UTSouthwestern Medical Center Department of Pediatrics

Pediatric Rheumatology 2023 Annual Report

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Pediatric Rheumatology – 2023 Annual Report

Under the direction of Division Chief Tracey Wright, M.D., the <u>Division of Pediatric</u> <u>Rheumatology</u> at UT Southwestern Medical Center remains the major center for pediatric rheumatology in North Texas. The faculty, fellows, and clinical and administrative staff are committed to excellence in clinical care, transformative research, and quality education with the following mission:

We exist to improve the lives of children with rheumatic disease by delivering first-class, compassionate care, discovering new knowledge, and training the next generation of leaders.

We accomplish this mission by:

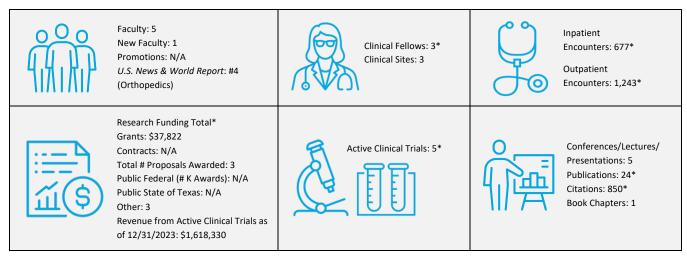
- Providing outstanding multidisciplinary care for children with rheumatic disease
- Fostering inquiry and discovery to advance the field and improve patient outcomes
- Developing the next generation of pediatric rheumatology leaders
- Promoting compassionate advocacy for children with rheumatic disease
- Cultivating a healthy, thriving, inclusive team culture



Tracey Wright, M.D. Associate Professor Division Chief

The Division maintains a busy clinical practice spanning three locations: Scottish Rite for Children Dallas, Scottish Rite for Children Frisco, and Children's Medical Center Dallas. The Division operates the largest and longest-established multispecialty clinic for children with rheumatic disease in the region at Scottish Rite for Children Dallas. We serve a diverse patient population and have a broad referral base from throughout Texas and surrounding states. Our faculty have a wide variety of clinical and research interests, including juvenile idiopathic arthritis, systemic lupus erythematosus, juvenile dermatomyositis, and antiphospholipid antibody syndrome.

Numbers at a Glance



^{*}Sources: Orbit report of RHi032 Organizational Research Dashboard, UTSW Office of Research and Grants Support, Faculty Affairs, Education Alumni Affairs, Clinical Business Operations-invoice creation period for 2023, CVs

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Honors/Awards

Best Doctors/Pediatric Specialists in Dallas, D Magazine

- Julie Fuller, M.D.
- Lorien Nassi, M.D.

Tracey Wright, M.D.

Texas Super Doctors, Texas Monthly

• Julie Fuller, M.D.

Top Conference Locations

Pediatric Rheumatology Symposium, New Orleans, March-April 2023

American College of Rheumatology Convergence, San Diego, November 2023

Education and Training

The Division of Pediatric Rheumatology has a significant commitment to promote new and innovative training strategies for medical students, pediatric residents, and fellows from other specialties, in addition to its Accreditation Council for Graduate Medical Education (ACGME)-accredited Pediatric Rheumatology Fellowship Program.

Medical Students

An elective is available for second- and fourth-year students to learn to develop a working differential diagnosis of arthritis in childhood, perform a comprehensive joint examination, and evaluate pediatric rheumatic disease.

Residents

The Division provides the major instruction to pediatric residents in the evaluation of the musculoskeletal system and the assessment of pediatric rheumatic disease. Division faculty directly teach pediatric residents in the regular departmental clinical conferences as well as those in the inpatient consultation service. A rheumatology elective is available for pediatric residents with an emphasis on care in the ambulatory setting. Residents also work with Division faculty on scholarly projects.

Fellows

Our three-year, ACGME-accredited fellowship program, directed by Dr. Wright, has a mission to develop the next generation of pediatric rheumatology leaders who are committed to multidisciplinary, patient-centered care; the discovery of new knowledge; and compassionate advocacy. Our fellowship provides comprehensive training for three Pediatric Rheumatology fellows (one per year). In the first year of fellowship, the emphasis is on acquiring knowledge and clinical skills in rheumatology. Fellows develop competence in the diagnosis and management of rheumatic disease in children by caring for the large, diverse patient population available at Children's Medical Center Dallas and Scottish Rite for Children. The second and third years of training focus on a quality improvement project or a translational or clinical research project that meets the American Board of Pediatrics requirements for scholarly activity while further developing clinical skills and pursuing advanced training. Program graduates secure positions in major academic institutions throughout the country, with several holding key leadership positions including division chief, fellowship program director, and assistant dean.



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The program provides comprehensive musculoskeletal ultrasound training to fellows to improve their proficiency in the application of this important tool in clinical practice and research. Program components include didactic and hands-on pediatric scanning sessions. Fellows also learn through cadavers and Simulation Center practice sessions.

Research Activities

The Division is actively engaged in translational and clinical research to elucidate disease mechanisms and improve the care of children with rheumatic disease. A large, diverse patient population has provided the ability to conduct studies in several areas, and faculty have been involved in multicenter studies of the pathogenesis and epidemiology of childhood rheumatic disease. Collaborative research with leading pediatric rheumatology translational scientists has garnered grant funding from the National Institutes of Health (NIH) and, most importantly, significantly improved the understanding of the pathophysiology of systemic-onset juvenile idiopathic arthritis and systemic lupus erythematosus. All Division faculty are members of the Childhood Arthritis and Rheumatology Research Alliance (CARRA), an investigator-led collaborative pediatric rheumatology research network with a mission to conduct collaborative research to prevent, treat, and cure pediatric rheumatic disease.

Julie Fuller, M.D., actively participates in the CARRA Juvenile Dermatomyositis Workgroup, studying the evaluation and management of these patients using a virtual platform. She also studies the natural history of calcinosis in juvenile dermatomyositis through a multicenter collaboration with the NIH.

Simrat Morris, M.D., has scholarly interests in fellow medical education with a focus on developing innovative tools to improve self-directed learning.

Lorien Nassi, M.D., focuses her scholarly work on the Division's quality improvement projects, with an emphasis on improving the transition of adolescents with rheumatic disease to adult care.

Elizabeth Sloan, M.D., studies the impact of antiphospholipid antibodies (aPL) on global coagulopathy and the effect of aspirin therapy on attenuating aPL-induced hypercoagulability. She has identified clinical risk factors for the development of arterial and venous thrombosis in pediatric systemic lupus erythematosus (SLE) patients with persistently positive aPL. Dr. Sloan is also examining on-criteria aPL and calprotectin as potential biomarkers for pediatric antiphospholipid syndrome. She has a Scientist Development Award from the Rheumatology Research Foundation to support this work. Dr. Sloan is the Site Principal Investigator for the CARRA Registry, a multisite observational registry whose goal is to understand the long-term outcomes and long- and short-term safety and effectiveness of the medications used to treat pediatric rheumatic disease. She co-leads the CARRA SLE-Antiphospholipid Syndrome (APS) Workgroup and is a Co-Investigator in a collaboration between CARRA and the Pediatric Rheumatology Education Association to improve the clinical characterization of pediatric APS.

Tracey Wright, M.D., is the Principal Investigator for the Clinical and Sample Core of the National Institute of Arthritis and Musculoskeletal and Skin Diseases-funded Center for Lupus Research (CLR), an integrated, cooperative center based at UT Southwestern, the Drukier Institute for Children's Health at Weil Cornell Medicine, and the Jackson Laboratory for Genomic Medicine. The goal of the CLR is to advance the knowledge of pathways and mechanisms that contribute to the development and amplification of human SLE and to develop assays and tools to 1) monitor these dysfunctional pathways and 2) stratify patients toward personalized therapies.



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Clinical Activities

Pediatric Rheumatology offers expert evaluation, counseling, and treatment in the broad spectrum of rheumatic disease found in children, including juvenile idiopathic arthritis, systemic lupus erythematosus, juvenile dermatomyositis, morphea/scleroderma, vasculitis, inflammatory uveitis, and autoinflammatory syndromes. Clinical services are offered at Scottish Rite for Children Dallas, Scottish Rite for Children Frisco, and Children's Medical Center Dallas. The Rheumatology Clinic at Scottish Rite for Children Dallas is one of the longest-established pediatric rheumatology clinics in the country and is the major referral center for North Texas. Beyond evaluating and treating children with suspected rheumatic diseases, the pediatric rheumatologists coordinate multidisciplinary care with other Divisions and ancillary services.

Patient Statistics

Rheumatology Patient Visits Per Location by Year:

Scottish Rite for Children Dallas	2019	2020	2021	2022	2023
Outpatient Visits	2,946	2,701	3,029	2,980	2,548
New Outpatient Visits	532	426	594	540	738
Infusions	735	502	567	658	848

Scottish Rite for Children Frisco	2019	2020	2021	2022	2023
Outpatient Visits	1,463	1,318	1,403	1,301	1,009
New Outpatient Visits	459	410	388	265	249
Infusion	152	263	262	126	154

Children's Medical Center Dallas	2019	2020	2021	2022	2023
Outpatient Visits	1,022	892	1,085	1,105	907
New Outpatient Visits	378	306	451	475	331
Infusions	258	251	200	202	223

Top Peer-Reviewed Publications and Book Chapters

- Agharokh L, Mamola K, Yu AG, Medina AL, Gurram B, Fuller J, Park JY, Chen W, Rajaram V, Hammer MR, Waugh JL.
 <u>Cachexia, chorea, and pain in chronic nonbacterial osteitis and inflammatory bowel disease: a case report.</u> J Med
 Case Rep. 2023 May 31;17(1): 237.PMID: 37254165
- Akkoyun EB, Most Z, Katragadda H, Yu A, Nassi L, Oakman N, Ginsburg S, Maamari M. Impact of anakinra use on clinical outcomes in children with moderate or severe multisystem inflammatory syndrome in children: a propensity score matched retrospective cohort study. Pediatr Rheumatol Online J. 2023 Nov 23;21(1):141. PMID: 37996856
- Gofshteyn JS, Mansfield L, Spitznagle J, Balasubramanian P, Cardenas J, Miller T, Gu J, Wang X, Punaro M, Fuller J, Nassi L, Stewart K, Ohouo M, Stagnar C, Baisch J, Walters L, Wang Y, Yan H, Rinchai D, Chaussabel D, Caielli S, Hong S, Onel K, Wright T, Pascual V. <u>Association of juvenile dermatomyositis disease activity with the expansion of blood memory B and T cell subsets lacking follicular markers.</u> Arthritis Rheumatol. 2023 Jul;75(7):1246-1261. PMID: 36648920
- 4. Weiss PF, Brandon TG, Ryan ME, Treemarcki EB, Armendariz S, **Wright TB**, Godiwala C, Stoll ML, Xiao R, Lovell D. <u>Development and validation of a juvenile spondyloarthritis disease flare measure: ascertaining flare in patients with inactive disease.</u> Arthritis Care Res (Hoboken). 2023 Feb;75(2):373-380.PMID: 34363343

