About the Seminar Series

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

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Website

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





Bob Gracy





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"





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)





HEALTH

South Texas Center for Emerging Infectious Diseases
Institute for Aging Research
UTSA Neuroscience Institute
San Antonio Institute for Cellular and Molecular Primatology
Institute for Bioengineering and Translational Research
Center for Research & Training in the Sciences

HUMAN & SOCIAL DEVELOPMENT

Center for Archeological Research Child and Adolescent Policy Research Institute Institute for Demographic and Socioeconomic Research

ALTERNATE ENERGY/SUSTAINABILITY

Institute for Conventional, Alternate and Renewable Energy Center for Water Research Center for Advanced Manufacturing & Lean Systems

SECURITY

Institute for Cyber Security
Center for Advanced Computing and Network Software







Bob Clark





Institute for Integration of Medicine & Science academic home for our Clinical and Translational Science Award (NIH / NCRR)

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 🤰





IIMS / CTSA Training and Career Development programs

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.





IIMS / CTSA Clinical Research Centers

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





Andy Tsin





NIH Competitive Research (SCORE) Program at UTSA

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)

	Baseline	End of 4-year
1. Increase no. of publications in peer-reviewed journals	1.4	grant cycle 1.6
2. Increase no. of extramural, individual, non-MBRS grants a. Submitted	1.2	1.5
b. Funded	0.3	0.4
3. Significantly increase the percent of SCORE faculty with at least one minority student from the MARC, RISE (or other) Programs within a SCORE grant year.	53%	90%

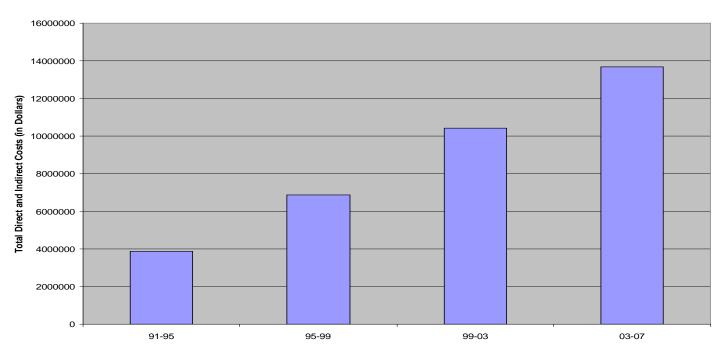




NIH Awards from 1991 to 2007

Current SC grant support: \$13.5 million (NIH Commitments from 2007-2012)

MBRS-SCORE Awards (91-07)







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)

Current Funding: \$10,077,314 (2004-2009)





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)





Sean Thompson





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 <u>not</u> 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 <u>UT-OWNED</u>
- 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 POCroadrunner (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



