

**South Texas Research Facility  
NEWSLETTER  
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**News and Information for Investigators and Staff Relocating to STRF**

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*If you wish to remove your name from the STRF Newsletter mailing list or add additional persons please contact me.*

**STRF Web Pages Coming**

The STRF web pages are under construction and should be accessible this month. We are assembling floor plans, drawings, photographs and other reference information for your use. We will notify you when the web pages go on line.

**Status of the Relocation Process**

During the last two years the building has evolved somewhat relative to the original plan. Laboratory spaces have been modified or subdivided as program requirements have crystallized. We have been working with the architects to make sure that the final floor plans, room names, room numbers, and room sizes will not change and will conform to the building as constructed before communicating precise space allocations to program leaders for allocation to investigators and staff. I have begun meetings with program leaders on the relocation data collection process.

On September 29 designs and layouts were reviewed and approved of furniture and modular furniture for laboratories, faculty offices, open offices, conference rooms and public spaces such as the lobby and reception areas. Digital renderings will be obtained and posted on our web site.

**Institutional Research Cores at STRF**

A few investigators may be undecided on whether to relocate owing to uncertainty as to institutional research core support at STRF. I have asked Mike Wilson, PhD, Director of Institutional Research Core Facilities, to share his current plans for STRF:

## **STRF INSTITUTIONAL RESEARCH CORES**

### **MIKE WILSON, PHD, DIRECTOR INSTITUTIONAL CORE FACILITIES**

UTHSCSA continues to make major investments in advanced technologies to support the innovative research at the STRF and throughout the university. The STRF facility is designed for a centrally located cluster of institutional Research Core Laboratories (RCL) on the second floor. Early planning by the STRF program leaders identified the following essential areas for RCL support in the STRF:

**THE CORE OPTICAL IMAGING FACILITY** will establish an STRF satellite laboratory. Instrumentation proposed for the STRF are super-resolution nanoscopy, confocal/multiphoton laser scanning microscopy, and video rate confocal imaging. The laboratory has been designed with infrastructure to support three major instruments as well as specimen preparation and tissue culture activities. The STRF imaging suite will accommodate customized, cutting-edge imaging technologies that will enable future advancements in biomedical research, thus continuing to uphold the core's reputation for excellence.

**FLOW CYTOMETRY.** A satellite laboratory will be established in the STRF to complement the existing facility in the medical school building of the main campus. The STRF will be a welcome outlet with sufficient space for growth and new instrumentation to help relieve backlogs as current usage trends continue to increase. The Flow Cytometry Core will expand into the STRF with equipment and staff to meet the growing research demands that will take place in that facility. For example, the Flow Core will introduce a multi-color cell sorter as a key new instrument in the satellite lab. Faculty input to help define the specific needs and specifications for new instrumentation to be placed in the STRF is encouraged. The STRF flow laboratory will be equipped with data analysis bays, space for general laboratory and cellular analysis and cell sorting suites that provide enhanced control of potential biohazards and contaminants.

**METABOLOMICS.** The Mass Spectrometry Laboratory (MSL) will establish a Metabolomics Laboratory for the targeted, quantitative analysis of specific metabolites. Establishment of the new laboratory will advance the research efforts of a large number of investigators across departments and disciplines at UTHSCSA studying a variety of important health-related topics.

The MSL will continue to operate the core laboratory on the main campus that specializes in protein and proteomic analyses. It is anticipated that instrumentation for acquisition of gel images and for gel band/spot excision will be available in the new STRF laboratory. This will make it possible for investigators on the north campus to prepare protein samples that will be analyzed in the main campus MS laboratory without the risk of gel contamination and breakage associated with transport.

The instrumentation capabilities proposed for installation in the STRF include a GC/MS and a triple quadrupole mass spectrometer, for which a proposal has been submitted to the NIH Shared Instrumentation Grant program.

**THE NEXT-GENERATION GENOMICS** laboratory is designed to accommodate the latest instrumentation for next-generation sequencing along with the molecular biology equipment for creating and analyzing the libraries and derivative molecules. The space is designed to help control the separation of materials in the workflow from processing the primary isolates and tissue to the final derivative molecules to be analyzed on the instruments. The laboratory will have potential for high throughput sample preparation, RNA/DNA isolation, library construction and molecular analysis.

**BIOREPOSITORY.** An institutional biorepository, or tissue bank, will be established to support IRB-approved protocols for the collection, storage, usage and final disposition of human tissues, biofluids and other derived materials. The facility will be equipped with freezer monitoring and alarm systems that comply with the regulatory standards needed to support best practices in biobanking. Similarly, a data management system will be deployed that meets the standards of the National Cancer Institute for secure inventory management, tracking, and annotation. The implementation of data management software tools will be coordinated with the Cancer Therapy and Research Center (CTRC) to ensure a consistent standard for computerized records management. This resource will enable specimen collections with the appropriate patient consent and IRB-approved protocols to be subsequently used for translational research studies.

The precise configuration to be adopted at STRF, at least in the beginning, will be based on analyses of strategic priorities for growing the core facilities to support of the university-wide research community, as well as information to be gathered from relocating investigators about their research needs. These plans will develop further as dialog continues between investigators, core directors and RCL administration.

Please direct your questions and suggestions to Mike Wilson, PhD, Director Institutional Research Cores, 567-2059, [wilsonma@uthscsa.edu](mailto:wilsonma@uthscsa.edu)

### **Other Shared Equipment**

Some investigators have equipment-sharing collaborations (outside of research core activities) at their current locations and are uncertain how these will be reestablished at STRF. During the data-gathering phase of relocation planning we will identify such collaborations and look into how to address them.

### **Frequently Asked Questions**

(These FAQs and answers will be archived on our web site.)

Q. I need to replace a -80 freezer but wonder whether I should hold off on the purchase since I will be moving my lab to STRF next year. Will new -80 freezers be provided at STRF?

A. Freezers and refrigerators will *not* be provided at STRF. We will relocate your existing freezers and refrigerators subject to the footprint depth maximum of 34" in the linear equipment rooms at STRF. Upright freezers and refrigerators will make the best use of floor space. If you have an item that exceeds 34" in depth you should identify it as an issue when we collect relocation data for your lab.

Q. What is the size of the STRF building and what is the total space available for research activities?

A. The STRF building is 188,530 gross sq. ft. less 62,780 gross sq. ft. for circulation (corridors, elevators, stairs) and support (electrical and mechanical rooms &c.) leaving 125,750 usable sq. ft. The last number includes the research cores.

Q. How do I schedule a tour of the building?

A. Since the building is dirty, dangerous, and far from complete inside, the construction team is reluctant to conduct tours until significant further progress has been made.

Q. Do we have capability to take virtual tours of the building?

A. Unfortunately we do not have this capability. On the other hand we plan to put on our forthcoming web pages as many useful photographs and drawings as we can.

Q. What new lab equipment will be furnished as part of the construction project?

A. Each linear equipment room will be provided with an ice machine. Each tissue culture room will be provided with one (1) 6 ft. vented biological safety cabinet, one (1) 6 ft. non-vented biological safety cabinet, one (1) 4 ft. non-vented biological safety cabinet, a carbon dioxide manifold including regulator, and a cylinder rack.

Q. What new furniture will be provided as part of the construction project?

A. New furniture will be provided throughout the STRF. This includes laboratories enclosed offices, cubicles, conference and meeting rooms, break rooms, and public spaces. Break rooms will be furnished with an under counter refrigerator and a trash receptacle.

Q. What is the Research Space Productivity Index (RSPI) for the STRF?

A. The current overall RSPI for the graduate school, medical school and dental school is \$500/sq. ft. This is also the RSPI for the STRF. However, bench space at STRF will be assigned as linear feet, and 0.168 linear feet = \$1/sq. ft.

### **How to Contact Me**

The best way to contact me is by email. If you have trouble please ask assistance from Gail Billbe, 567-2015.

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