

PEDIATRICIAN-SCIENTIST PROGRAM



Texas Children's
Hospital®

Baylor
College of
Medicine

*"Our goal is to deconvolute your
pathway to becoming an independent
and successful pediatrician-scientist."*

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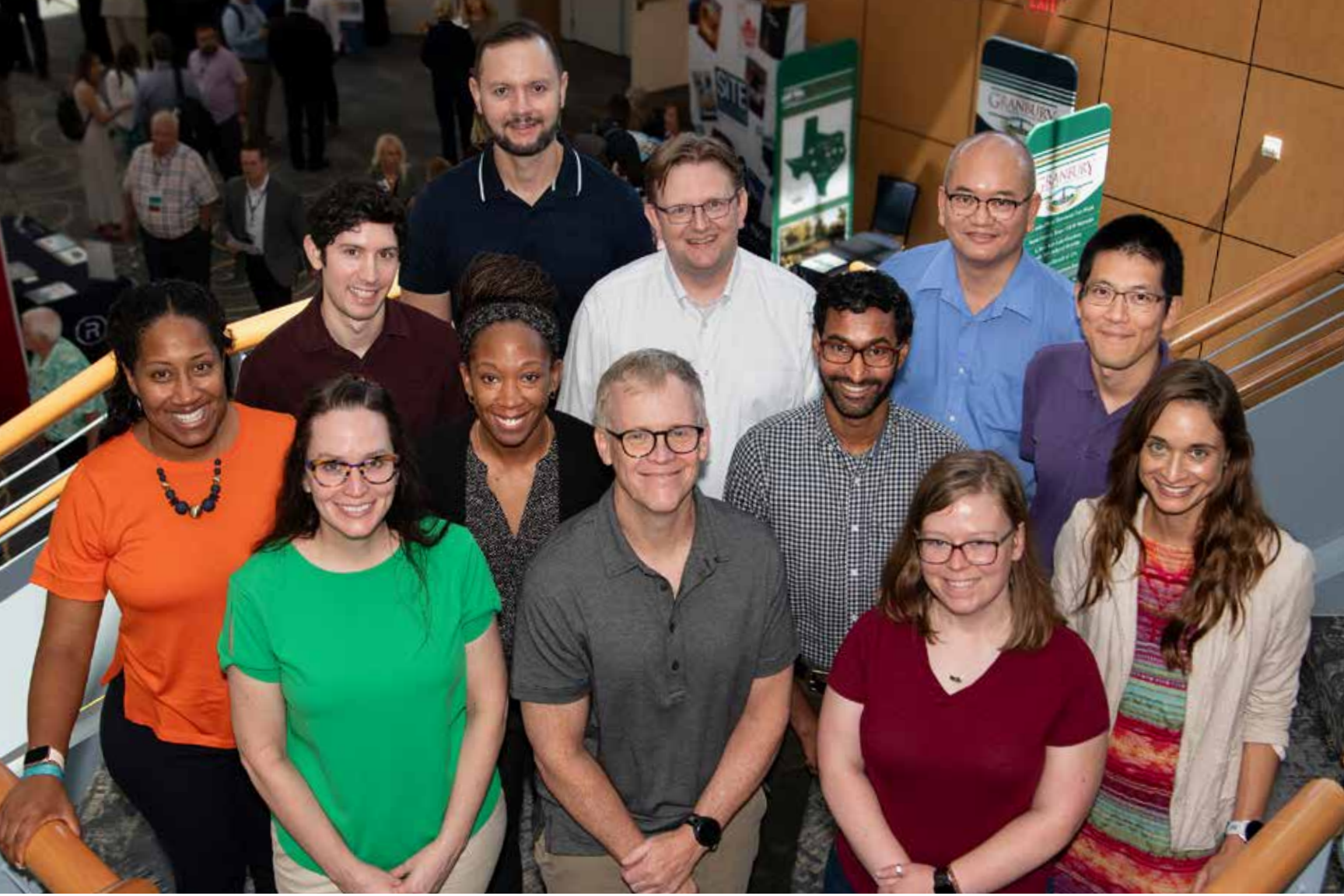
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About Us: BCM PSP

• OUR MISSION

To provide excellent pediatric clinical training in the context of a pathway to scientific independence through intensive mentoring, guidance, and educational programming and a roadmap to preparedness. The program strives to train future academic pediatricians to provide superb care to children, engage in meaningful innovation through basic or clinical research, and mentor and train the next generation of pediatrician-scientists.



OVERVIEW

Baylor College of Medicine is proud to offer a new research track for qualified candidates that have been approved by the American Board of Pediatrics. The Pediatrician-Scientist Program (PSP) is an ideal career choice for MD or MD/MD-PhD graduates who are considering a career as a principal investigator or a pediatrician-scientist. As the largest children's hospital and department of pediatrics in the United States, there is a strong commitment and priority to providing expert clinical training and educational opportunities in the context of formal research progression towards becoming an independent investigator.

STRUCTURE

PSP residents will commit to the ABP-Integrated Research Pathway (ABP-IRP), which is a 3-year, residency-training program that will link to the categorical residency program to fulfill the ABP requirements. The program is designed to create a clear pipeline from residency to a junior faculty appointment by offering a myriad of educational experiences, research opportunities, and career development guidance. PSP residents will participate in the following components to promote their development as clinician-scientists: Academic Scholarship, Academic Enrichment Activities, and Mentoring. These components will be specific to each year in the program.



AMERICAN BOARD OF PEDIATRICS– INTEGRATED RESEARCH PATHWAY

The ABP-IRP track allows pediatric residents the opportunity to complete 11 months of research starting in the PL-2 year and involving most of the PL-3 year while also completing 22 months of core clinical pediatric residency. All PSP residents will fulfill all pediatric categorical residency program requirements.

Upon acceptance into the program, candidates are required to commit to this pathway within their intern year.

The Residency Program Director and PSP leadership will closely monitor fulfillment of both the pediatric categorical and PSP requirements. The Resident's Individualized Advisory Committee (RIAC) will also meet regularly to assess the resident's progress through the ABP-IRP pathway. The RIAC will consist of the Residency Educational Mentor, Primary Research Mentor, Clinical Case Mentor, Residency Program Director, PSP Associate Program Director, and other relevant faculty.

The Pediatrician Scientist: a builder, a mover, a shaker, an advocate

Rayne H. Rouce, MD

Associate Professor Pediatrics-Hematology/Oncology
Director of Cell Therapy Clinical Research Operations
BCM Assoc Director of Community Outreach
DLCCC Assoc Director Community Outreach and Engagement



OBJECTIVES •

ENGAGE

talented MD or MD/PhD graduates
committed to careers in academic
medicine and the field of pediatrics

PROVIDE

extensive road mapping and
customized experiences to
PSP residents to allow for an
unprecedented dual training in
clinical and research efforts

CREATE

a multifaceted, long-term mentoring
structure to support trainees during
their transition from residency to
fellowship and, ultimately, junior
faculty



“The amount of support that we get as pediatrician-scientists in training was clear to me from the beginning, with every level of the program and administration invested in supporting our research and clinical education.”

– **Xavier Rios Villanueva, MD, PHD**

PROGRAM STRUCTURE

• PROGRAM COMPONENTS

I. COMPREHENSIVE MENTORING PROGRAM

Mentorship in PSP entails the assignment of a Residency Educational Mentor, Primary Research Mentor, and a Resident Individualized Advisory Committee throughout the duration of the residency training.

RESIDENCY EDUCATIONAL MENTOR. The Residency Educational Mentor (REM) is a faculty member committed to a substantive and long-lived relationship with the resident, who will serve as a role model for navigating and balancing a career as both a scientist and a pediatrician. To this end, the relationship between the PSP resident and the residency educational mentor includes formal monthly meetings, bi-annual meetings after completion of the PSP and can assist with career advising and tracking of graduate activities. This is a **long-lived mentorship** that continues throughout fellowship and into junior faculty years to foster long-standing **collaborations** and professional **collegiality**.

PRIMARY RESEARCH MENTOR. Selected by the PSP resident, research during the **protected research blocks** will be conducted in the laboratory of the Primary Research Mentor (PRM). PRMs are to be chosen from the targeted area of clinical and research interest that most closely aligns with that of the PSP resident. The PRM can hold a PhD, MD, or MD/PhD degree. As the PSP resident **transitions to fellowship** and a **career as a pediatrician-scientist**, the PRM can serve as a **long-standing mentor** and collaborator in the field.

CLINICAL CASE MENTOR. To provide **guidance**, mentorship, and **expert advice** in the area of **clinical interest** for completing the clinical case report. Each PSP resident will be assigned a Clinical Case Mentor (CCM).

Resident Individualized Advisory Committee Meetings

RIAC meetings will serve as a forum to formally discuss the progress of each PSP resident. Members of the RIAC include the REM, PRM, CCM, and PSP leadership plus any relevant research collaborators. The purpose of the RIAC meeting is to provide a **supportive** and **constructive environment** to discuss **individual** progress in meeting both categorical and PSP program milestones and goals. They will be held biannually throughout the entire PSP program.

II. PARALLEL EDUCATION PROGRAM

The parallel education program is focused upon providing the necessary knowledge and perspective to **flow** through the academic pipeline, **develop** an investigative program, and **achieve success** in a K-series career development NIH application. Key components of the PSP parallel educational program will include the following:

- **Full participation** in the categorical residency educational program to fulfill ABP-IRP requirements.
- **Alternative Didactic Noon Conference.** These sessions focus on academic and professional development.
- **Pediatrician-Scientist Forum.** This forum is required for all residents and will be held monthly to feature the career narrative and science of a pediatrician-scientist.
- **Orientation retreat.** Held annually, this specific retreat is for all PSP residents and reviews program structure and encourages peer collegiality and interaction.

**DIDACTIC NOON
CONFERENCE**

**PEDIATRICIAN-
SCIENTIST FORUM**

**ORIENTATION
RETREAT**



III. PILOT GRANTS PROGRAM

The Pilot Grants Program helps to promote continual planning and development of allocated research time and effort along with providing strongly mentored exercises in grant writing.

All PSP residents are strongly encouraged to apply for and obtain a pilot grant through the PGP, which will be used in support of their research. Applications for the PGP are evaluated in a mock study section held within the PSP, which will also provide an additional experience of value in understanding what is important in constructing a grant application and gaining insight into the review process. Finally, the ability to receive an award and manage a research budget is an integral part of succeeding in research and is something that PSP program leadership will oversee and provide mentoring.

BAYLOR COLLEGE OF MEDICINE CAMPUS





IV. SCHOLARLY PUBLICATION GOALS

Building the academic CV in preparation for competitiveness for K-series funding is a necessary priority of the PSP. This will include a rational publication stream targeted at justifying the candidate as a developing academic. The scholarly expectations are aligned to promote engagement in the proposed area of research, but also for true engagement in the pediatrician-scientist portion of training and are specific to each year of the program.

YEAR 1

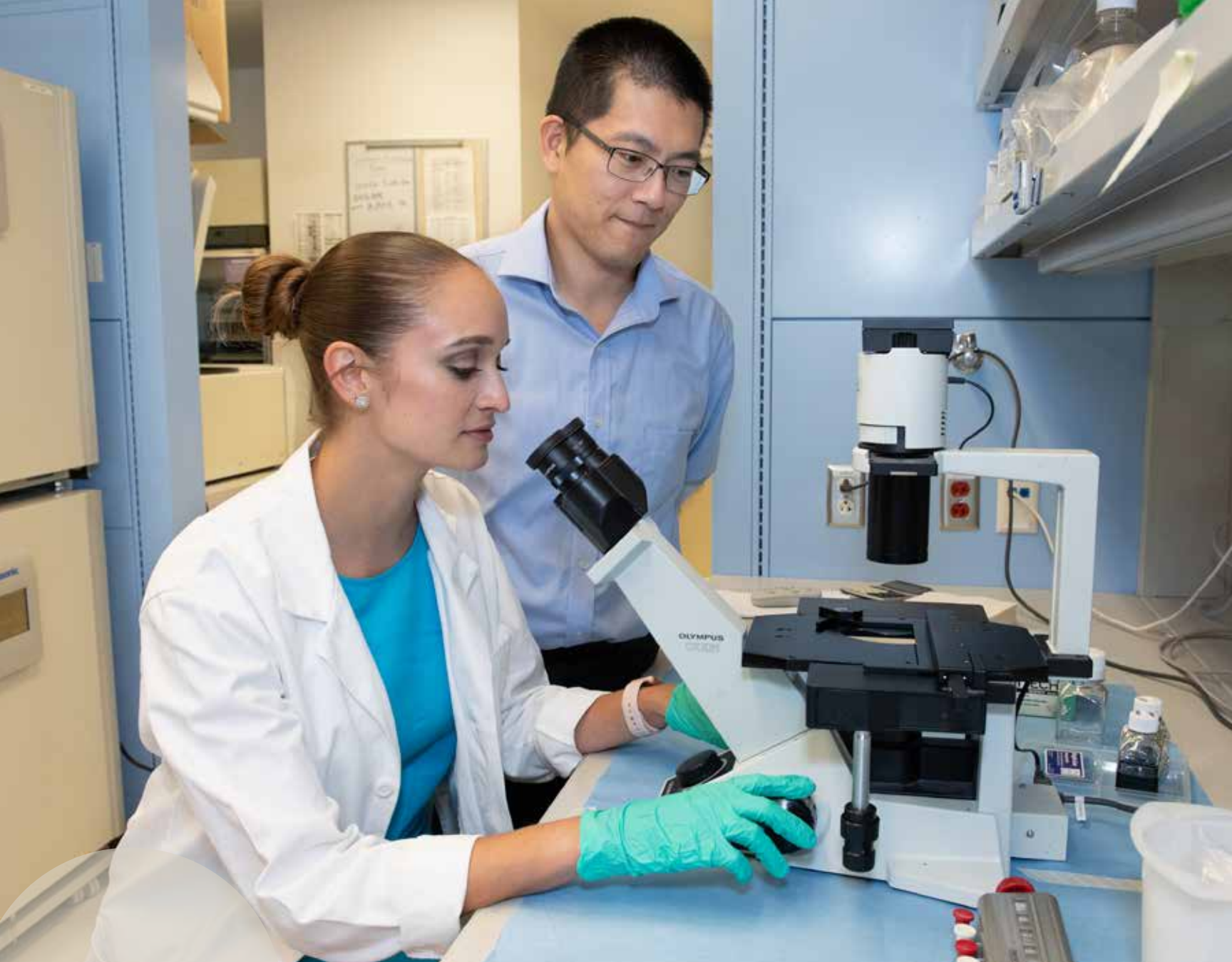
PSP residents are supported in publishing a case report in a clinical area connected to their targeted research area in order to align their development as a pediatrician-scientist in a specialized clinical topic. This represents valuable exposure to clinical science and clinical publishing and the insight derived from that experience will enhance the residents ability to truly academically integrate clinical medicine and investigation.

YEAR 2

PSP residents are supported in generating and submitting a scholarly review and a grant through the internal PSP pilot grants program in the area of research related to the proposed topic of research that begins in block 6 of PL-2.

YEAR 3

PSP residents are supported in the publication of an abstract, a primary research article of original resident research, for presentation at a national meeting and broader scientific publication as appropriate. PSP residents are also encouraged to submit the candidate section of a K-award, which supports the building of the K-award application.



V. PROGRAM TIMELINE

PL-1 – PL-3

In PGY-1 and PGY-2 years, PSP residents experience a truncated clinic rotation schedule, which will allow for a full year of research to be conducted—in part during PGY-2, but predominantly in PGY-3. Careful road mapping occurs before the beginning of PGY-1 and throughout the program to allow for optimized scheduling and to ensure that all applicable training is completed before each trainee enters into a subspecialty fellowship program.

Subspecialty

As PSP residents advance to fellowship, fellows may potentially be eligible for full or partial salary support through NIH-sponsored T-32 grant opportunities within

Baylor College of Medicine and Texas Children's Hospital. During fellowship, independent research projects that have been established during residency can be strengthened and expanded to support continued grant submissions and research career development. There are a number of departmental and institutional grant award opportunities that PSP fellows will be quite competitive for after completing research and educational program milestones built into the program.

The Department of Pediatrics Fellowship Program is engaged in the PSP and is collaborating in creating PSP pathways to independence.

PROGRAM TIMELINE

			RESIDENCY				SUBSPECIALTY			
ACTIVITY			PRE-PL-1	PL-1	PL-2	PL-3	YEAR 1	YEAR 2	YEAR 3	
I	MENTORSHIP	Professional Development	Residency Education Mentor (REM) Pairing	Apr.						
			PSP Peer Mentor Program Pairing (PMP)	Jun.						
			Clinical Case Mentor (CCM) Identification	Jun.						
			Primary Research Mentor (PRM) Selection		Jun.					
			Annual Orientation Retreat Attendance	Jun.	Jun.	Jun.	Jun.	Optional	Optional	Optional
	Parallel Education Program	Alternative Didactic Noon Conference (Monthly)		Jul.-May	Jul.-May	Jul.-May	Optional	Optional	Optional	
		Pediatrician-Scientist Forum Seminar (Monthly)		Jul.-May	Jul.-May	Jul.-May	Optional	Optional	Optional	
	Thoughtful Pairings	Pairing with BCM Medical Student During Rotations		*Oct.-Jun.	*Oct.-Jun.	*Oct.-Jun.				
II	RESEARCH	Development	Residency Education Mentor (REM) monthly meetings		Jul.-Jul.	Jul.-Jul.	Jul.-Jul.	(Bi-annual)	(Bi-annual)	(Bi-annual)
			Formalizing RIAC Committee Members with PSP Leadership		Oct.					
			Bi-annual RIAC Progress Meetings		1st (Mar.) 2nd (Jun.)	1st (Dec.) 2nd (Jun.)	1st (Dec.) 2nd (Jun.)			
	Research	Clinical/Basic Investigative Research			Sep-Oct.**	Jul.-Sep.** Nov.-May**				
III	SCHOLARSHIP	Grants	PGP: Internal Grant: Submission of Pilot Grant Program (PGP) Applications			Jan.				
			PGP: Mock Study Section-Pilot Grant Review			Jan.				
			PGP: Study Section Decision Announcement			Jan.				
			K Award: Submission of Candidate Section of NIH K Award in a Mock Study Section				Mar.			
			K Award: Review and Feedback of NIH K Candidate Section				Mar.			
			K Award: NIH K Award Grant Submission						Spr.-Sum.	
	Publication Goals	Clinical Case Report		May						
		Scholarly Review Article			Jun.					
		Primary Research Article				May				
	Scientific Conference Program (SCP)	Specialty Society or Pediatric National Meeting Identification			Jul.					
		National Meeting Abstract				Dec.				
		National Meeting Attendance				Spr.-Sum.				

Current RESIDENTS

GRADUATING • CLASS OF 2028

Erin Elizabeth Bolte, MD, PHD

Kali Deans-Fielder, MD, PHD

ERIN ELIZABETH BOLTE, MD, PHD

Research interests: I'm interested in the microbiome-gut-brain axis as a target for neurodevelopmental disorders like autism.

How Does the PSP support your career development? The PSP has enabled me to make connections within the world's largest medical center, while simultaneously offering a broad and deep clinical exposure to pediatric medicine at Texas Children's Hospital. Because of the size of the Texas Medical Center there are always researchers with aligned interests ready to mentor, collaborate, network, or teach! I feel genuinely supported and cared for by the PSP leadership, who are always looking for individualized opportunities for PSP trainees.



Undergraduate Institution: University of Notre Dame (B.S.)

Graduate Institution: University of Guelph (M.Sc.) Ontario, Canada.

Medical/Graduate School Institution: Baylor College of Medicine (M.D./Ph.D.)

Current Year in PSP: PL-1

Email: bolte@bcm.edu

Hometown: New Lenox, IL

Fellowship Interest: Developmental and Behavioral Pediatrics





KALI DEANS-FIELDER, MD, PHD

Research interests: Intestinal Epithelial Pathophysiology, Nutrition

How Does the PSP support your career development? The PSP program offers a dynamic, career-focused curriculum that actively connects trainees with opportunities and mentorship they might not otherwise encounter. It intentionally facilitates mentorship aligned with my fellowship and research interests, both within and beyond the department and institution. Program leadership strongly supports protected research time and cultivates a vibrant community through meaningful social engagement with like-minded peers across related fields.

Undergraduate Institution: University of Wisconsin-Madison

Graduate Institution: Baylor College of Medicine

Medical School Institution: Baylor College of Medicine

Current Year in PSP: PL-1

Email: kali.deans-fielder@bcm.edu

Hometown: Oak Park, IL

Fellowship Interest: Gastroenterology and Hepatology



GRADUATING CLASS OF 2027

Marisa Pinson, MD, PhD



MARISA PINSON, MD, PHD

Research Interests: I am interested in developmental origins of health and disease and the placenta-brain axis. My research interests lie in gene-environmental interactions, specifically how gene expressions change in response to prenatal/perinatal exposures (e.g. alcohol, marijuana, opioids) and how these expression changes in the placenta have downstream consequences on fetal brain development. I want to elucidate mechanisms of short-term (mal) adaptations and correlate them with long-term health outcomes to identify points of intervention.

Why did you pick Texas Children's/Baylor Pediatrician-Scientist Program? I was initially interested in Baylor PSP because of how well designed and structured it was to help my training as not only a pediatrician but also as a scientist with regular meetings with mentors and well laid out annual goals. However, I knew it was the right place for me when I met the people and experienced firsthand just how supportive they are, listening to my research ideas and career goals and immediately putting me in touch with people of similar interests. Between the research potential, the excellent mentorship, and ample time for research built into the program, I could not have picked a better place.

Undergraduate Institution: Baylor University, Waco, Texas

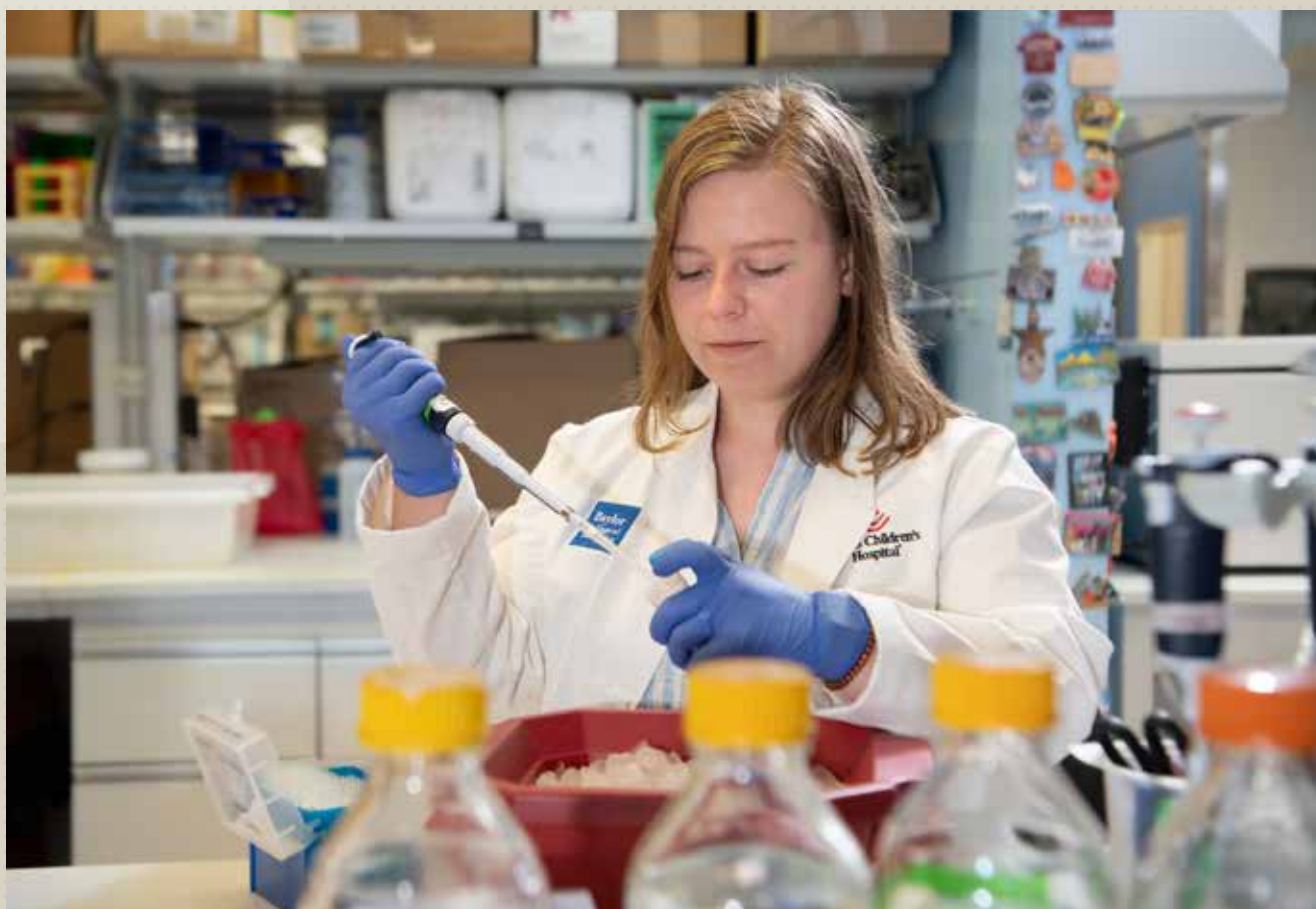
Medical/Graduate School Institution: Texas A&M Health Science Center College of Medicine

Current Year In PSP: PL-2

E-mail: Marisa.Pinson@bcm.edu

Hometown: Beaumont, Texas

Fellowship Interest: Developmental-Behavioral Pediatrics, Neurodevelopmental Disorders



GRADUATING CLASS OF 2026

Tiffany King, MD, PHD

Christopher Peek, MD, PHD



TIFFANY KING, MD, PHD

Research Interests: I'm interested lung injury in sickle cell disease.

How does the PSP support your career development? The PSP helps support my career development through structure programming and networking that allows me to hear from pediatric scientists. I'm also supported through regular meetings with mentors and advisor committee creates for discussion of my ideas for my future with feedback and assistance in determining what next steps I should take.

Undergraduate Institution: The University of North Carolina at Chapel Hill

Graduate Institution: The Ohio State University College of Medicine, Department of Biomedical Sciences

Medical School Institution: The Ohio State University College of Medicine

Current Year In PSP: PL-3

E-mail: tiffany.king@bcm.edu

Hometown: Charlotte, NC

Fellowship Program: Pulmonology



CHRISTOPHER PEEK, MD, PHD

Research Interests: I am broadly interested in microbial-host interactions at the interface of mucosal immunology and microbiology. I hope to better understand how infection, inflammation, and antimicrobial therapies mechanistically alter interactions between the gastrointestinal system and hematopoiesis.

How does the PSP support your career development?

The Baylor Pediatrician-Scientist Program has been integral to my development as a future physician-scientist. The leadership team has supported my research and clinical interests through individualized mentorship pairings within my field of interests. Additionally, the Baylor PSP has provided protected time for establishing research connections, resources for presenting work at national conferences, and support for publications and grant writing. As someone new to the Houston area, the Baylor PSP has made the transition to a new city as smooth as possible and welcomed me into a fantastic new family.

Undergraduate Institution: Davidson College

Graduate Institution: Vanderbilt University
School of Medicine

Medical School Institution: Vanderbilt University
School of Medicine

Current Year In PSP: PL-3

E-mail: christopher.peek@bcm.edu

Hometown: Nashville, TN

Fellowship Program: Infectious Diseases



"The PSP has been a great community of support and inspiration. Not only do we have the opportunity to meet and interact with other resident physician scientists in our program, but they also promote interactions with senior pediatrician scientists among Baylor College of Medicine, Texas Children's Hospital and the Texas Medical Center."

– Arianexys Aquino López, MD, PhD

Program ALUMNI

CLASS OF 2025



SATHI WIJEYESINGHE, MD, PHD

Undergraduate Institution: University of Maryland – College Park
Graduate Institution: University of Minnesota
Medical School Institution: University of Minnesota
Current Year In PSP: PL-3
E-mail: sathi.wijeyesinghe@bcm.edu
Hometown: New York, NY
Fellowship Program: Allergy & Immunology

CLASS OF 2023



IAN FRANCIS, MD, PHD

Undergraduate Institution: University of Denver, Denver, Colorado
Graduate Institution: Boston University, Boston, Massachusetts
Medical School Institution: Boston University, Boston, Massachusetts
Current Year In PSP: PL-3
E-mail: Ian.Francis@bcm.edu
Hometown: Denver, CO
Fellowship Program: Nationwide Children's Hospital, Critical Care Medicine

CLASS OF 2024



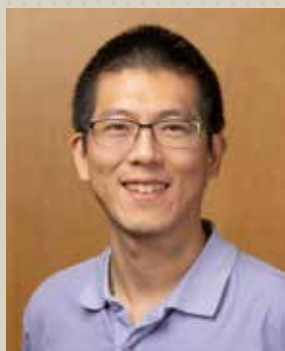
AUDRA INESS, MD, PHD

Undergraduate Institution: Smittcamp Family Honors College at California State University, Fresno, Fresno, CA
Graduate Institution: Virginia Commonwealth University Center for Clinical and Translational Research, Richmond, VA
Medical School Institution: Virginia Commonwealth University School of Medicine, Richmond, VA
Fellowship Program: Baylor College of Medicine, Genetics



MARIMAR DE LA CRUZ BONILLA, MD, PHD

Undergraduate Institution: University of Puerto Rico, Mayagüez, Puerto Rico
Graduate Institution: UT MD anderson UT Health Graduate School of Biomedical Sciences, Houston, Texas
Medical School Institution: University of Puerto Rico School of Medicine, San Juan, Puerto Rico
Fellowship Program: Baylor College of Medicine, Hematology/Oncology



JIMMY CHANG, MD, PHD

Undergraduate Institution: Washington University in St. Louis, St. Louis MO
Graduate Institution: Northwestern University, Chicago, IL
Medical School Institution: Northwestern University, Chicago, IL
Fellowship Program: Baylor College of Medicine, Genetics

CLASS OF 2022



NATALIE GUERRERO, MD, PHD

Undergraduate Institution: Pomona College
Graduate Institution: University of Wisconsin School of Medicine and Public Health
Medical School Institution: University of Wisconsin School of Medicine and Public Health
Fellowship Interest: Adolescent Medicine
Academic Role: Assistant Professor at Riley Children's Hospital



YIKE JIANG, MD, PHD

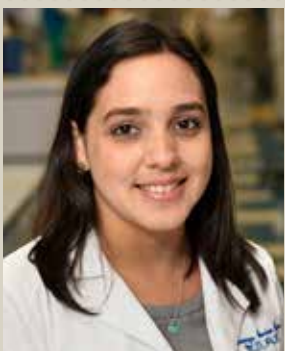
Undergraduate Institution: University of Maryland, College Park
Graduate Institution: Geisel School of Medicine at Dartmouth
Medical School Institution: Geisel School of Medicine at Dartmouth
Fellowship Interest: Rheumatology
Academic Role: Assistant Professor at Dartmouth



PRASANNA RAMACHANDRAN, MD, PHD

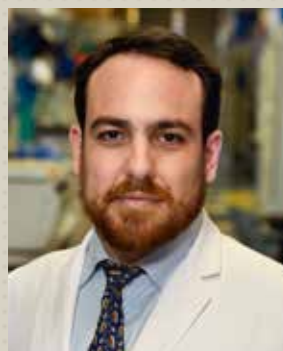
Undergraduate Institution: Fairleigh Dickinson University
Graduate Institution: Washington University in St. Louis, Baylor College of Medicine
Medical School Institution: Baylor College of Medicine
Fellowship Interest: Gastroenterology-Nutrition
Academic Role: Instructor at Boston Children's Hospital

CLASS OF 2021



ARIANEXYS AQUINO LÓPEZ, MD, PHD

Undergraduate Institution: University of Puerto Rico, Río Piedras Campus
Graduate Institution: The University of Texas MD Anderson Cancer Center UTHealth Graduate School of Biomedical Sciences
Medical School Institution: MD/PhD - University of Puerto Rico School of Medicine
Fellowship Interest: Pediatric Hematology/Oncology
Academic Role: Fellow at Texas Children's Hospital



JAVIER CABRERA-PEREZ, MD, PHD

Undergraduate Institution: Columbia University
Graduate Institution: University of Minnesota
Medical School Institution: University of Minnesota
Fellowship Interest: Allergy/Immunology
Academic Role: Fellow at Brigham and Women's Hospital

CLASS OF 2020



PATRICK CONNELL, MD, PHD

Undergraduate Institution: Johns Hopkins University, Baltimore, MD
Medical School Institution: Baylor College of Medicine, Rice University (combined program) MD, PhD
Fellowship Interest: Cardiology
Academic Role: Pediatric Cardiology, Texas Children's Hospital



STELLA HARTONO, MD, PHD

Undergraduate Institution: California State Polytechnic Institute, Pomona, CA
Medical School Institution: Mayo Clinic School of Medicine
Fellowship Interest: Allergy and Immunology
Academic Role: Clinical Fellow, National Institute of Allergy and Infectious Diseases



NAOMI TJADEN, MD, PHD

Undergraduate Institution: Boston University, Boston, MA
Medical School Institution: MD/PhD - University of Kansas Medical Center. (PhD- KUMC, Stowers Institute for Medical Research)
Fellowship Interest: Gastroenterology
Academic Role: Gastroenterology Fellow, Children's Hospital of Philadelphia

*"The leadership believes in the potential of each one of us
and will do everything they can to support our careers."*

– Nicole Ramsey, MD, PHD

What Can the PSP OFFER YOU?

Tailored IRP

Institutional Commitment

Protected Research Time

Unprecedented Opportunity



STRUCTURED

Integrated Research Pathway

Layered mentorship
Extensive professional development



UNPARALLELED

Institutional Commitment

We want you to join
THE RICH LEGACY OF PEDIATRICIAN-SCIENTISTS
at Baylor College of Medicine



PROTECTED Research Time

Guaranteed for ALL PSP residents
Flexible call schedule during research months
Supplemental research stipend



UNPRECEDENTED Clinical Training

Texas Children's Hospital
Largest department of pediatrics in the world

STEERING COMMITTEE

Support of research and career development
from Mentorship in all areas of Pediatrics

ACADEMIC GENERAL PEDIATRICS CHILD HEALTH POLICY & ADVOCACY



JEAN L. RAPHAEL, MD, MPH
Division Chief, Academic General Pediatrics
Director, Center for Child Health Policy and Advocacy
Vice Chair for Clinical Affairs
 Professor of Pediatrics
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CRITICAL CARE



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TRUNG NGUYEN, MD
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CARDIOLOGY



DANIEL PENNY, MD, PHD, MHA
Chief, Cardiology Section
Professor
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ENDOCRINOLOGY



**MARIA JOSE REDONDO, MD,
PHD, MPH**
Professor of Pediatrics
 Diabetes and Endocrinology
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STEERING

ETHICS



JAMES A. THOMAS, MD, FAAP
Co-Chief, Ethics Section
Professor
Critical Care Section
Department of Pediatrics
Baylor College of Medicine
jathoma1@texaschildrens.org

GASTROENTEROLOGY/ HEPATOLOGY/NUTRITION



BENJAMIN SHNEIDER, MD
George Peterkin Endowed Chair in Pediatrics
Chief, Gastroenterology, Hepatology, & Nutrition Section
Professor
Department of Pediatrics
Baylor College of Medicine
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SANJIV HARPAVAT, MD, PHD
Assistant Professor
Pediatrics-Gastroenterology
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COMMITTEE

GENETICS



BRENDAN LEE, MD, PHD
Chairman

Department of Molecular and Human Genetics
Robert and Janice McNair Endowed Chair
Professor

Program in Integrative Molecular and Biomedical Sciences, Developmental
Biology, Translational Biology & Molecular Medicine

Director, Center for Skeletal Medicine and Biology

Director, Medical Students Research Track

Rolanette and Berdon Lawrence Bone

Disease Program of Texas

Baylor College of Medicine

Director, Skeletal Dysplasia Clinic

Texas Children's Hospital

blee@bcm.edu



HUDA Y. ZOGHBI, MD

Director, Jan and Dan Duncan Neurological Research Institute

Texas Children's Hospital

Ralph D. Feigin, M.D., Endowed Chair

Investigator, Howard Hughes Medical Institute

Member, Institute of Medicine and National Academy of Sciences

Professor

Departments of Pediatrics, Neuroscience, Program in Developmental

Biology, Program in Integrative Molecular and Biomedical Sciences,

Program in Translational Biology & Molecular Medicine

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GLOBAL & IMMIGRANT HEALTH



**ANNA MANDALAKAS, MD,
PHD, FAAP**

Professor

**Associate Vice Chair Research - Global
Chief, Section of Global Health**

Director, Global Tuberculosis Program

Department of Pediatrics

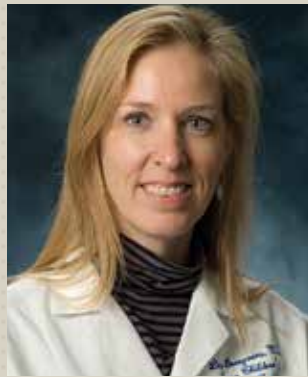
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Texas Children's Hospital

anna.mandalakas@bcm.edu

STEERING

HEMATOLOGY/ONCOLOGY



LISA BOMGAARS, MD

Director, Clinical Research Operations
Director, Quality and Safety
Texas Children's Cancer Center
Medical Director, Clinical Research Center
Professor of Pediatrics
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NEPHROLOGY



MICHAEL BRAUN, MD
Chief, Nephrology Section

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INFECTIOUS DISEASE



FLOR M. MUNOZ, MD

Associate Professor of Pediatrics,
Infectious Diseases
Molecular Virology and Microbiology
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KATHERINE KING, MD, PHD

Associate Vice-Chair for Research
Associate Professor
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COMMITTEE

TROPICAL MEDICINE



PETER HOTEZ, MD, PHD, FASTMH, FAAP

Professor, Departments of Pediatrics,
Molecular Virology & Microbiology
Dean, National School of Tropical Medicine,
Baylor College of Medicine
Texas Children's Hospital Endowed Chair
of Tropical Pediatrics
Co-Director, Texas Children's Hospital Center
for Vaccine Development
University Professor, Department of Biology, Baylor University
Senior Fellow in Disease and Humanity, James A Baker III
Institute for Public Policy, Rice University
Senior Fellow, Scowcroft Institute of International Affairs,
Texas A&M University
hotez@bcm.edu

NEUROSCIENCE



HSIAO TUAN CHAO, MD, PHD

Assistant Professor and McNair Scholar
Departments of Pediatrics-Division of Neurology and
Developmental Neuroscience, Molecular
and Human Genetics, and Neuroscience
Investigator, Duncan Neurological Research Institute
Texas Children's Hospital
Associate Program Director, Basic Neuroscience
Pathway, Child Neurology Residency Training
Program
Awardee: National Institutes of Health Director's Early
Independence Award from the High-Risk, High-Reward
Research program; Career Award for Medical Scientists
from the Burroughs Welcome Fund
hsiaotuan.chao@bcm.edu



JIMMY L. HOLDER, JR., MD, PHD

Co-Chair BCM Medical School Admissions
Committee
Joan and Stanford Alexander Chair for Neuropsychiatric
Genetics
Associate Professor of Pediatrics and Neurology
Texas Children's Hospital and
Baylor College of Medicine
holder@bcm.edu

LEADER



Pediatrician-Scientist Program

Donald Williams Parsons, MD, PHD

Audrea Burns, PHD

SHIP



DONALD WILLIAMS PARSONS, MD, PHD

Director, Pediatrician-Scientist Program

Professor of Pediatrics, Baylor College of Medicine

Beverly and Daniel C. Arnold Endowed Chair for Precision Medicine

Chief of the Division of Hematology-Oncology

in the Department of Pediatrics at Baylor College of Medicine

Director of Texas Children's Cancer and Hematology Center

dwparson@bcm.edu



AUDREA BURNS, PHD

Associate Professor

Co-Director, Texas Children's Faculty College

Associate Program Director, Pediatrician-Scientist Program

Texas Children's Hospital

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"The PSP provides specific objectives for trainees to accomplish during each year of the program, which serves as a blueprint for progression through the critical stages of development from resident, to fellow, to K-awardee."

– Joseph Alge, MD, MS, PHD

Our IRP: THE EXPERIENCE



PEDIATRICIAN-SCIENTIST PROGRAM (PSP)

#	PL-1	PL-2	PL-3
1	*PHM-i	PHM-res	^V Research
2	*PHM-i	*TCH NICU	^V Research
3	*TICU-i	*TCH NICU	^V Research
4	*BT ICN-i	Research	^V Research
5	Newborn (TCH OR BT)	*Hematology-Oncology	^V Research
6	*Pulmonary-i or *Endocrine-i	*Cardiology	^V Research
7	*Renal-i	* ^V Adolescent Medicine	^V Research
8	PSP Outpatient Subspecialties	^V Development	^V Research
9	Key Subspecialty Selective	^{VJ} Flex Elective	^V Research
10	^V Harris Health Outpt-i	TCH EC-u	^V Research
11	^V Flex Elective [#]	* ^S PHM-sup	* ^S Subspecialty-u
12	TCH EC-i	^S Harris Health Outpt-u	^V Capstone [#]
13	^V Pedi CARES 1 [#]	Research [#]	TCH EC-u [#]

LEGEND

*	Call or night float rotation
- i	Intern rotation
-u/sup	Upper-level rotation
S	Counts toward supervisory graduation requirement
V	Rotation during which vacation can be given
J	Rotation during which jeopardy is given
#	One of these rotations must be scheduled during block 13 for PSP retreat
Red Font	Rotation must be during that specific block number
	Counts towards inpatient graduation requirement
	Counts towards subspecialty graduation requirement
	Counts towards ambulatory graduation requirement

• PRE-PL-1 GOALS

Categorical			PSP		
Block #					
May			Residency Education Mentor (REM) Pairing		
Jun				Clinical Case Mentor Identification	Annual Orientation Retreat Attendance
Jul	1	*PHM - i			
Aug	2	*PHM - i			
Sep	3	*PHM - i			
	4	*Hematology/Oncology - i			
Oct	5	#PSP/HH Outpt or TCH EC			
Nov	6	##TCH EC +/- HH Outpt			
Dec	7	*BT NICU/ICN - i			
Jan	8	Newborn			
Feb	9	Elective ^v			
Mar	10	PCU			
Apr	11	Harris Health Outpt I ^v			
May	12	Subspecialty - i			
Jun	13	Pedi Skills ^v (x2)			

• PL-1 GOALS

		Categorical	PSP			
Block #						
Jul	1	*PHM - i	Residency Education Mentor (REM) Monthly Meetings			
Aug	2	*PHM - i				
Sep	3	*PHM - i				
	4	*Hematology/Oncology - i				
Oct	5	#PSP/HH Outpt or TCH EC				
Nov	6	##TCH EC +/- HH Outpt	Didactic Noon Conference (DNC) Monthly Seminar			
Dec	7	*BT NICU/ICN - i				
Jan	8	Newborn	Pediatrician-Scientist Forum Monthly Seminar			
Feb	9	Elective ^v				
Mar	10	PCU	Medical Student Thoughtful Pairings		1st Resident Individualized Advisory Committee Progress Meeting (RIAC)	
Apr	11	Harris Health Outpt I ^v				
May	12	*Subspecialty - i			2nd Resident Individualized Advisory Committee Progress Meeting (RIAC)	Case Report
Jun	13	Pedi Skills ^v (x2)				

• PL-2 GOALS

Categorical			PSP					
Block #								
Jul	1	*PICU	Residency Education Mentor (REM) Monthly Meetings	Primary Research Mentor (PRM) Selection				National Meeting Identification
Aug	2	*TCH PFW						
Sep	3	^S *Subspecialty - u						
	4	*Liver/GI or Core						
Oct	5	Cardiology						
Nov	6	Research	Didactic Noon Conference (DNC) Monthly Seminar		Investigative Research			
Dec	7	Adolescent	Pediatrician-Scientist Forum Monthly Seminar			3rd RIAC Meeting	Internal Grant Pilot Grant Program	
Jan	8	Development	Medical Student Thoughtful Pairings				Program Decision Announcement & Peer Study Section	
Feb	9	^S Harris Health Outpt - u ^V						
Mar	10	Community Pediatrics ^V						
Apr	11	BT EC						
May	12	TCH EC						Scholarly Review Article
Jun	13	Elective ^V				4th RIAC Meeting		Orientation Retreat

• PL-3 GOALS

Categorical			PSP					
Block #			Residency Education Mentor (REM) Monthly Meetings Didactic Noon Conference (DNC) Monthly Seminar Pediatrician-Scientist Forum Monthly Seminar Medical Student Thoughtful Pairings	Investigative Research				
Jul	1	Research						
Aug	2	Research						
Sep	3	Research						
	4	Research						
Oct	5	^s *PHM - u						
Nov	6	Research		Investigative Research				
Dec	7	Research			5th RIAC Meeting	Internal Grant Pilot Grant Program		
Jan	8	Research						
Feb	9	Research						
Mar	10	Research						
Apr	11	Research				National Meeting Attendance		
May	12	Research					Primary Research Publication	
Jun	13	Research			6th RIAC Meeting			Submission and Feedback of Candidate Section of NIH K08 Award to Mock Study Section

• SUBSPECIALTY GOALS

PSP				
Block #		Year 1	Year 2	Year 3
Jul	1	Residency Education Mentor (REM) Monthly Meetings Didactic Noon Conference (DNC) Monthly Seminar Pediatrician-Scientist Forum Monthly Seminar Medical Student Thoughtful Pairings		
Aug	2			
	3			
Sep	4		Residency Education Mentor Meeting (Bi-annual)	Residency Education Mentor Meeting (Bi-annual)
Oct	5			
Nov	6			
Dec	7			
Jan	8			
Feb	9		Mock K Award: Pilot Grant Program Submission	
Mar	10		Residency Education Mentor Meeting (Bi-annual)	Residency Education Mentor Meeting (Bi-annual)
Apr	11			
May	12			
Jun	13			



• BAYLOR COLLEGE OF MEDICINE

Come join an established
legacy of training
pediatrician-scientists
at Baylor College
of Medicine

#1 in Genetics: Department of Molecular and Human Genetics is a leader in NIH funding and rankings.

#1 in Texas: Overall for medical research and specific specialties.

Top NIH Funding Consistently among the top institutions for National Institutes of Health (NIH) funding, especially in genetics and pediatrics.

Designated a Tier 1 medical school for research by *U.S. News & World Report*, placing it among the nation's elite for discovery.

Tier 1

Texas Children's Hospital is the primary pediatric training site for Baylor's students. The **largest** pediatric hospital in the nation, Texas Children's is **ranked in all 10 subspecialties** in *U.S. News & World Report's* list of America's Best Children's Hospitals. Overall, Texas Children's Hospital tied for third in the country, and is one of only 10 children's hospitals to achieve Honor Roll designation. Texas Children's Hospital provides care in more than 40 pediatric specialties and has multiple locations across Houston. Additionally, the Texas Children's Women's Pavilion is a state-of-the-art center for obstetrics and gynecology.

Harris Health System (HHS) is a fully integrated healthcare system that cares for all residents of Harris County, Texas. HHS was the first accredited healthcare institution in Harris County to be designated as a Medical Home and is one of the largest in the country. **Ben Taub Hospital**, the central clinical care facility of HHS, is contiguous with the Baylor campus and serves as a teaching hospital for Baylor students for all specialties and their subspecialties.

OPPORTUNITIES ABOUND



U.S. News & World Report ranks Texas Children's Hospital the #1 in Pediatric Hospital in Texas. The institution has been recognized on the *U.S. News and World Report* Honor Roll for 15 consecutive years.

Source: infinitepassion.org

TEXAS CHILDREN'S HOSPITAL



Texas Children's® BY THE NUMBERS

Founded in 1954

3 pediatric, stand-alone hospitals
in the Greater Houston area:
Texas Medical Center, West Campus &
The Woodlands

Annual volume:
36,000
admissions to Texas
Children's Hospital

40,000+
surgeries

157,000
Emergency Center visits

Approximately
6,600 births at
Texas Children's Pavilion
for Women annually



4.6 million patient
encounters yearly

Nearly

15,000
faculty and staff



8 Texas Children's
Specialty Care locations
in Houston and Austin



55+ Texas Children's Pediatrics
locations in Houston, Austin and
College Station, with 250+ pediatricians
and over 1.5 million patient
encounters annually



12 Texas Children's Urgent Care
locations in Houston and Austin

424,000+ 
Texas Children's Health Plan members

2 Centers for Children and Women
exclusively for Health Plan members

1 of the world's first basic research
institutes dedicated to childhood
neurological diseases:
Texas Children's Hospital® Jan and Dan
Duncan Neurological Research Institute®

\$70+ million dedicated
to research each year



1 Texas Children's Hospital
academic partner:
Baylor College of Medicine



 texaschildrens.org

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Source: texaschildrens.org

THE TEXAS MEDICAL CENTER

Patient Visits Per Year **10+ Million**

More than the populations of Los Angeles, Houston, and San Francisco—combined.

Number of Employees **106,000+**

More people than Exxon, Apple, or Google.

Number of Patient Beds **9,200**

If they were all stacked, they would measure approximately 1.65 miles—the equivalent of 7 Empire State Buildings.



The largest medical

21 Hospitals	160,000 Visitors Daily	17,500 Faculty
59 Member Institutions	10 Million Visitors Annually	15,000 Nurses
8 Academic & Research Institutions	18,000+ International Patients Annually	10,000 Volunteers
4 Medical Schools	10 Million Patient Encounters Annually	5,700 Researchers
8 Nursing Schools	180,000+ Surgeries	50,000 Students
2 Universities	13,600+ Heart Surgeries	5,000 Physicians
2 Pharmacy Schools	750,000 ER Visits	
1 Community College	50 Million Developed Sq. Ft.	
1 High School focused on life sciences	\$3 Billion New Construction	

Number of babies delivered **26,280**

TMC delivers about 1 baby every 20 minutes.

Number of people in the health science field **1 in 5**

Living in the 77030 zip code makes TMC the highest concentration of life science professionals in the country.

Size of the medical center **1,345 Acres**

TMC is the eighth-largest business district in the country—right after Philadelphia and Seattle.



center in the world

Advancing life sciences through collaboration, education, and research.

GDP contribution **\$25 Billion**

TMC's contribution to the country's gross domestic product.

Number of surgeries annually **180,000**

A surgery is started every 3 minutes in the medical center.

Expansion **\$3 Billion**


Current investment in construction and expansion.

The city supports a booming economy adding thousands of jobs, especially in healthcare, with attractions like Space Center Houston, Museum District institutions, and extensive parks drawing millions.

The city's future includes expanded green spaces, new developments, and a growing entertainment scene, making it a major hub with significant cultural and recreational offerings.

HOUSTON

By 2026, the **City of Houston**, the fourth most populous U.S. city, is projected to have over 2.39 million residents.

- 
- Metro Area (Greater Houston): Over 7.8 million residents across 10 counties.
 - Growth: Consistently ranks as one of the fastest-growing cities, adding tens of thousands of residents annually.

Economy & Jobs (Projected)

- Job Growth: Forecasted 30,900 new jobs in Metro Houston for 2026, with healthcare leading.
- Key Sectors: Healthcare, education, professional services, and construction are major drivers.

Parks & Recreation

- Major Parks: Home to numerous parks, including Discovery Green, Buffalo Bayou Park, and local favorites like Daikin Park.

- Developments: Continued focus on increasing green spaces and outdoor amenities.

Museums & Culture

- Museums: Features world-class institutions like the Museum of Fine Arts, Houston, the Houston Museum of Natural Science, and the Cockrell Butterfly Center.
- Attractions: Hosts major draws such as Space Center Houston and the Houston Zoo.

Future Outlook

- **Development:** Expect new entertainment districts, increased green infrastructure, and continued expansion.
- **Vision:** Houston is on track to potentially surpass Chicago as the third-largest U.S. city in the coming years.

At **665 square miles**, the City of Houston could contain the cities of New York, Washington, Boston, San Francisco, Seattle, Minneapolis and Miami.



George R. Brown Convention Center



Hermann Park Conservancy



Downtown Houston



Houston City Hall



Life on the Bayou



Wortham Theater Center



Source: The Greater Houston Partnership

WHY HOUSTON?



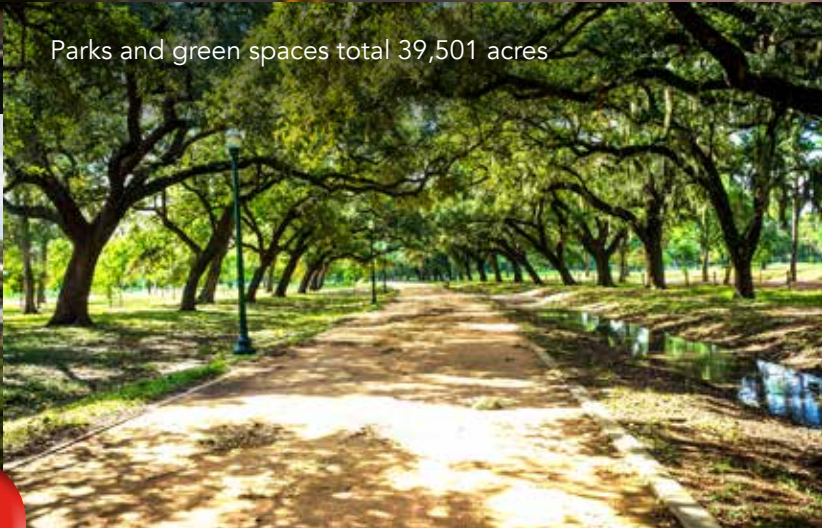
Affordable housing



McGovern Centennial Gardens



Parks and green spaces total 39,501 acres



HOUSTON

By the numbers...

Houston Parks and Recreation Department oversees **380 developed municipal parks** and more than **167 green spaces**, which together encompass approximately **39,501 acres**. The department owns and operates **60 community centers** across the city along with the Metropolitan Multi-Service Center. Amenities include:

- 235 playgrounds
- 201 tennis courts
- 173 basketball courts
- 165.3 miles of trails
- 161 baseball and softball fields
- 87 soccer fields
- 30 pools
- 29 water spray grounds
- 20 volleyball courts
- 16 football/rugby/cricket/lacrosse Fields
- 11 community garden sites
- 9 dog parks
- 8 golf courses
- 7 skate parks
- 5 fitness centers
- 4 nature centers

Greater Houston has **4.4 million sq. ft. of convention space** and regularly hosts worldwide events. In 2018, Houston **hosted 415 conventions and meetings** that drew **737,335 attendees** translating into an estimated economic impact of \$591.7 million.

The **Houston Museum District** is one of the country's most visited and diverse cultural centers with **19 museums**. These museums provide rich experiences in art, history, culture, nature and science. The district is divided in four walkable zones, each of which includes a group of museums.

Resident companies in **drama, ballet, opera** and **orchestra** perform year-round in Houston. More than **500 institutions** are devoted to the performing and visual arts, science and history in the Houston area.

Houston restaurants feature outstanding regional dishes as well as diverse international cuisine. In 2018, Houston was home to **11,292 food service and drinking establishments** that employed more than 258,700.

Housing costs in Houston are 46.2 percent below the average for the nation's 20 most populous metro areas and 3.1 percent below the average for all U.S. metros. Excluding the two most expensive housing markets, New York and San Francisco, which tend to skew the average, Houston's housing costs are 35.3 percent below the major metro average.

The Houston Metropolitan Area covers **9,444 square miles**, an area larger than five states: New Hampshire, New Jersey, Connecticut, Delaware and Rhode Island

Average travel time to work: 29.9 minutes

Demographics (2024)

Populations: City of Houston - 2,3+ million

Harris County - 4,731,145

Houston Metropolitan Area - 7,122,240

Ethnic diversity:

44.5% Hispanic/Latino; 24% White; 22% Black/African American; 7% Asian; 2.5% Other

Normal daily **maximum temperatures** in Houston: January 62.9°F; April 79.6°F; July 93.7°F; October 82°F. Houston had 56 inches of rain in 2018.

1. How will I balance the PSP program goals along with the categorical clinical requirements?

We have carefully created a customized clinical and block schedule that will allow for protected periods of time each year to work towards program goals. This schedule is unique to PSP residents, as we understand the demands specific to each rotation and the overall clinic load experienced within each year.

2. Will I receive a salary during the research blocks during the PL-2 and PL-3 year?

Yes salary will be provided throughout the entire program and will be the same as for residents in the categorical program.

3. Is there a special application process for the program?

Please apply to the Pediatrician-Scientist Program track in ERAS. Select applicants will be notified to provide additional information.

Frequently Asked **QUESTIONS**

4. Are the tracks ranked separately for the match?

Yes, the PSP program will accept three candidates, separately from those accepted for the categorical program. There will be a separate ranking process for both programs. You will have the opportunity to rank each track that you have applied to and interviewed for. For example, depending on your personal interests and experience after attending the various track interviews, you can rank the PSP first and the Categorical program second. There is a possibility that you can match for the Categorical program and not match for the PSP program since the PSP track has only three spots.

5. Why should I consider the PSP instead of a short track residency?

The PSP is a pathway to independence program and unlike "short-tracking" there are no additional general pediatric clinical requirements to fulfill during fellowship.

6. Houston, Texas?

The Texas Medical Center is the World's Largest medical center and Houston is the fourth largest city in America. Houston just bypassed New York City as the most diverse city in the U.S. and it is the fastest growing major city.

7. What is so unique about the PSP?

The PSP has a protected residency pathway to reconnect you to research, establish your investigative network while focusing intensely on developing your scholarly and investigator skills. The entirety of the 1000+ faculty in the Department of Pediatrics is aligned behind the PSP and your success.



COMMUNITY



CONTACT US

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**Texas Children's
Hospital®**

Baylor
College of
Medicine

PEDIATRICIAN-SCIENTIST PROGRAM

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