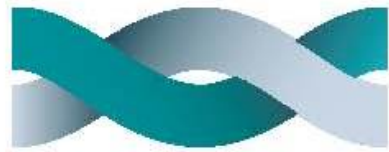


# Gulf Coast Consortia



QUANTITATIVE BIOMEDICAL SCIENCES

A collaboration of seven biomedical institutions  
in Houston and Galveston

Breaking down barriers and building bridges  
Increasing cooperation and collaboration  
Training young scientists for the future



a collaborative network of seven traditionally competing academic institutions



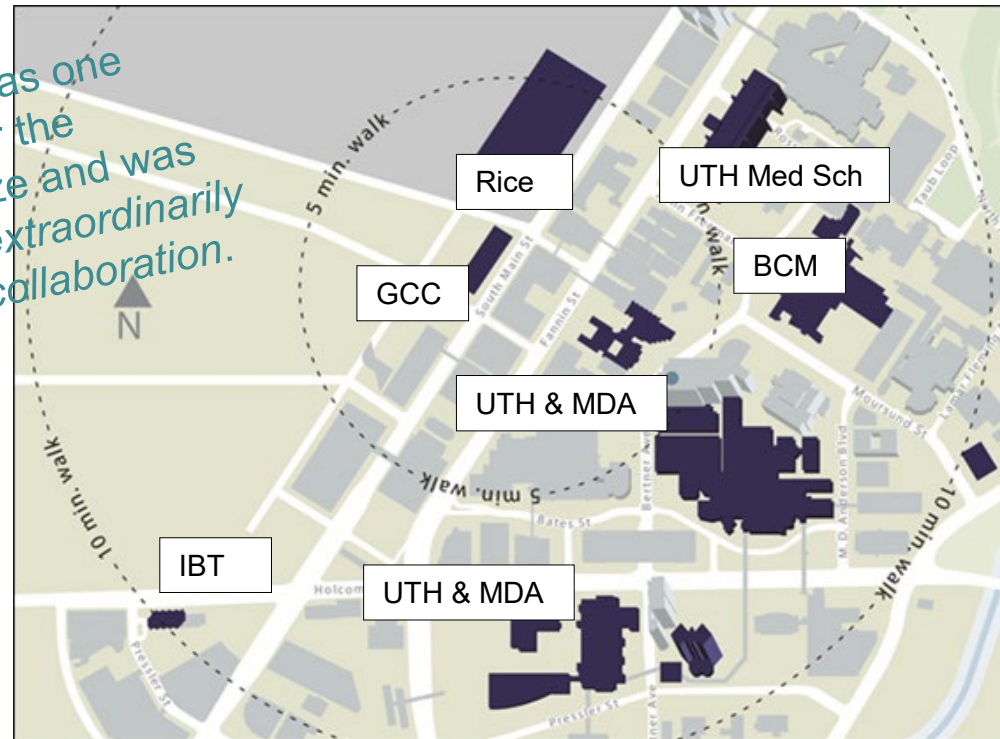
GIVING LIFE TO POSSIBLE



GCC was formed specifically to merge separate scientific disciplines across Texas Medical Center institutions in the pursuit of biomedical research.

Neighboring institutions, around the corner, down the street

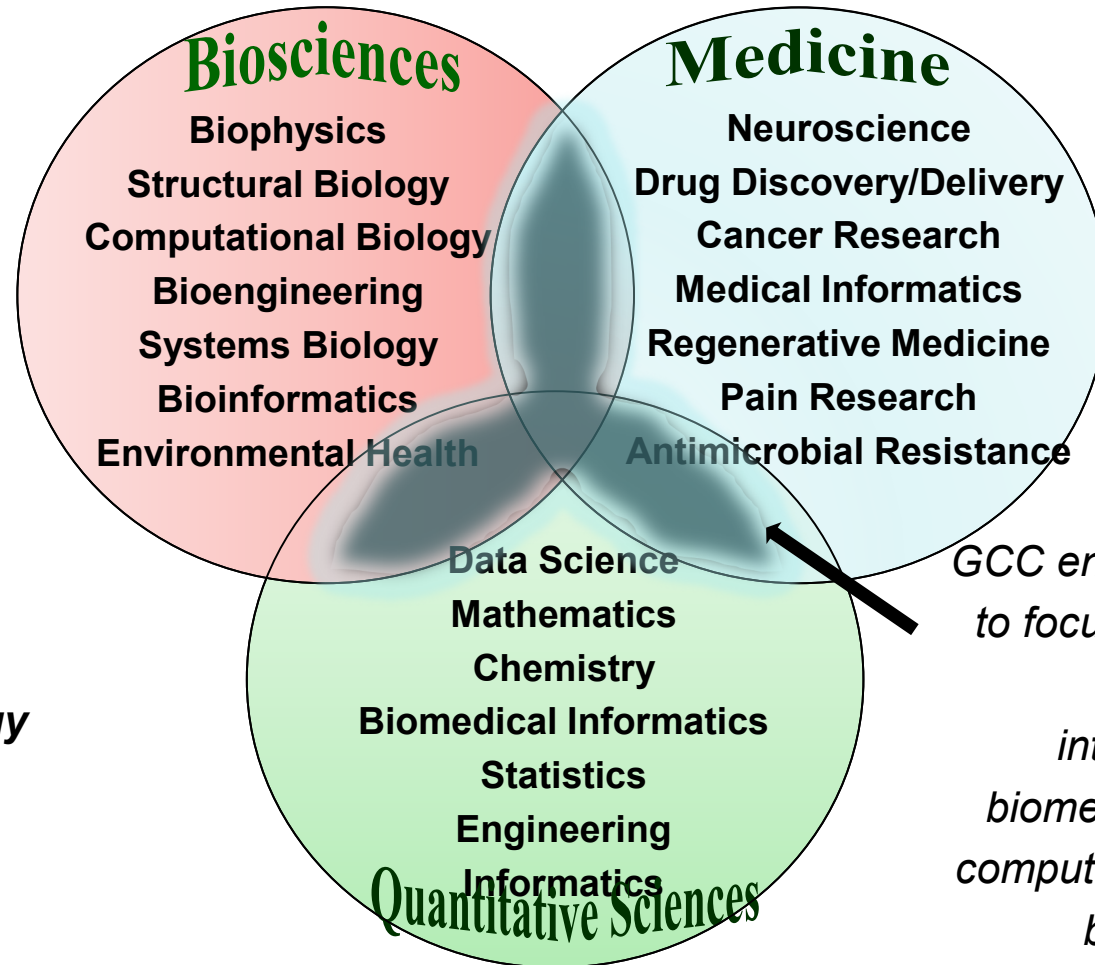
- 5 institutions within a 5- to 15-minute walk
- UH is only a 15-minute drive; UTMB is only a 50-minute drive.



*Chosen from more than 800 candidates, GCC was one of 8 national finalists for the 2011 Collaboration Prize and was noted for creating an extraordinarily impactful, innovative collaboration.*



Where the biosciences intersect with quantitative sciences and medicine



**Others:**  
*Onco-cardiology*  
*Immunology*

*GCC encourages researchers to focus on the more unique, cutting edge, and interdisciplinary areas of biomedical science, such as computational cancer biology, biomedical informatics, neuroengineering.*

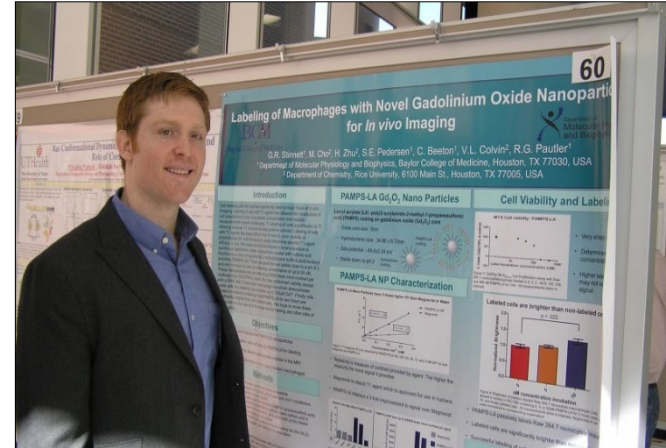
### **KECK CENTER TRAINING PROGRAM HIGHLIGHTS**

- 7 Training Programs
- 2 Undergraduate Summer Programs
- 400+ Training Faculty
- Theme-centric interdisciplinary programs
- Curriculum tailored to each trainee that aligns with their graduate program
- Diverse training opportunities
  - Weekly Keck Seminars
  - Keck Fellows Meetings
  - Annual Research Conference
- Annual progress reviews with trainees and mentors
- Support for training/research conferences



*More than 250 trainees and faculty meet at the Keck Annual Research Conference held every fall.*

- **Qualifications and eligibility for our fellowships: PhD students**
  - who have already chosen a lab at the end of their first year
  - who are US Citizens, Dual Citizens of the US, or Permanent Residents who already have their Green Card
  - whose research projects fall within the scope of each Training Program
  - who meet other requirements as noted on the web site: [www.gulfcoastconsortia.org/training](http://www.gulfcoastconsortia.org/training)
- **Applications are generally open in Fall and Spring**
- **Fellowships for PhDs:**
  - provide NIH-level stipends, partial support for health insurance, tuition and fees, and travel
  - are renewable for a second year if progress is satisfactory; for some programs a third year is possible
  - allow cross-institutional course registration



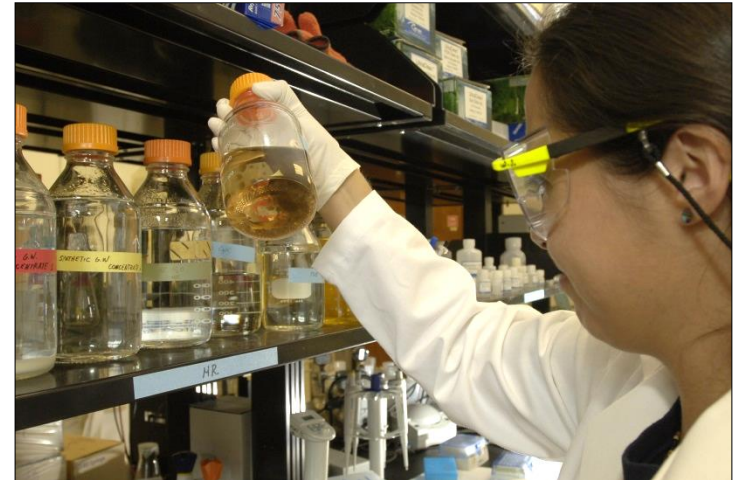
- **Biomedical Informatics and Data Science:**  
(PI: Lydia Kavradi: Rice)
  - Cross-trains pre- and postdoctoral students at the interface between the computational / mathematical sciences and biological sciences / biomedicine. (NLM)
    - In 28<sup>th</sup> year, renewed for 5 years in 2017
    - **9 predocs**, 6 postdocs
- **Houston Area Molecular Biophysics Program:**  
(PI: Ted Wensel, BCM)
  - Offers predoctoral trainees advance course work in molecular biophysics complemented by faculty-directed research and a seminar program. (NIGMS)
    - In 31<sup>st</sup> year, renewed for 5 years
    - **9 predocs**
- **Training Interdisciplinary Pharmacology Scientists:**  
(PI: Carmen Dessauer, UTHSC)
  - Predoctoral training; spans the entire range of drug development from initial target identification and validation through FDA approval: Systems biology approaches to improve selection of drug targets (NIGMS)
    - **5 predocs**, in 4th year of funding;



- **Precision Environmental Health Sciences:**  
(PI: Cheryl Walker, BCM)
  - Predoc and postdoc training; provides innovative training, interdisciplinary courses and research projects blending genetics, environmental health and data science
    - 5-year program beginning 2018
    - **3 predocs** (GSBS, SPH); 3 postdocs

*Should you become a postdoctoral fellow in the future, other fellowships are available:*

- **Antimicrobial Resistance:**  
(PI: Cesar Arias, UTHSC)
  - 5-year program beginning 2019
  - 2-4 postdocs
- **Computational Cancer Biology**  
(PI: Monte Pettitt, UTMB)
  - 10 postdocs, in 3<sup>rd</sup> year of funding



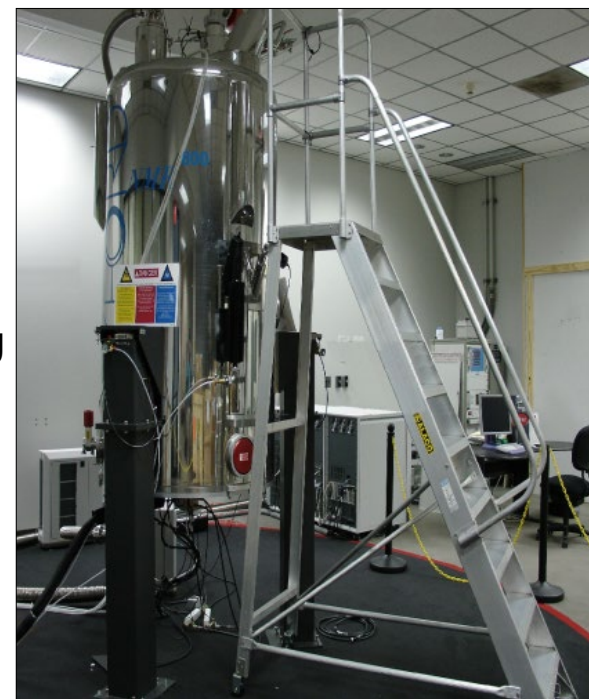


Equipment purchased and facilities developed and/or shared:

### Screening facilities

- High throughput screening core facility at IBT
- Affiliated cores
  - Targeted Therapeutics Drug Discovery Program, UT-Austin
  - Combinatorial Drug Discovery Program, IBT
  - Center for Advanced Microscopy & Imaging Informatics, BCM
  - Therapeutic Monoclonal Antibody, UTHealth
  - Center for Drug Discovery, BCM
  - Center for Comprehensive PK/PD and Formulation, TSU
  - Center for Computer-Accelerated Therapeutics, UTMB

**800 MHz NMRs at UTMB  
and at Rice**



- Keck Seminars, Fridays at 4:00 during fall and spring semesters
- Gulf Coast Vascular Research Consortium meeting, August 23-24
- Rigor and Reproducibility Publication and Reporting Workshop, August 28
- Innovative Drug Discovery & Development Roundtable Series: High Throughput Screening, September 5
- Systems Biology for Clinical Infectious Diseases Research Sym, Sept 18
- Rigor and Reproducibility Workshop, October 10
- **Keck Annual Conf: Precision Environmental Health: Integrating Environmental Sciences, Genomics, and Data Science to Advance Human Health, Oct 11**
- 1st Annual GCC Translational Imaging Symposium, October 22
- ADME: Lead Characterization and Optimization, October 29
- Regenerative Medicine Symposium, November 8
- Emerging Trends in Cellular and Molecular Biophysics, December 3

[www.gulfcoastconsortia.org](http://www.gulfcoastconsortia.org)

*Keep up with  
GCC Events  
via  
GCC News  
weekly email*