

RESEARCH

SCHOLARLY TRAINING

Between the time of acceptance into the program and arrival in Dallas, the Program Director will discuss research plans with the future fellow and arrange an additional visit to Dallas, if helpful. Planning for a meaningful research experience begins prior to actual enrollment in the program. During the interview, the candidate will be invited to share his or her aspirations and an attempt to ascertain whether clinical or basic science research training would more appropriately prepare the candidate for the desired career path.

UTSW | BENCH SCIENCE TRACK

For fellows interested in a bench science track, the various training options include:

- ✓ T32 training Program through the adult Pulmonary and Critical Care Division and the Pediatric Pulmonary and Vascular Biology Division (Drs. Lance Terada and Philip Shaul are the co-directors),
- ✓ Pediatric Scientist Development Program (PSDP; <http://psdp.yale.edu/>)
- ✓ Physician Scientist Training Program (PSTP; Drs. Charles Ginsburg and David Russell are the Co-Directors)
- ✓ R-25 Training Grant in NHLBI-focused Research for Minority Students (Dr. Michael McPhaul, Director).

UTSW | CLINICAL INVESTIGATION TRACK

For fellows interested in clinical investigation, UTSW has a **Clinical Research Scholars program** to support the development of the careers of individuals who are dedicated to a long-term career in clinical investigation, and aspire to develop into future leaders in clinical research (the **Training Curriculum in Patient-Oriented Research (TCPOR)** is funded through an NIH NCRR KL2 grant mechanism).

UT Southwestern offers one of the nation's most comprehensive clinical research curricula including 24 full-semester courses in research principles and methods through the Southwestern Graduate School of Biomedical Sciences. The instructors include faculty and clinical investigators with a wide range of expertise including clinical research design and methods, biostatistics, epidemiology, and outcomes and health services research.

Throughout the three-year training program, fellows learn experimental design, data collection and analysis and laboratory techniques through attendance at the required Pediatric Respiratory Medicine Research Conference, as well as in a research orientation session at the beginning of each year. The fellows have free access to the Program Director, other faculty in the division and department, and research mentors.



UTSW | CORE CURRICULUM

The Respiratory Medicine Core Curriculum will be led by a small group of faculty members, as well as upper level pulmonary fellows.

The didactic sessions will cover the topics included in the American Board of Pediatrics “Pediatric Pulmonology Content Outline,” as well as other topics of interest to a pediatric pulmonologist. In addition to a broad introduction to Pediatric Pulmonology, the course aims to aid preparation for the certifying examination. Because topics pertinent to Pediatric Pulmonology overlap with interests of other subspecialties, some of the content of the course will be covered in joint sessions with the Critical Care fellows and the Neonatology fellows.

A separate review of pulmonary physiology will take place in three blocks over the first six months of each year. The upper level fellows will participate with faculty in teaching the course to the first year fellows. Other short courses include the PFT, tracheostomy and ventilator and flexible bronchoscopy practicums that are required for first year fellows and may be attended by interested upper level fellows.

A required course in statistics, Conceptual Biostatistics for the Clinical Investigator, will be taught by faculty in the Department of Clinical Sciences and is required for second year fellows. Additional courses are available for fellows interested in clinical research.

Moreover, the fellow is required to attend the fellows’ core curriculum offered by the Department of Pediatrics. The weekly conference features research presentations by the fellows alternating with curricular activities of general interest that rotate on a three-year cycle, opportunities for social interaction, or general discussions. The conference is central to an interdisciplinary program for fellow education designed to develop a departmental repository of educational and administrative resources to enrich the opportunities offered by the individual fellowships.

UTSW | CORE MENTORS

Core mentors for the pediatric pulmonology trainees outside of the Respiratory Medicine division have been selected based on their proven track record in science, as well as their experience training fellows in other related pediatric subspecialties. These core faculty members are among the most accomplished in the university and are listed in the “Research Handbook” that the fellow will receive upon joining the program. If a fellow expresses an interest that cannot be supported by the research programs of the core faculty, the Program Director will contact and screen potential mentors throughout the university and provide a list of possibilities to the fellow. The fellow will then have the opportunity to work with each potential mentor during brief rotations during the first year in order to ensure that the laboratory environment is a good match for the fellow.





UTSW | RESPIRATORY MEDICINE RESEARCH CONFERENCE

During the first year of fellowship, the Program Director supervises the fellows' search for an appropriate project, laboratory or patient population and mentor. The second and third years of the training program are primarily devoted to research. Each year, the fellow will present two or three research conferences to the Respiratory Medicine faculty.

The pediatric faculty provides research opportunities both within the Respiratory Medicine division and within the larger community of the University of Texas Southwestern Medical Center.

UTSW | CASE CONFERENCE

The fellows are required to prepare cases for the weekly case conference attended by the Respiratory Medicine faculty. The cases for presentation may represent diagnostic or therapeutic puzzles or simply illustrate a common issue in pediatric pulmonology for which "best practice" is debated.

In order to prepare for the presentation, a fellow must locate the relevant information regarding the case. Most frequently, the information will be available through online search of medical literature databases, such as PubMed [<http://www.ncbi.nlm.nih.gov/sites/entrez>]. Fellows will also be encouraged to seek faculty guidance in the preparation of the cases. Those fellows who are unfamiliar with the online medical literature databases will receive a tutorial on their use.

From the plethora of available articles, the fellow must glean the few most salient and assess the validity of the conclusions of the study as applicable to the patient case to be presented. Subsequently, the fellow will present his or her assessment of the literature to the faculty for discussion during the conference. The results of the discussion as informed by the fellow's presentation will then be implemented in the care of the patient presented. Thus, the fellow will engage in self-study through literature searches, but will have immediate faculty feedback on his or her efforts in the conference.

