Dear Colleague,

The rheumatology program at NewYork-Presbyterian Hospital is comprised of faculty affiliated with Columbia University College of Physicians and Surgeons and Weill Cornell Medical College and Hospital for Special Surgery. The program provides state-of-the-art care to patients with the broad range of inflammatory and autoimmune diseases, pursues groundbreaking research at both the laboratory level and through clinical studies, and offers comprehensive training to medical residents and fellows.

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**Program Highlights**

The Division of Rheumatology at NewYork-Presbyterian/Columbia has a long and distinguished history in the study and treatment of rheumatic diseases and in the mentoring and training of leaders in the field of rheumatology. The Division’s 12 rheumatologists treat the full range of autoimmune diseases and inflammatory disorders, including inflammatory arthritis, ankylosing spondylitis, vasculitis, together with polyarteritis nodosa and Wegener’s granulomatosis, osteoarthritis, systemic lupus erythematosus, scleroderma, Sjögren’s syndrome, and myositis, with polymyositis and dermatomyositis.

In 2012, the Division’s faculty had 1,416 new office visits and 4,556 follow-up visits, and its Infusion Unit treated 96 patients with multiple visits, totaling 600 infusions. Clinical services also include an injection clinic that employs ultrasound technology to allow for more targeted treatments.

With a high prevalence of systemic lupus erythematosus in the African-American and Hispanic communities of Northern Manhattan surrounding NewYork-Presbyterian/Columbia, the rheumatologists work closely with nephrologists and obstetricians to address the increased risk for renal disease and pregnancy lost brought on by the disease.

A recognized leader in rheumatology and immunology research, with a major focus on rheumatoid arthritis and lupus, the Division currently has 18 clinical trials underway to provide valuable insight into the development of more effective treatments.

The Division of Rheumatology at NewYork-Presbyterian/Weill Cornell and Hospital for Special Surgery is comprised of faculty jointly appointed at Weill Cornell Medical College and Hospital for Special Surgery. The Division is the largest rheumatology program in the country, with 31 full-time rheumatologists and three pediatric rheumatologists, seeing 9,000 new patients and 28,000 follow-up patients per year, providing both outpatient and inpatient care.

The Division features an eight-bed infusion unit that accommodates over 4,600 treatments per year, and two dedicated beds for pediatric infusion, and administers state-of-the-art biologic therapies to patients with systemic autoimmune and inflammatory diseases.

Division faculty lead 15 investigator-initiated and industry-sponsored drug trials per year, as well as more than 40 approved clinical research studies per year, giving patients access to medications not available elsewhere. The clinical and academic activities of the Division are organized around Centers of Excellence in Lupus and Antiphospholipid Syndrome; Inflammatory Arthritis; Scleroderma, Vasculitis and Myositides; Bone Health and Osteoporosis; Osteoarthritis; and Pediatric Rheumatology. The Division’s clinicians work closely with their colleagues engaged in laboratory research studies, as well as orthopedic surgeons, to advance the care of patients with rheumatic diseases.

**Faculty News**

Joan M. Bathon, MD, Chief of Rheumatology, NewYork-Presbyterian/Columbia, continues to serve as Editor-in-Chief of the American College of Rheumatology journal, *Arthritis & Rheumatism*. Dr. Bathon has published more than 120 journal articles and book chapters, with a focus on mechanisms of inflammation in arthritis, biologic treatment of rheumatoid arthritis, and biomarkers in inflammatory arthritis.
Franck J. Barrat, PhD, recently joined the Autoimmunity and Inflammation Program in the Division of Rheumatology at Hospital for Special Surgery. An experienced translational basic scientist with expertise in the function and regulation of immune system cells in the pathogenesis of lupus, Dr. Barrat, who was previously with Roche as a Distinguished Scientist in the Inflammation Discovery and Translational Areas, is internationally recognized for his work in drug discovery – from target identification to proof-of-mechanism clinical studies.

In 2013 NewYork-Presbyterian/Columbia welcomed Elana J. Bernstein, MD, to the Division of Rheumatology. Dr. Bernstein, who has a particular interest in scleroderma, vasculitis, and myositis, completed her residency at Massachusetts General Hospital and a fellowship in rheumatology at Hospital for Special Surgery.

George D. Kalliolias, MD, PhD, a physician-scientist in the Division of Rheumatology at Hospital for Special Surgery, will be honored with the 2014 Sontag Fellowship in recognition of his advancement of promising research in rheumatoid arthritis. Dr. Kalliolias was chosen as this year’s fellow from a class of 15 researchers who will be receiving grants from the Arthritis National Research Foundation, in partnership with The Sontag Foundation.

Research Initiatives

The Role of Citrullinated Proteins in Lung Diseases in RA. Pulmonary complications and, in particular, interstitial lung disease, represent a leading contributor to mortality in patients with rheumatoid arthritis. Jon T. Giles, MD, and Joan M. Bathon, MD, and their colleagues at NewYork-Presbyterian/Columbia discovered that the more anti-citrullinated peptide antibodies (ACPA) that were present, the more likely patients were to have features of interstitial lung disease – suggesting a possible role for ACPA in its pathogenesis. The researchers are now seeking to identify whether or not the antibodies are just markers of the disease or if they have some pathogenic effect. [Annals of the Rheumatic Diseases. 2013 May 28. Epub ahead of print.]

A New Perspective on Lupus Nephritis. About 50 percent of patients who develop lupus nephritis do not adequately respond to current therapies. While the treatment of lupus is currently driven by the concept of an antibody-mediated injury, the chronic injury in renal disease does not appear, for many patients, to fit into that paradigm. Robert J. Winchester, MD, former Chief of Rheumatology at NewYork-Presbyterian/Columbia, in conjunction with Vivette D. D’Agati, MD, Director of the Renal Pathology Laboratory at Columbia, and her colleagues discovered that the immunologic characteristics of the infiltrating CD4+ and CD8+ T-cells in the lupus kidney indicate that they have the potential to mediate injury, which may be relevant to the development of progressive renal failure. [Arthritis & Rheumatism. 2012 May;64(5):1589-600.]

Expediting Treatment for Early Rheumatoid Arthritis. Prior to joining Hospital for Special Surgery, Vivian P. Bykerk, MD, served as lead investigator of the Canadian early ArThritis CoHort (CATCH), an ongoing multicenter research project on early inflammatory arthritis. At the 2013 Annual Meeting of the American College of Rheumatology, Dr. Bykerk presented findings of this research that demonstrated delaying treatment could greatly increase the likelihood that patients will suffer worse disability two years out. Dr. Bykerk continues this research as principal investigator of CATCH-US, a parallel study in the United States. [Rheumatology International. 2014 Jan;34(1):85-92. Journal of Rheumatology. 2013 Aug;40(8):1259-67.]

Predicting Poor Pregnancy Outcomes in Lupus Patients. Researchers, led by Jane E. Salmon, MD, Director of the Lupus and APS Center of Excellence at Hospital for Special Surgery, have identified a biomarker that may predict poor pregnancy outcomes in lupus patients. The study, presented at the 2013 American College of Rheumatology Annual Meeting, determined that increased levels of an anti-angiogenic protein called sFlt1 in pregnant lupus patients placed them at increased risk of placental insufficiency and preeclampsia.