

SECTION OF IMMUNOLOGY, ALLERGY AND RHEUMATOLOGY



SECTION CHIEF

Sandeep Agarwal, M.D., Ph.D.

The year 2019 has been an exciting year as we continue our growth and building for the future of the Section of Immunology, Allergy and Rheumatology. Our faculty, trainees, and staff make important contributions to the education, research and clinical missions of Baylor College of Medicine, which we herein recognize.

This report contains some of achievements of the year past. This is our foundation from which we will continue to build the future of Immunology, Allergy and Rheumatology at Baylor College of Medicine. I am honored and excited to lead our talented and committed Section into a bright future.

Sandeep Agarwal, M.D., Ph.D.
Associate Professor
Chief, Section of Immunology, Allergy and Rheumatology

HIGHLIGHTS

One of the most important highlights in 2019 is the restart of the Allergy and Clinical Immunology Clinic in the Faculty Group Practice. With the arrival of Dr. Sanjiv Sur, a physician-scientist, we are not only providing outstanding care for patients with allergic diseases at the Baylor Clinic, but we have also increased the depth of our research portfolio. The Allergy and Clinical Immunology Clinic will be growing in the coming year and will also help the Section provide related clinical services in our other clinical pavilions as well.

In the past year, we have seen continued success in our research programs. Faculty members in the Section have published 53 peer-reviewed manuscripts. Research programs were supported by 20 grants from the National Institutes of Health, CPRIT, and foundations, including one grant supporting the start of our clinic trials program. Faculty members have also given 18 invited seminars to local, national and international audiences. Finally, our Section is the home of the Biology of Inflammation Center, which provides research and educational support for immune-related diseases across the entire College.

I would also like to recognize all of the important contributions that our Section makes in the clinical and educational missions. Our physicians provide outstanding, patient-centered care across all of our clinical pavilions, including Baylor Clinic, Baylor St. Luke's Medical Center, the Michael E. DeBakey

VA Medical Center, Texas Children's Hospital, Harris Health Smith Clinic, and Ben Taub Hospital. All levels of trainees, including medical students, graduate students, physician-assistant students, internal medicine residents, postdoctoral fellows and clinical fellows, benefit from our commitment to mentoring and teaching. The quality of our Rheumatology and Allergy fellowship program applicants and matriculating fellows and the programs they train in continues to climb. The Immunology, Allergy and Rheumatology faculty is completely dedicated to the clinical and scholarly development of our fellows. We train outstanding physicians and our graduates obtain an outstanding foundation for their subsequent careers, in both academic and community settings.

FACULTY

Section Chief: IAR

- Sandeep K. Agarwal, M.D.

Faculty – Rheumatology

- Joan Appleyard, M.D.
- Kalpana Bhairavarasu, M.D.
- Onome Ifoeze, M.D.
- Grace Hsiao-wei Lo, M.D.
- Rashmi Maganti, M.D.
- Dona Poulouse, M.D.
- Tiphonie P. Vogel, M.D.
- Michael C. Wu, M.D.

Faculty – Immunology and Allergy

- David B. Corry, M.D.

- David B. Engler, M.D.
- Sana Hasan, M.D.
- Evan Li, M.D.
- Frank Orson, M.D.
- Roger D. Rossen, M.D.
- Sanjiv Sur, M.D.

Faculty – Research

- Antony Rodriguez, Ph.D.
- Li-Yuan Yu-Lee, Ph.D.

Emeritus Faculty: Rheumatology

- Donald M. Marcus, M.D.

RESEARCH ACTIVITIES

Bhairavarasu, Kalpana, M.D.

- Implementing Decision Aid for Lupus – IDEAL STRATEGY; Patient-Centered Outcomes Research Institute

Corry, David, M.D.

- Fungal Pathogenesis of Moderate to Severe Asthma; NIH (R01)
- Immunology Scientist Training Grant; NIH/NIAID
- Mechanism and Function of Let-7, a Novel Modulator of Th17-dependent Emphysema; NIH/NHLBI (R01)
- The Houston “Breathe Easy” Healthy Homes-Based Model; USDHUD

Lo, Grace, M.D.

- Feasibility of a Novel Approach to Studying Early Knee Osteoarthritis: an Offspring Study; NIH/NIAMS
- A Pilot Randomized Controlled Trial of Hand Traction for Nodal Osteoarthritis; NIH/NIAMS

Maganti, Rashimi, M.D.

- A Randomized, Double-Blind Placebo Controlled Multi-Center Phase 2 Dose Ranging Study to Assess the Safety and Efficacy of Multiple VAY736 Doses Administered Subcutaneously in Patients with Moderate to Severe Primary Sjogren’s Syndrome; Novartis Pharmaceuticals

Rodriguez, Antony, M.D.

- Role of Let-7 MicroRNA in Chronic Obstructive Pulmonary Disease (Rodriguez); Gillson-Logenbaugh Foundation Award
- Mechanism and Function of Let-7, A Novel Modulator of Th17-Dependent Emphysema; NIH/NHLBI (R01)

Sur, Sanjiv, M.D.

- Role of Cytosolic DNA-Multiprotein Interactome in Allergic Airway Inflammation; NIH/NHLBI (R01)
- Role of Cytosolic DNA Sensor in Allergic Airway Inflammation; Dept. of Defense Grant

Vogel, Tiphannie, M.D.

- BRIDGE, Baylor Rheumatology Initiative: Developing and Guiding Engagement; Rheumatology Research Foundation Medical Student Preceptorship
- BCM Clinical Site for an Undiagnosed Diseases Network; NIH
- A Targeted Approach to Cytokine Blockade in Juvenile Arthritis (Vogel); Thrasher Research Fund
- Validating STAT3 as a Therapeutic Target in Arthritis (Vogel); Arthritis National Research Foundation Grant

Yu-Lee, Li-Yuan, M.D.

- Endothelial-to-Osteoblast Conversion in Prostate Cancer Bone Metastasis; NIH (R01)
- Polo-like Kinase 1 as a Novel Molecular Target for the Treatment of Asthma; Biology of Inflammation Center Pilot Grant
- Regulation of Dormancy of Metastatic Prostate Cancer Cells by Bone Microenvironment; CPRIT
- A Novel Therapy Targeting Prostate Cancer-Induced Aberrant Bone Formation; CPRIT

HONORS AND AWARDS

Agarwal, Sandeep, M.D.

- Cullen Trust for Healthcare Endowed Chair in Immunology

Corry, David, M.D.

- Clarence and Irene H. Fulbright Chair in Pathology

Rodriguez, Antony, Ph.D.

- Gillson Longenbaugh Foundation Award

Vogel, Tiphannie, M.D., Ph.D.

- Kelly Award for Juvenile Arthritis Research Arthritis National Research Foundation Scholar

Sur, Sanjiv, M.D.

- Provisional Patent. “Methods and Compositions Related to Recombinant Neil2.” Equal Inventors Sanjiv Sur, Tapas Hazra and Ashok Chopra for use of Neil2 in many types of inflammation.
- Provisional Patent. “BRD4 Inhibitor Treatment of IgE-Mediated Diseases.” Equal Inventors Sanjiv Sur, Allan Brasier, Jia Zhou, Bing Tian for use of BRD4 Inhibitor in allergic diseases.