OVERVIEW

The Division of Immunobiology was created in 2006 with the goal of helping turn basic science research into real-life medicine by performing translational research related to human immunology and the biology of human immune responses.

Clinical faculty within the Division of Immunobiology have expertise in medicine, infectious diseases as well as allergy & clinical immunology. This interdisciplinary group is working together to provide state-of-the-art clinical care and interdisciplinary research opportunities.

Research in the division includes investigations of the basic mechanisms of mucosal and systemic immunity protective against mucosally transmitted, chronic intracellular pathogens. Molecular biological and immunological techniques are being used to develop and test new vaccines in animal models and human vaccine trials. In addition, other research projects include studies of regulatory T cells present among tumor-infiltrating lymphocytes, and the biologic effects of IL-12 cytokine family members in infections, autoimmune disease and cancers. Clinical research projects focus on studies of the safety and immunogenicity of new TB vaccines and trials of new state-of-the-art treatments for allergic diseases.

A component of the division, the Section of Allergy and Clinical Immunology is actively involved in the missions of clinical care, education and research.

The section provides a comprehensive range of diagnostic, therapeutic and consultative services for allergic diseases, asthma and immune disorders. These include allergy skin testing to airborne allergens and foods, lung spirometry and a number of special services including direct challenge testing, and desensitization for inhalant, insect venom and drug sensitivities. A nasal and paranasal sinus laboratory is used to evaluate nasal and sinus problems with fiberoptic nasopharyngoscopy. With surgeons from the Department of Otolaryngology (ear, nose and throat disorders), the section's faculty physicians participate in a multidisciplinary comprehensive sinus clinic serving patients with chronic sinusitis. The section staffs the Allergy & Immunology Service at the John Cochran VA Medical Center. The section also performs specialized diagnostic laboratory testing for allergic bronchopulmonary aspergillosis.

The section is actively involved in teaching of medical students and internal medicine residents by providing both an elective rotation that attracts large numbers of trainees and a variety of didactic lectures. The section also offers a two year subspecialty residency/fellowship training program in allergy and immunology accredited by the American Council on Graduate Medical Education, in collaboration with the Pediatric Division of Allergy and Immunology. This program is highly sought after by graduates of internal medicine, pediatrics and medicine-pediatrics residency programs from around the country.

Annually, the section has 10-15 active clinical research protocols studying asthma, allergic bronchopulmonary aspergillosis, rhinitis, sinusitis, nasal polyps, and hereditary angioedema.
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Section faculty serve on numerous Medical School and Saint Louis University Hospital committees, as well as being highly active nationally in subspecialty professional organizations, and providing service to the FDA, the National Institutes of Allergic and Infectious Diseases (NIAID), and Board of Directors of the American Board of Allergy and Immunology.

HONORS AND RECOGNITION

Mark S. Dykewicz, M.D.
Best Doctors, St. Louis Magazine

American Board of Allergy and Immunology, a Conjoint Board of the American Board of Internal Medicine and the American Board of Pediatrics Board of Directors, Examination Question Committee, Task Force on Maintenance of Certification (MOC), Nominating Committee.

American Academy of Allergy, Asthma and Immunology/American College of Allergy, Asthma and Immunology: Joint Task Force on Practice Parameters in Allergy, Asthma and Immunology; Chair, Workgroup on Rhinitis Parameter.

American College of Allergy, Asthma and Immunology: Vice-Chair, Rhinitis/Sinusitis Committee.

FDA Consultant, Center for Drug Evaluation and Research (CDER).

National Institute of Allergic and Infectious Disease, Division of Microbiology and Infectious Diseases: Chair of Data Safety Monitoring Board, Independent Safety Monitor for All U.S. Sites: A Phase III, Randomized, Double-Blinded, Placebo-Controlled, Multi-Center Study To Evaluate The Immunogenicity, Safety, and Tolerability Of CSL Limited Inactivated Influenza Vaccine In Adults Greater Than Or Equal To 18 to Less Than 65 Years Of Age. (Protocol 06-0016).

Chair of Safety Monitoring Committee: Mix and Match of Trivalent Inactivated Influenza (TIV) and Live Attenuated Influenza Vaccine (LAIV), a Phase I Safety, Immunogenicity, and Viral Shedding Study (Protocol 04-101).

Chair, Safety Monitoring Committee: Protocol Number: 06-0082 Phase 1A Clinical Study with DAS181: Double-Blind, Randomized, Placebo-Controlled, Single Dose Escalating Study in Healthy Adults.

Chair, Safety Monitoring Committee: A Phase I/II randomized study of the safety and immunogenicity of vaccination strategies using one or two clades and different schedules of H5N1 unadjuvanted, inactivated subvirion influenza vaccines in H5 naïve healthy adults (Protocol 07-0019).

GRANTS AND CONTRACTS HELD BY EACH FACULTY MEMBER

Anupma Dixit, Ph.D.
HUD MOLHH0167-08, “Long-Term Fungicidal Efficacies of Most Favored Antimicrobial Products in Mold Remediation,” 2008-2010, $500,000.

Daniel F. Hoft, M.D., Ph.D.
DIVISION OF IMMUNOBIOLOGY


Jianguo Liu, Ph.D.
Vasculitis Foundation, “PARP-1 in CSS-associated IL-10 Promoter Polymorphisms,” 2009-2010, $50,000.

During fiscal year 2009 the Division of Immunobiology had eight active studies with different sponsors. Due to confidentiality agreements and non-publicity clauses in contracts with sponsors, specific information pertaining to industry sponsored research may not be released in public documents.