(Graduated ARCs Continued)

METABOLIC DISEASES AND INSULIN RESISTANCE: STUDIES IN PATIENTS UNDERGOING BARIATRIC SURGERY (2012-2015)
Drs. Neil Ruderman, Caroline Apovian (capovian@bu.edu) and Konstantin Kandror (kkandror@bu.edu)

COMPUTATIONAL GENOMIC MODELS OF ENVIRONMENTAL & CHEMICAL CARCINOGENICITY (2012-2015)
Drs. Stefano Monti (smonti@bu.edu) and David Sherr (dsherr@bu.edu) [into a CTSI program]

ETOLOGY AND PATHOGENESIS OF ORAL CANCER (EPOC) (2014-2016)
Drs. Maria Kukuruzinska (mkukuruz@bu.edu), Avrum Spira (aspira@bu.edu) and Maria Trojanowska (trojanme@bu.edu)

Drs. Daniel Segrè (dsegre@bu.edu) and Evan Johnson (wej@bu.edu)

ARC Programs (ongoing ARC activities)

MOBILE and ELECTRONIC HEALTH (2015-2019, 2020-present)
Drs. Belinda Borrelli (belindab@bu.edu); Lisa Quintiliani (Lisa.Quintiliani@bmc.org) and Tibor Palfai (palfai@bu.edu)

PRECISION MEDICINE FOR ALZHEIMER DISEASE AND RELATED DISORDERS (2015-2019, 2020-present)
Drs. Rhoda Au (rhodaa@bu.edu), Alice Cronin-Golomb (alicecg@bu.edu) and Lindsay Farrer (farrer@bu.edu)

THROMBOSIS TO HEMOSTASIS IN HEALTH AND DISEASE (2014-2017, 2018-present)
Drs. Vipul Chitalia (vichital@bu.edu) and Katya Ravid (kravid@bu.edu)

PROTEIN TRAFFICKING AND NEURODEGENERATIVE DISEASES (2009-present)
Dr. Lindsay Farrer (farrer@bu.edu) [into a Program in Personalized Medicine]

Examples of Institutional Initiatives

- The Evans Center co-developed with the Nanoscience Center RFAs in Nanomedicine
- The Evans Center co-developed with the Nanoscience and Cancer Centers the R25 NCI-funded training program in Nanomedicine (2010-2015)
- The Evans Center co-developed with the Department of Biochemistry Institutional Interdisciplinary Thematic Seminars
- Evans Center-initiated new interdisciplinary graduate courses (Biological Core Technologies; Nanomedicine)
- Evans Center-initiated Masters Programs (Biological Core Technologies: Nanomedicine)

Expected Achievements of ARCs

- Reasonable expectation of continued programmatic growth, and a plan for inclusive and open exchange of ideas
- Extramural grant funding obtained following establishment of the ARC, particularly co-PI R01 grants
- Successful implementation of a structure to support predoctoral and postdoctoral training in content area
- Structure and content should complement and not overlap or compete with existing university entities
- Scientific incubator for basic discoveries with potential application via the CTSI to translational research
- Successful ARCs could eventually gain a status of a program or center

Expected Support by the Evans Center

- Grant Support for each ARC for 1-3 years, pending annual review
- Travel Awards to present (preferably as a talk) ARC work in meetings
- Funds for annual mini-symposia and periodic seminars to enhance knowledge and collaborations
- Administrative Support with regard to ARC budget management, symposia, web site update, etc.
- Administrative Support with preparation of large institutional grants
- Research and educational support to DOM graduate programs

Major Goals of the Evans Center and the ARCs

- Form ARCs, each consisting of an assembly of investigators, including an ARC director, 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 postgraduate programs
- Assist in envisioning and developing current and new institutional research fields, such as Center for Multiscale and Translational Mechanobiology (CMTM), begun in winter 2019
- Reach out to The Clinical and Translational Science Institute (CTSI) and other centers and institutes, such as Massachusetts Academy of Sciences and MassBio, for further research and core development
- Provide an opportunity for faculty at BU to become Evans Center 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 etc.

Evans Fellows Awardees

- Dr. Tamar Prahaamian (2013), Dr. Gyungah Jun (2013)
- Dr. Marc Liesa, Dr. Cesar Sommer and Dr. Francesca Seta (2014)

Research Collaborators Awards

Jessica Fetterman (2020)
- Rhoda Au (2019)
- Irving Bigio (2018)
- Bob Varelas (2018)
- Daniel Segre (2017)
- Carmela Abraham (2015)
- Bela Suki (2015)
- Mark Grinstaff (2014)
- Donald Hess (2013)
- Kathleen Morgan (2013)
- Gary F. Mitchell (2012)
- Joyce Wong (2012)
- Bennet Goldberg (2011)

Outstanding Mentors Recognition

Richard A. Cohen and Bennett Goldberg (2016)

ARC Leadership Award

Lindsay Farrer (2020)
MISSION
The goal of the ECIBR and IBRO is to promote growth and discovery in emerging interdisciplinary biomedical research and educational areas by providing faculty affiliated with the Department of Medicine (DOM) and with various schools, departments and centers at Boston University (BU) a dynamic, interdisciplinary organizational structure, which allows investigators with different areas of expertise to collectivity address mechanisms of disease, and to facilitate new training opportunities. ECIBR was founded in March 2009, at that time mainly supported by the DOM Evans Foundation, providing the groundwork and tools to facilitate biomedical team science to integrate research and researchers all across BU. The reach of these efforts is now expanding to the Charles River Campus through additional collaboration with the Clinical & Translational Science Institute (CTSI). In 2015, the Boston University Interdisciplinary Biomedical Research Office (BU IBRO) was created under the auspices of the office of BU Vice President and Associate Provost for Research to enhance training experiences and new opportunities for interdisciplinary biomedical research. See our following publications: pubmed/28445220; pubmed/23874035; pubmed/23269301; pubmed/28720207

ADDITIONAL INFORMATION
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Ms. Robin MacDonald
Executive Assistant
remac@bu.edu

bmc.bu.edu/evanscenteribr
www.bu.edu/research/ibro
Boston University School of Medicine

Affinity Research Collaboratives (ARCs)
Faculty affiliated with the Evans Center hold academic appointments with different departments. The Center provides opportunities for collaborations within Affinity Research Collaboratives (ARCs) organized around foci of common research interests. The extraordinary strength in biomedical and physical sciences at Boston University, and the support and development of the ARCs create opportunities for new interdisciplinary approaches to both research and training in biomedical research.

Joining an ARC
- Investigators from all over BU are encouraged to form or join an ARC, which consists of several investigators, including from DOM;
- The ARC selects its own Director;
- Most ARCs are initiated by the faculty, and at times by the Evans Center’s Director;
- A review panel prioritizes the ARC proposal based upon uniqueness of the opportunity, scientific quality and promise;
- Joining an ARC after it has been formed is also possible, in consultation with the ARC and Evans Center’s directors;
- Joining multiple ARCs is allowed

Current (2020) ARCs (ARC Directors)
RESPIRATORY VIRUSES: A FOCUS ON COVID-19 (2020-present)
Drs. Markus Bosmann (mbosmann@bu.edu) and Mohsan Saeed (msaeed1@bu.edu)
CONNECTING TISSUES AND INVESTIGATORS (Fibrosis ARC) (2017-present)
Drs. Maria Trojanowska (trojanme@bu.edu), Irving Bigio (bigio@bu.edu) and Bob Varelas (xvarelas@bu.edu)
TOBACCO REGULATORY SCIENCE (2017-present)
Drs. Jessica Fetterman (jefetter@bu.edu), Naomi Hamburg (nhamburg@bu.edu), Andrew Stokes (acstokes@bu.edu) and Stine Grodal (grodal@bu.edu)

Graduated ARCs (into BU programs, center, research assemblies)
**Drs. Darrell N. Kotton (dkotton@bu.edu), Gustavo Mostoslavsky (gmostos@bu.edu), and George Murphy (gjmurphy@bu.edu)
MITOCHONDRIALARC:MITOCHONDRIAL IN HEALTH AND DISEASE (2009-2014)
Drs. Orian Shirihai and Andrea Havasi (ahavasi@bu.edu)
SEX DIFFERENCES IN ADIPOSE TISSUE BIOLOGY AND RELATED METABOLIC DISEASES (2009-2015)
Drs. Susan Fried and Paul Pilch [co-supports BNORC programs]
MOLECULAR, BIOMECHANICAL AND GENETIC MECHANISMS OF ARTERIAL STIFFNESS (2010-2016)
Drs. Richard A. Cohen, Kathleen Morgan (kmorgan@bu.edu) and Francesca Seta (setaf@bu.edu) [into a Research Core]
CALCULUM HOMEOSTASIS IN HEALTH AND DISEASE (2010-2014)
Drs. Victoria Bolotina (bolotina@bu.edu) and Mike Kirber (mkirber@bu.edu) [into Parkinson’s Disease Initiative]
NANOTHERANOSTIC PLATFORMS FOR CANCER AND VASCULAR DISEASE (2011-2015)
Drs. Victoria Herrera (vhererra@bu.edu), Joyce Wong (jywong@bu.edu), Mark Grinstaff (mgrinstaff@bu.edu), and Karl Karlson (karl.karlson@bmc.org) [into a Nanomed Program]

Evans Center Metrics: November 2009 - June 2020
(Note the high % of funding)

<table>
<thead>
<tr>
<th>20 ARCs</th>
<th>Publications (Co-PIs)</th>
<th>Grants (Co-Investigators)</th>
<th>Presentations at Meetings</th>
<th>Core Participants*</th>
<th># Trainees participating in ARC projects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Applied</td>
<td>Funded (R01, R21, U01 or PPS, etc.)</td>
<td></td>
<td>Pre</td>
</tr>
<tr>
<td>TOTALS</td>
<td>915</td>
<td>674</td>
<td>531</td>
<td>570</td>
<td>263</td>
</tr>
</tbody>
</table>

* Total number of ARC members from across campuses is 377; 24 from other institutions
* Core participants include ARC funded members, while the total number of ARC members of Evans Center members is greater. See: Ravid, K., Coleman, D. (2013) J. Academic Medicine 88(2):179-184.