ARC Program

The Affinity Research Collaboratives (ARCs) consist of faculty and trainees from different disciplines across campuses, who are organized around the foci of common research interests. The extraordinary strength in biomedical and physical sciences at Boston University, and the support and development of the ACRs create opportunities for the interdisciplinary approaches to both research and training in biomedical research. The ARCs are co-supported by the ECIBR, BU-IBRO and The Clinical and Translational Science Institute (CTSI).

The major goals of the Evans Center and the Affinity Research Collaboratives (ARCs) are to:

• Form ARCs, each consisting of an assembly of an average of 10 investigators, including 1-3 ARC directors, who focus on a research theme, explored with the aid of different disciplines and technologies to advance Research and Discovery as it applies to Disease States
• Enhance the educational mission at graduate and post-graduate programs
• Assist in envisioning and developing current and new institutional research cores
• Reach out to:
  – CTSI and other centers and institutes for further development of translational application and Biotechnology
  – Partnership with Biotech companies
  – Community Education
• Provide an opportunity for faculty at BU to become ECIBR's members (regardless of ARC’s affiliation) and to benefit from ongoing seminars, mini-symposia, immediate knowledge of and access to data-bases and reagents generated by ARCs.

There are 5 keys of success of the ARCs:

- CAPABILITY
  Creative research ideas
- CONDITIONS
  Supportive Culture
- COACHING
  Mentoring by leadership
- COMMUNICATION
  Effective scientific exchanges
- COOPERATION
  Willingness to learn
Past and Present ARCs

1. Protein Trafficking and Neurodegenerative Disease | Director: Dr. Lindsay Farrer
2. Mitochondrial Dynamics in Health and Disease (mtARC) | Directors: Drs. Orian Shirihai and Andrea Havasi
3. BU iPS Cell Bank | Directors: Drs. Darrell Kotton, Gustavo Mostoslavsky and George Murphy
4. Sex Differences in Adipose Tissue Biology and Related Metabolic Disease | Directors: Drs. Susan K. Fried and Paul Pilch
5. Cardiovascular Consequences of Metabolic Disease | Director: Dr. Kenneth Walsh
6. Biomarkers of Disease | Directors: Drs. Mark McComb, Richard A. Cohen and Catherine Costello
8. Calcium Homeostasis in Health and Disease | Directors: Drs. Victoria Bolotina and Michael Kirber
9. Obesity, Inflammation and Cancer | Directors: Drs. Gerald V. Denis and Barbara Nikolajczyk
11. Metabolic Diseases and Insulin Resistance | Directors: Drs. Neil Ruderman, Konstantin Kandror and Caroline Apovian
12. Computational Genomics Models of Environmental Chemical Carcinogenicity | Directors: Drs. Stefano Monti and David Sherr
13. Etiology & Pathogenesis of Oral Cancer | Directors: Drs. Maria Kukuruzinska, Maria Trojanowska and Avrum Spira
14. Thrombosis and Hemostasis in Health and Disease | Directors: Drs. Vipul Chitalia, Katya Ravid, and Jean Francis
15. PneumoniARC | Director: Dr. Joseph ‘Jay’ Mizgerd
18. Precision Medicine for Alzheimer Disease and Related Disorders ARC | Directors: Drs. Rhoda Au, Alice Cronin-Golomb and Lindsay Farrer

Published References