Evans Center for Interdisciplinary Biomedical Research
(Evans Center)

An Update
DOM Faculty Meeting
Wednesday, May 18, 2011

Katya Ravid, DSc/PhD

http://www.bumc.bu.edu/evanscenteribr/
Expand DOM Educational Mission & Scope

Develop New Research Disciplines (to BU)

Develop Cross Campus (CR-BMC) Programs; collaborations with other institutes

Develop New Interdisciplinary Research via ARCs

Create Opportunities for collaborations between Basic Scientists and Clinical Investigators

Publications (Co-PIs)
Grants (Co-PIs)
Educational Programs
New Disciplines (to BU)

Metric

Photo by REMac2010
ARCs initiated on 12.1.2010 following a review process:

CALCIUM HOMEOSTASIS IN HEALTH AND DISEASE
Drs. Victoria Bolotina and Mike Kirber, ARC Directors

MECHANISMS AND TREATMENT OF ARTERIAL STIFFNESS
Drs. Richard A. Cohen and Kathleen Morgan, ARC Directors

OBESITY, CANCER AND INFLAMMATION
Dr. Gerald Denis, ARC Director, and Dr. Barbara Nikolajczyk, ARC co-Director

ATRIAL FIBRILLATION INITIATIVE
Drs. Jared W. Magnani, Emelia J. Benjamin, and Elaine Hylek, ARC co-Directors
Calcium Homeostasis in Health and Disease

Bolotina and Kirber et al.,
Denis and Nikolajczyk et al.,
ARCs initiated on 12.1.2009 following a review process:

**BLOOD MICROBIOME**: Drs. Marie E. McDonnell and Lisa Ganley-Leal, ARC Directors

**PROTEIN TRAFFICKING AND NEURODEGENERATIVE DISEASES: ALZHEIMER DISEASE AS A FIRST MODEL SYSTEM**: Dr. Lindsay Farrer, ARC Director

**SEX DIFFERENCES IN ADIPOSE TISSUE REMODELING: MECHANISMS AND ROLE IN DISEASE RISK ASSOCIATED WITH OBESITY**: Drs. Susan Fried and Paul Pilch, ARC Directors

**REGENERATIVE MEDICINE**: Drs. Darrell Kotton, Gustavo Mostoslavsky and George Murphy, ARC Directors

**MITOCHONDRIA: ONE ORGANELLE, MULTIPLE ORGANS**
Drs. Orian Shirihai and Anthony Molina, ARC Directors

**CARDIOVASCULAR CONSEQUENCES OF METABOLIC DISEASE**: Dr. Kenneth Walsh, ARC Director
***successful completion with achievement of an NIH-funded PPG***

**BIOMARKERS OF DISEASE**: Dr. Mark McComb, ARC Director, and Drs. Richard Cohen, and Catherine Costello, ARC co-Directors
<table>
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<tr>
<th>New Graduate Courses initiated by the Evans Center</th>
<th>ARCs during mid 2009-2010</th>
<th>Faculty Participation</th>
<th>Publications</th>
<th>Grants</th>
<th>Presentations at Meetings</th>
<th>Trainees in ARC Projects</th>
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<tbody>
<tr>
<td>• Biological Core Technologies (K. Ravid, co-director)</td>
<td>79 DOM 28 Basic Sciences 18 Charles River Campus 7 School Public Health 14 Outside BU PhD to MD ratio: 2.5 / 1</td>
<td>146</td>
<td>32</td>
<td>Applied</td>
<td>Funded R01 or PPG</td>
<td>43 Pre 27 Post</td>
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<tr>
<td>• Principles of Nanomedicine (Evans &amp; Nanoscience Centers; K. Ravid, co-director)</td>
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<td><strong>TOTALS</strong></td>
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<td><strong>33</strong></td>
<td><strong>13 (I PPG)</strong></td>
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Ongoing New Initiatives: Research

--Pre-ARCs in Discussion:

• Nanomedicine (Nanotheranostics - combinatorial target-specific diagnostics and therapeutics): Victoria Herrera (DOM) and Joyce Wong (CR campus)

• Studying Metabolic Disease via Bariatric Surgery: Neil Ruderman

--Synergies and collaborations with Pharmaceutical Companies: Novratis and others

--Developing tools for Metric Evaluation of Research: using the Evans Center as a model
Ongoing New Initiatives: Education

The Boston University Cross-Disciplinary Training in Nanotechnology for Cancer (XTNC)

provides stipends, tuition support, laboratory and travel budget and training to graduate students and postdocs whose interdisciplinary research uses nanotechnology to understand the properties of cancer cells and to discover and develop research tools, diagnostic tools, and therapeutic agents that will reduce suffering and death due to cancer.

The application process is described at http://nano-cancer.bu.edu/education/apply

and are due June 1, 2011 for a 12-month fellowship beginning September 1, 2011.
Ongoing New Initiatives: Clinical-Basic Research

An Introduction to Cancer Care for Engineers and Physical Scientists
Spring 2011 Two-Day Short Course
Course Director: Jennifer E. Rosen, MD FACS
May 16-17, 2011; 9 am – 5 pm
670 Albany Street Auditorium

• This workshop is co-sponsored by:
The Center for Nanoscience and Nanobiotechnology, the Clinical and Translational Science Institute, the Evans Center for Interdisciplinary Biomedical Research, the Office of the Dean of the School of Medicine, and the Office of the Vice President and Associate Provost for Research.
Announcements:

Evans Center Research Retreat Day
Tuesday, September 20, 2011
8:30a – 3p, Museum of Science

Seminar with Novartis
Wednesday, May 25, 2011
10 – 11a, Wilkins Board Room