

UMass LSTF ATC Workgroup: Update and Preliminary Recommendations

Co-Chairs

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ATC Working Group Members

- Sam Black (Amherst)
- Tony Carruthers (Worcester)
- Brendan Chisholm (Worcester)
- Terry Flotte (Worcester)
- Andrew Grosovsky (Boston)
- Steve Goodwin (Amherst)
- Jim McNamara (Worcester)
- Melissa Moore (Worcester)
- Tariq Rana (Worcester)
- Bal Ram Singh (Dartmouth)
- Gary Stein (Worcester)
- John Sullivan (Worcester)
- Xingwei Wang (Lowell)

Defining Advanced Therapeutics

“The ATC pillar will describe those research and educational initiatives whose primary goal is to translate fundamental discoveries into innovative therapeutic products.”

Scope of ATC Working Group's Efforts

- Focusing most directly on those research and educational initiatives with a primary goal of translating of fundamental discoveries into novel therapeutics
- Using the University's Stem Cell Working Group report and UMass Worcester's Advanced Therapeutics Cluster proposal as a starting point
- Initial thinking around specific disciplines and technologies
 - Stem Cell Biology
 - Research cores and programs in human and animal stem cells
 - RNAi
 - Translation of RNAi into a therapeutic
 - Gene Therapy
 - Viral and non-viral vectors
 - Delivery mechanisms
 - Interface with stem cells and RNAi

Reactions to Thematic Areas Within the ATC Pillar

- Pillar defined around specific methodologies and technologies as opposed to concepts
 - Pillar needs to be goal-oriented, and not confined to specific technologies, to effectively account for the emerging nature of therapeutic approaches
- Other rationally-designed therapeutics, including those derived from combinatorial chemistry, *in vitro* evolution, and other innovative methods for target identification and validation should be included in the scope of the work
 - Group would also focus on the development of other core resources to assist in target validation
 - including resources such as tissue and DNA banks and the development of more useful preclinical models of human disease.
- UMass should excel at both discovery and application

Recommendation #1: Establish the UMass Center for Clinical and Translational Science (UMCCTS)

- Administered by the Senior Vice President for the Health Sciences
- Primary mission to engage faculty interested in clinical and translational research
- Membership in the center will be available to all UMass faculty
- Members will have access to UMass Worcester core facilities at in-house rates

**CCTS
External
Advisory Cmte**

DRAFT

**M. Collins
VP Health
Sciences**

DRAFT

**CCTS
Strategic
Advisory Grp**

P. Isakson - Abbott Bioresearch CTR
R. Farquhar - Charles River Labs
E. Overstrom - WPI-BEI
Vice Provost Research - Amherst
Vice Provost Research - Boston
Vice Provost Research - Dartmouth
Vice Provost Research - Lowell
Chair Medicine
Chair Molecular Medicine
Cardiovascular
Chair Pathology
CEO UMMHC
Cancer Center

UMass Center for Clinical and Translational Science (UMCCTS)
J. Sullivan, Director
T. Flotte, J. Gurwitz, Chair QHS, W. Ettinger, K. Luzuriaga, S. Noone
Co-Directors
UMCCTS
Executive Committee

**Operations
Cmte**

**Community
Advisory
Board**

Co-Directors
W. Ettinger
J. Gurwitz
&
Chair QHS

Co-Directors
J. Sullivan
&
T. Flotte

Co-Director
K. Luzuriaga

Co-Directors
W. Ettinger
&
S. Noone

**Biostatistics
&
CT Design**

**Biomedical
Informatics**

**Community
Research
&
Engagement**

Child Health Research

**Novel Methodologies
UMATC
M2D2**

**Research Integration
Pilot & Collaborative Studies
Translational Technologies
& Resources**

K12 Program

**PhD CPHR
MD PhD
Millennium PhD**

**Masters Clinical
Investigation**

**Medical Student
Research Track**

**Regulatory Knowledge
&
Support**

**Participant Clinical
Interactions**

**Clinical Research
Ethics**

Recommendation #2: Creation of the *UMass Life Sciences Moment Fund*

- Administered by the Senior Vice President for the Health Sciences
- UMass Worcester would invest \$1MM in academic year 2008-2009 for pilot projects grants that promote inter-campus collaborations
- Grants would fund projects focused on clinical and translational science, linking enabling engineering technologies to clinical/medical technologies
- Grants would be open to all UMass faculty, but the projects would include a UMass Worcester faculty member as a collaborator
- Grants could be directed to fund post-doctoral fellowships

Recommendation #3: Establish Annual Scientific Meeting of UMCCTS members

- Bring together all UMass faculty who are recipients of UMass Life Sciences Moment Fund grants
- Bring together all UMass faculty who utilize the UMCCTS core services
- Acceptance of pilot funding, fellowship funding or use of cores at in-house rates contingent upon commitment of faculty to present their research findings at annual meeting
- Annual meeting would be held at different campus each year

Recommendation #4: Pursue Funding Opportunities through the Commonwealth's Life Sciences Initiative

- UMass has a number of initiatives with the House and Senate versions of the life sciences legislation that are directly, or in part, related to clinical and translational research

Proposed UMass Funding in the House and Senate Versions of the Life Sciences Initiative	
House Bill 4554	Senate Bill 2566
<ul style="list-style-type: none"> \$95MM for a life sciences complex at UMass Amherst \$11.4MM for the acquisition of the ATMC at UMass Dartmouth \$10MM for a nano and biomanufacturing facility at UMass Lowell \$90MM for an Advanced Therapeutics Cluster facility at UMass Worcester <p style="text-align: right;">Total: \$206.4MM</p>	<ul style="list-style-type: none"> \$95MM for a life sciences complex at UMass Amherst \$10MM for a Center for Personalized Cancer Therapy to be operated by UMass Boston and to be located in New Bedford, Taunton or Falmouth \$10MM for a regional incubation center for life sciences initiatives in New Bedford to be jointly operated by UMass Dartmouth and Bristol Community College \$5MM for a nano and biomanufacturing facility at UMass Lowell \$90MM for an Advanced Therapeutics Cluster facility at UMass Worcester \$6MM to the UMass Building Authority to execute lease agreement with Baystate Medical Center for the Pioneer Valley Life Sciences Institute in Springfield <p style="text-align: right;">Total: \$216MM</p>