multi-Disciplinary Program to Identify Predictors of Efficacy and Resistance to Cancer Checkpoint Inhibition (PIPER-C) ARC Program
 Co-Directors: Drs. Matthew Kulke, Evan Johnson, David Sherr, Gerald Denis

New Pre-ARCs in development 2024-2025

- Women's Health: BIRCWH
 Leadership: Drs. Emelia Benjamin, Joyce Wong & Elisha Wachman
- Food Access, Justice, and Sovereignty: Food Is Medicine
 Leadership: Drs. Olivia Thomas & Kelsey Egan

 Funding supported by the DOM, CTSI, GSDM, BMC office of CSO

Interested Faculty please contact the ARC or Pre-ARC leaders and/or Robin MacDonald [remac@bu.edu]

Representative ARCs' Recent Discoveries

COVID-19 ARC Program: The influence of aging on the host response of lung endothelial cells in SARS-CoV-2 infected mice (<u>Subramaniam</u> et al., Front Immunol, 2024, accepted)

Fibrosis ARC Program: Janicot R, Maziarz M, Park JC, Zhao J, Luebbers A, Green E, Philibert CE, Zhang H, Layne MD, Wu JC, Garcia-Marcos M. Direct interrogation of context-dependentGPCR activity with a universal biosensor platform. Cell. 2024 Mar14;187(6):1527-1546.e25. doi: 10.1016/j.cell.2024.01.028. Epub 2024 Feb 26.PMID: 38412860; PMCID: PMC10947893

Precision Medicine ARC Program: Kang M, Li C, Mahajan A, Spat-Lemus J, Durape S, Chen J, Gurnani AS, Devine S, Auerbach SH, Ang TFA, Sherva R, Qiu

print.PMID: 38959008

ME-health ARC Program: Borrelli,B., Bartlett, Y. K., Fulford, D., Frasco, G., Armitage, C. J., & Wearden, A. A.(2024). A behavioral activation mobile app to motivate smokers to quit: Feasibility and randomized controlled pilot trial. JMIR: Formative Research,8, e54912

Thrombosis ARC Program: Ma S, <u>La J</u>, Swinnerton KN, Guffey D, Bandyo R, De Las Pozas G, Hanzelka K, Xiao X, Rojas-Hernandez CM, Amos CI, <u>Chitalia V, Ravid K</u>, Merriman KW, Flowers CR, <u>Fillmore N</u>, Li A. Thrombosis risk prediction in lymphoma patients: A multi-institutional, retrospective model development and validation study. Am J Hematol. 2024 Apr 23. doi: 10.1002/ajh.27335. Online ahead of print.PMID: 38654461



Drs. Ravid and Chitalia, leaders of the <u>Thrombosis ARC Program</u> and of the AHA-funded center:

<u>CAT-HD Cancer-Associated Thromboembolism as affected by Health</u>

<u>Disparities</u> hosted the Spring semi-annual meeting of the AHA Strategically

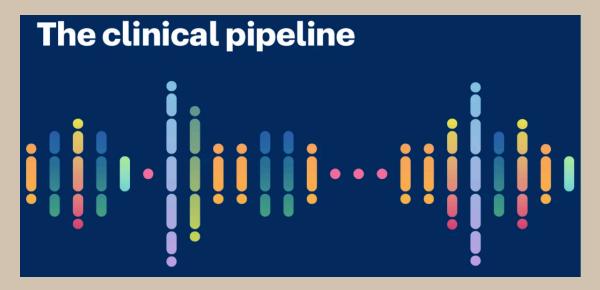
Focused Research Network at Boston University on May 13&14, 2024

BU Assistant Dean Daryll Healea <u>presented a brief history of Boston University</u> to our guests at a welcoming & networking session at Hillel House, Bay State Road.

On May 10, 2024, led by Lindsay Farrer, the Precision Medicine ARC Program,
AHA & Framingham Heart Study Brain Aging Program
organized a half-day, 4th annual, virtual symposium entitled "Inflammation,
Immunity and Alzheimer's Disease:From Mechanisms to Potential
Therapeutics" held via zoom. More than 400 persons registered for the event.

Recent Recognitions for Directors of ARC Programs

Women's Health Pre-ARC Co-Director, Dr. <u>Emelia Benjamin</u>, has been selected for an endowed professorship. Congratulations on this notable achievement!



Fibrosis ARC Program Director, Dr. <u>Irving Bigio</u>, developed over the past decade a device for visual analysis of lesions.

Read more about this successful development in a Nature Medicine paper, <u>"How Alpowered handheld devices are boosting disease diagnostics - from cancer to dermatology"</u>



Precision Medicine ARC Program Director, Dr. <u>Lindsay Farrer</u>, shared links to Korean news outlets reporting on the collaboration between BU & Chosun University









Dr. Carmela Abraham, Prof Emerita, member of an ARC led by Dr. Lindsay Farrer, was welcomed by Advantage Therapeutics Inc. as its Chief Scientific Officer.
 Dr. Rhoda Au, Receives Melvin R. Goodes Prize for Excellence in Alzheimer's Drug Development

Dr. Lindsay Farrer, Recently awarded a \$13.7 million grant from NIH, this team, including ARC members, is using whole genome sequencing and other approaches to identify genetic factors for Alzheimer's disease in Jews and Arab citizens of Israel. Dr. Vijaya Kolachalama, alerted us to his article: "Al-based differential diagnosis of dementia etiologies on multimodal data" Nature Med. 2024, as an ARC collaboration. Listen to their Podcast on neurological research: A new Alzheimer's monoclonal antibody treatment shows promising results: 'Hopefully more effective approach'

Interested Faculty please contact the ARC or Pre-ARC leaders and/or Robin MacDonald [remac@bu.edu]

Address inquiries related to logistics to: Robin MacDonald, at remac@bu.edu





Copyright (C) *2024* Fall. All rights reserved.

Want to change how you receive these emails?

You can <u>update your preferences</u> or <u>unsubscribe</u>

