

Evans Center for Interdisciplinary Biomedical Research

(Evans Center)

Launched on 3.1.09

<http://www.bumc.bu.edu/medicine/evansbiomedicalresearch/>

Presentation to DOM on 5.11.09

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Evans Center Director

Evans Center for Interdisciplinary Biomedical Research (Evans Center)

Mission Statement: The goal of the Evans Center is to promote growth and discovery in emerging interdisciplinary biomedical research and educational areas by providing faculty affiliated with the Department of Medicine and with other Departments and Centers at Boston University a dynamic, interdisciplinary organizational structure.

The Evans Center:

- An organizational structure to support research in newly envisioned and ongoing fields, employing expertise from different disciplines to explore mechanisms as they apply to disease states. The center is not a recapitulation of existing centers or institutes.
- Basic science discovery promoted by the Center will be available for collaborative pursuits with the Clinical and Translational Science Institute (CTSI) and other Centers and Institutes, thereby assisting the school's mission to promote basic discovery as well as translational research.

How do we achieve the goals of the Evans Center at Research Level?

The **EVANS CENTER** will mainly consist of Affinity Research Collaboratives (**ARCs**)

What are **ARCs**?



An ARC represents an assembly of at least 5 investigators and members of their laboratories who would select an ARC Director and together will focus on a research theme, which will be explored with the aid of different disciplines and technologies. We envision participation of basic, clinical and population researchers from all over BU.

Major Goals of the Evans Center and the ARCs

- Use the ARCs as incubators to jump start new ideas, research collaborations and programs, for which currently there is no support or structure. The ARCs will employ interdisciplinary approaches to enhance discovery as it applies to disease states;
- Throughout the process of working with ARC groups, identify large fields of common research interest and assist in creating Research Forums/Clubs (e.g., Inflammation Research Forum), which if successful could become in the future NIH-funded Centers and Programs
- Enhance the educational mission at graduate and post-graduate programs (graduate course; training programs);
- Assist in envisioning and developing current and new institutional research cores [e.g., model organism core; human tissue bank];
- Reach out to:
 - >> *Other Centers and Institutes (e.g., CTSI, GSI etc.) for further collaborative development of translational application*
 - >> *Collaborations/Partnership with Centers out of BU, including Biotech companies*
 - >> *Community Education*

Dean

Department of Medicine

Steering Committee

(BUSM, BMC, BU main campus,
BUSPH, Biotech)

Members (invited to
join at their discretion):

DOM Researchers;
Faculty from other
departments

Evans Center

**Advisory and Review
Board**

(internal and external)

ARC

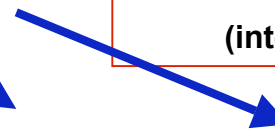
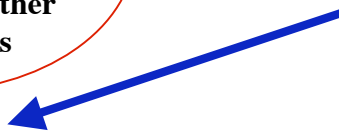
ARC

ARC

ARC

ARC

Faculty from DOM & other BUSM/BMC/BU Departments



Members of the steering committee (to be finalized):

David Center (*representing CTSI*)

Douglas Faller (*Cancer Research*)

David Slant (*clinical section*)/To be finalized

Richard Cohen (*Evans Scholar*)

Orian Shirihai (*representing young investigators and new Technologies and cores*)

Ann Rothstein (*basic science department*)

Barbara Corkey (*representing DOM*)

Arlene Ash (*Internal Medicine*)

Roberta White (*Associate Dean for Research, BUSPH*)

Bennet Goldberg (*Director of NanoTechnology, BU main campus*)

Ulla Henson (*Biology, main campus*)/To be confirmed

Keith M. Gottesdiener (*Merck Research Laboratories, Vice President,
Clinical Sciences and Therapeutic Area Group Leader*)

Jan Vijg (*Professor and Chair, Department of Genetics*

Albert Einstein College of Medicine)

Joining ARCs

- It is anticipated that most ARCs would be initiated by the faculty--

The Center exists to empower the faculty to develop new research pursuits and collaborations;

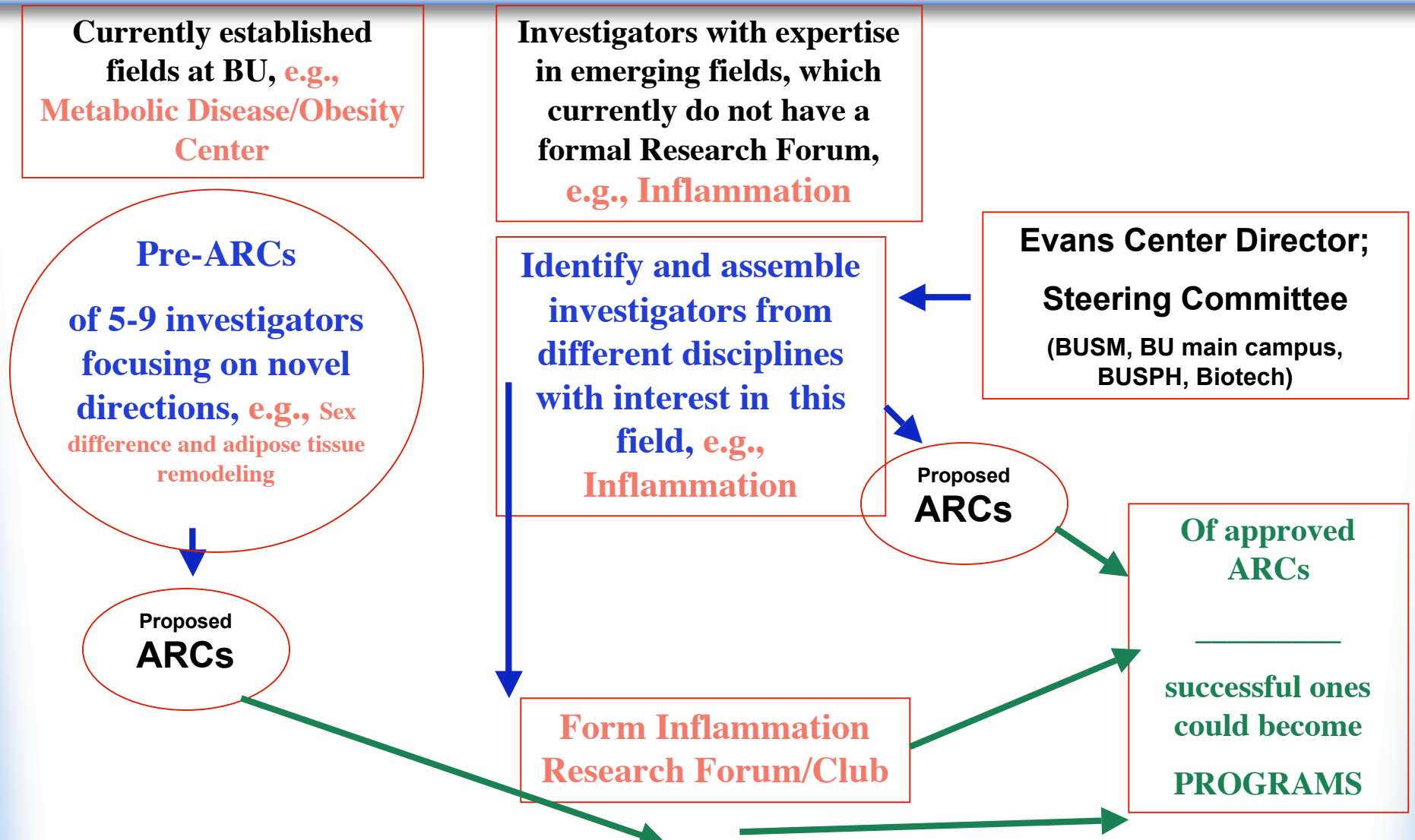
The Center will also envision and suggest new research directions

- The ARC will select a Director (and as applicable a co-Director), as needed in consultation with the Center's Director;

Pre-ARCs

- We are encouraging the formation of pre-ARCs in order to allow investigators to gradually explore novel research opportunities and collaborations within their groups and beyond.
- By the time the ARC grant applications are announced (late summer/early Fall 2009), investigators would have had ample of opportunities to create a more mature ARC application based on a pre-ARC forum.

Work in Progress: thus far, the Evans Center has identified and worked with two main categories:



Listed Pre-ARCs: work in progress

- **SEX DIFFERENCES IN ADIPOSE TISSUE REMODELING**
- Dr. Susan Fried, pre-ARC Director (skfried@bu.edu)
- **PROTEIN TRAFFICKING AND NEURODEGENERATIVE DISEASES**
- Dr. Lindsay Farrer, pre-ARC Director (farrer@bu.edu)
- **REGENERATIVE MEDICINE:** Focus to be determined
- Drs. Darrell N. Kotton and Gustavo Mostoslavsky, pre-ARC Directors (dkotton@bu.edu; gmostsosl@bu.edu)
- **MITOCHONDRIA in DISEASE**
- Dr. Orian Shirihai, pre-ARC Director (Shirihai@bu.edu)

Other large fields under exploration

Examples for which we have expertise in different disciplines, and together could be addressing new and potentially important research areas:

NanoMedicine in xx (cardiovascular disease; ID, etc.) (application of Nanotechnology to the study of selected disease states)

Biomarkers of Disease (Proteomics; Genomics; population studies; drug screen; computational approaches; disease models in mice or other organisms)

From Public Health to bench level: Metabolic Disease/Disparity/Cancer
(metabolomic; cancer biology; population studies; animal models; drug-screen etc.)

Selection of ARCs

- There will be a process to review and prioritize the ARC proposals based upon uniqueness of the opportunity, scientific quality and promise, the DOM strategic plan, potential scientific synergy of the group, accomplishments and expertise of the faculty members of the group, and possible training opportunities; ARCs will be funded for a recommended period of time, hopefully leading to successful competition for external grant support
- ARCs are *dynamic units*- within each ARC membership can change, based on ARC's recommendation; and ARCs can dissolve and new ones develop, also based on self- and center's evaluation;
- Joining an ARC after it has been formed will be encouraged;
- A PI can join more than one ARC
- Pre-ARCs which are not funded as ARCs and which are identified to have high potential, will remain as Research Forums with some administrative /organizational support from the Evans Center

Expected Achievements of the Evans Center

- Continued programmatic growth, and a plan for inclusive and open exchange of ideas;
- A scientific incubator for discoveries with potential application to human disease, and potential development of new concepts, data-bases, institutional resources;
 - Funding obtained following establishment of the ARC, including multi-PI RO1 and/or PPG, Centers, and/or training grants;
 - Successful implementation of a structure to support pre-doctoral and postdoctoral training in content areas;

Upcoming Events:

<http://www.bumc.bu.edu/medicine/evansbiomedicalresearch>

- Pre-ARC meetings with groups to discuss and exchange ideas for ARCs and Programs
- Offering a **web page to each DOM researcher** who currently does not have one
- Announcement of **ARC Grant Applications** (late summer)
- Mini- symposia:

Stem Cell Biology and Regenerative Medicine; April 17, 2009

(DOM and Evans Center's first mini-symposium with welcoming notes by Dean and Provost, Dr. K. Antman)

Nanotechnology in Medical Research

May 13, 2009; RSVP to Maria (maria.losurdo@bmc.org)

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- 1. Celebratory Seminar Event to announce and present the ARCs (early winter 2010)**
 - 2. Scientific Retreat organized by the Evans Center**