Seminars in Translational Research (STRECH) is a collaborative project between the UTHSCSA Institute for Integration of Medicine and Science / Novel Clinical and Translational Methodologies and the UTSA Department of Biomedical Engineering and Research Centers in Minority Institutions program.

The seminars will bring together investigators from basic, clinical, and social sciences to highlight the bidirectional and multiple stages of the scientific translation of research discoveries from the bench to the bedside and to the community. It will promote the formation of multidisciplinary teams from both institutions, and other IIMS partners in order to foster the development of innovative theories, approaches, and technologies in clinical and translational research.

Seminars will be held the third Wednesday of each month (September through May) from 4:00-5:00 PM, including refreshments, alternating venues between the UTSA and UTHSCSA campuses.

Thanks to the offices of the Vice Presidents for Research at UTSA and UTHSCSA for their generous support.
STRECH Organizing Committee

**UTSA**
Terri Krakower  
Anson Ong

**UTHSCSA**
Nedal Arar  
Hanna Abboud  
Robert Clark

Administrative support and contact information

Tapashya Ghosh  
[ghosht@uthscsa.edu](mailto:ghosht@uthscsa.edu)  
567-4704  
[STRECH@uthscsa.edu](mailto:STRECH@uthscsa.edu)

Website

[http://translationalseminars.utsa.edu/index.html](http://translationalseminars.utsa.edu/index.html)
October STRECH Seminar

Mauro Ferrari, Director, Division of Nanomedicine, UTHSC-Houston
Three Dimensions of Individualized Nanomedicine
October 21, 2009; 4:00 PM; UTSA – BSE 2.102

Upcoming STRECH Seminars

November 18 (UTHSCSA) – Rodolfo Valdez, Centers for Disease Control
December 16 (UTSA) – Sunil Ahuja, UTHSCSA
January 20 (UTHSCSA) – pending
February 17 (UTSA) – Bruce McEwen, Rockefeller University
March 17 (UTHSCSA) – David Center, Boston University
April 21 (UTSA) – pending
May 19 (UTHSCSA - pending
Building the Capacity for Translational Research & Collaborative Funding Opportunities

September 16, 2009

Robert Gracy, PhD – UTSA, Vice President for Research

Robert Clark, MD – UTHSCSA, Director, Institute for Integration of Medicine & Science

Andrew Tsin, PhD – UTSA, Director, Center for Research and Training in the Sciences & Research Centers in Minority Institutions Program Director

Sean Thompson, MS, MBA – UTHSCSA/UTSA, Senior Technology Licensing Associate, South Texas Technology Management

Brian Herman, PhD – UTHSCSA, Vice President for Research
Background:

• Academia not only expected to conduct Research but Development and Commercialization (Bayh-Dole)

• Federal agencies shift support from individually focused grants to multidisciplinary teams to address major complex problems.

• SBIR/STTR and related translational & developmental programs with industry

• Thus “Lab bench to Marketplace” or “Bench to Bedside”
Seminars in Translational Research

Model Partnerships in Collaborative Translational Research

**Examples at UTSA and UTHSCSA:**

- San Antonio Life Science Initiative (SALSI)
- Institute for Integration of Medicine and Science (IIMS)
- Bioengineering Program
- South Texas Technology Management (STTM)
- Chlamydia Vaccine Licensure with Merck

**Examples at UT-System and State:**

- UT-System-Wide Collaboration Proposal
- Good Laboratory Practice (GLP- program to establish best practices)
- Energy Summit: Academia, Government and Industry
- Emerging Technology Fund (ETF)
Research Partnerships

UT System

University of Texas Health Science Center at San Antonio

Military

Industry, Governments, Utilities

Southwest Foundation for Biomedical Research

Texas Research Park

Southwest Research Institute
Bob Clark
Programs, services, and funding opportunities available to CTSA partner institutions

Training and career development*
MSCI, TST*, KL2*

Pilot projects*
Biomedical informatics
Biostatistics
Research ethics
Regulatory support
Novel methodologies
Translational technologies resources*
Clinical research centers*
Community engagement

* = funding available
Masters of Science in Clinical Investigation – MSCI
   Formerly K30 grant
   Didactics plus mentored research project

Translational Science Training – TST
   UT System educational grant plus GSBS matching funds
   Graduate student stipends (up to 6 per year)

Career Development Award – KL2
   Senior fellow / junior faculty – 3 Clinical Scholars X 2 years
   Mentored career development
   Didactics, career skills support groups, research project
   Effort and salary support – 75% (cost-sharing now permitted)
IIMS / CTSA Pilot Project program

RFA issued annually to all CTSA partner institutions
   One-year awards, up to $50K each (6+ awards)
   ARRA 2009 supplement expected to add 3 to 6 awards X 2 years

Two-tiered peer review process
   Scientific merit
   Programmatic relevance and special emphasis areas
      Novel methods, ethics, regulatory, community, informatics

Funding based on specified criteria
   Significance, novelty, impact on clinical outcomes
   Strength of design, feasibility, investigator, team
   Use and leveraging of IIMS resources
   Contribution to career development of clinical / translational scientists
   Likelihood of future NIH or other competitive funding
IIMS / CTSA Translational Technologies Resources

RFA issued semi-annually to all CTSA partner institutions
   Six month awards, up to $10K each (25-30 awards)

Two-tiered peer review process
   IIMS TTR Key Function committee
   Scientists with expertise in the requested technology

Funding based on specified criteria
   Impact on the advancement of translational science
   Appropriate and effective use of the technology resource

Funding mechanism
   Funds encumbered, then paid directly to the core resource as services on
   the project are rendered.
Several CRCs operated by IIMS / CTSA

- Adult units – BRU (VA Hospital), FORU (Carrington Bldg), MARC, H-RAHC
- Pediatric unit – CHART (CSRCH)

Full range of services available in support of human subjects research

- Projects generally have peer-reviewed funding
- Industry-funded projects also accepted on cost reimbursement basis

Cost-sharing between IIMS / CTSA and investigator’s grant funds

- Necessitated by budget cuts under CTSA, relative to GCRC mechanism
- Prospective planning and negotiation of cost-sharing arrangements
- Graded scale of cost-sharing proportion based primarily on funding agency, available budget, and relevance to IIMS / CTSA programs
**MISSION of the MBRS Program:**
to significantly increase the number of under-represented minorities conducting biomedical research.

**GOAL of the SCORE Program at UTSA:**
to develop biomedical research capability of the faculty.

**Measurable Objectives** (per project/per year)

<table>
<thead>
<tr>
<th>Objective</th>
<th>Baseline</th>
<th>End of 4-year grant cycle</th>
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<tbody>
<tr>
<td>1. Increase no. of publications in peer-reviewed journals</td>
<td>1.4</td>
<td>1.6</td>
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<tr>
<td>2. Increase no. of extramural, individual, non-MBRS grants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Submitted</td>
<td>1.2</td>
<td>1.5</td>
</tr>
<tr>
<td>b. Funded</td>
<td>0.3</td>
<td>0.4</td>
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<tr>
<td>3. Significantly increase the percent of SCORE faculty</td>
<td>53%</td>
<td>90%</td>
</tr>
<tr>
<td>with at least one minority student from the MARC, RISE (or other) Programs within a SCORE grant year.</td>
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NIH Awards from 1991 to 2007
Current SC grant support: $13.5 million
(NIH Commitments from 2007-2012)
NIH - Research Centers in Minority Institutions (RCMI) Program at UTSA

MISSION of RCMI:
expansion of national capability for research in the health sciences.

GOAL: establish Cajal Neuroscience Research Center at UTSA
(developed into UTSA Neurosciences Institute)

Objectives:

- Core research facilities (Advanced Imaging, Proteomics, Bioinformatics)
- Faculty research (four projects in neuroscience & computational biology)

Pending NIH - Research Centers in Minority Institutions (RCMI) Program at UTSA

MISSION of RCMI:
expansion of national capability for research in the health sciences.

GOAL: establish the Center for Interdisciplinary Health Research at UTSA to focus on basic & translational health research

Objectives:
- Core research facilities (Biophotonics, Computational Systems Biology, Protein Biomarkers, Nanotechnology & Human Heath)
- Faculty research (five projects in basic and translational health research)

Proposed Funding: $14,273,586 (2010-2015)
South Texas Technology Management (STTM)

• STTM manages technologies developed at UTHSCSA, UTSA, UT-Pan American and UT-Brownsville

  – Our job:
    • License UT technologies for development by private companies for UT, Inventor and public benefit
    • Be a value-added resource UT Researchers, Clinicians and other Faculty can trust and rely on to manage the valuable intellectual property resulting from their work
      – So you can stay focused on your work; and
      – To protect your and UT’s interests in UT technology
STTM in the Context of Translational Research

• Translational Research as a “concept” is relatively new but:
  – “Multi-disciplinary and multi-institutional collaboration and cooperation” are not new to the more successful UT Researcher/Clinician Inventors

• STTM is uniquely positioned to foster, facilitate and support such cooperation
  • The only UT Tech Transfer serving multiple institutions
  • Use STTM’s multi-institution awareness to help you find:
    – Resources
    – Collaborators
Translational Research in Practice

• Generally, University “research” (inventions) are “translated” for practical application in the context of:
  – Licenses to existing private companies
  – Licenses to startup companies
  – Sponsored Research Agreements (SRAs)
    • But inventions resulting from such SRAs are **UT-OWNED**

• Leverage STTM’s:
  – Industry contacts
  – IP experience
  – Startup knowledge
  – Other resources
Resources Available Through STTM

• POCsparc Grants
  – Funds made available through SALSI
  – Up to $25,000 to faculty of the four STTM-served UT institutions
    • To advance UT inventions toward successful commercialization
  – Requirements for eligible proposals:
    • UTHSCSA & UTSA collaborative research projects
    • Collaborative projects between UTHSCSA or UTSA researchers and UTB or UTPA researchers**

**UTSA faculty proposals may also be considered for ROCroadrunner (POCrr) grants, which are funded through a supplement to the Emerging Technology Fund award that established the UTSA Institute for Cyber Security
Resources Available Through STTM

• POCsparc Grants (continued)
  – An invention disclosure form must be on file
  – STTM is now accepting proposals; all must be submitted by 5:00 PM Oct. 16, 2009

• TIF Grants
  – Similar in concept to POCsparc, but administered by UT System
  – Typically, TIF projects are more developed
    – Preference is given to startup opportunities
  – Requests considered for amounts up to $50,000
Brian Herman

Wrap-up and closing remarks
Questions, comments, discussion