



McGovern
Medical School

The University of Texas
Health Science Center at Houston

Interventional Radiology



Disposable catheter inserted into vein



Vein warmed and collapses



Catheter withdrawn, closing vein

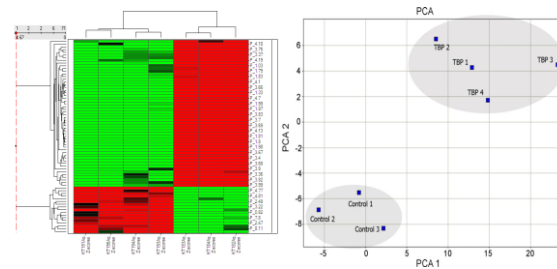
IBD Therapy Response and Prediction of Bone Fractures



Translational Cancer Research

Translational Cancer Research uses patient-specific information to:

- Develop new medications
- Predict medication dosage
- Avoid accidental overdose
- Develop biomarkers
- Develop new methods
- 3D Print biological parts

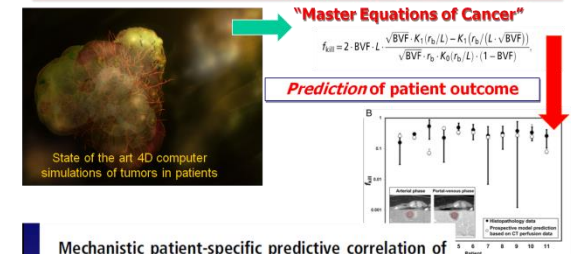


Metabolic & Proteomic Profiling

Center for Translational Cancer Research,
Institute of Molecular Medicine,
UTHealth
1825 Pressler Street
Houston, TX 77030

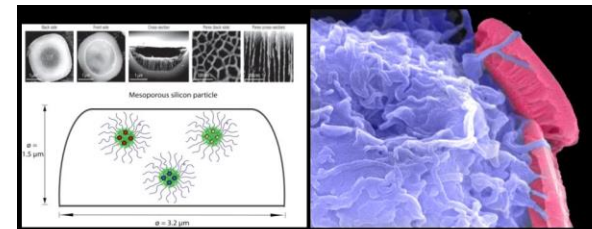
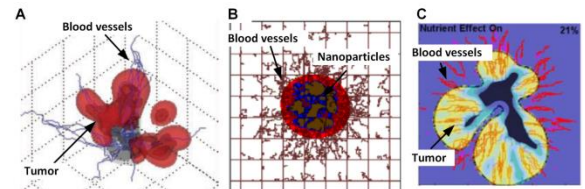
<https://www.uth.edu/imm/centers/center-for-translational-cancer-research.htm>

Mathematical modeling integrated with clinical trials to maximize treatment outcome



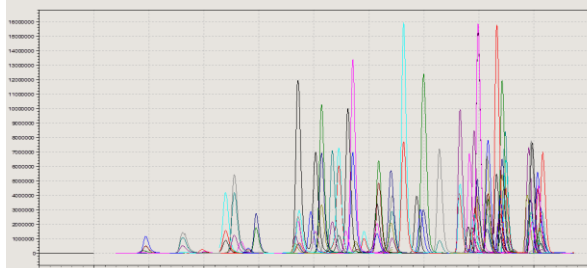
Mechanistic patient-specific predictive correlation of tumor drug response with microenvironment and perfusion measurements

Jennifer Pascal¹, Elaine L. Beare^{2,3}, Zhibai Wang¹, Eugene J. Koay¹, Steven A. Curley¹, and Vittorio Cristini^{1,2,3}
Departments of ¹Pathology and ²Chemical and Nuclear Engineering and Center for Biomaterials Engineering, University of New Mexico, Albuquerque, NM 87131; ³Departments of Radiation Oncology and ⁴Surgical Oncology, The University of Texas MD Anderson Cancer Center, Houston, TX 77030 and ⁵Division of Biology, California Institute of Technology, Pasadena, CA 91125

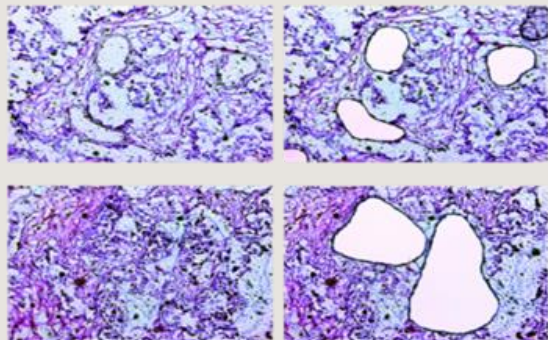


IMM Center for
Translational
Cancer Research

Clinical & Translational Proteomics:

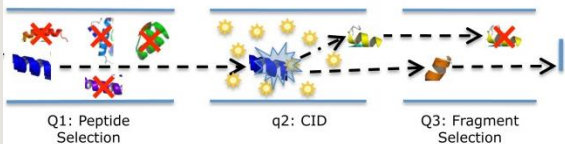


Therapeutic Drug Monitoring



Laser Microdissection

Selected-Reaction Monitoring (SRM) Mass Spectrometry



Targeted Proteomics

Basic Research

Preclinical Assay Development

Clinical Assay Development



Thermo LTQ Orbitrap XL-ETD



Thermo LTQ Orbitrap Fusion



Agilent's 6538 Ultra High Definition Accurate-mass Q-TOF

The center has two large-scale, high-resolution 3D printers for the manufacture of multi-color prototypes and production models of surgical instruments, tissue models and laboratory equipment. We can print biological tissue models using CT or MRI scans.



3D printed leg bone from a dimetrodon (a dinosaur) on the 3D printer bed with support

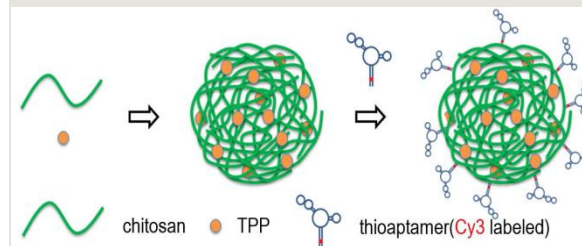
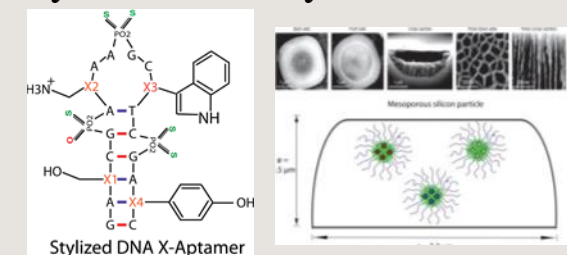
3D Printing Services



Multi-color prototypes and toys

NanoChemistry & 3D Printing Services:

Development of X-Aptamers and Hybrid Particle Systems



Reduction of Cancer Metastasis using our ESTA-1 Thioaptamer

