

Rheumatology ADVANCES

New Building for Transformative Medicine

Home to the Orthopaedic and Arthritis Center

In October, the first patients were welcomed into the Brigham and Women's new Building for Transformative Medicine, a state-of-the-art translational research building designed to foster clinical and research collaboration to provide innovative care.

By bringing together orthopaedic and musculoskeletal investigators and caregivers in one location, the building aims to accelerate the translation of research into advances in the precision and personalization of patient care.

"This addition to Brigham and Women's Hospital represents a new era of medical discovery and innovation, where caring and curing happen under one roof and patients are at the center of it all," said Michael B. Brenner, MD, Chief, Division of Rheumatology, Immunology, and Allergy.

The building consolidates outpatient care for orthopaedics and rheumatology, bringing together clinical care, research and education. It also features eight floors of research space, including basic, clinical and translational research, patient information and consent rooms for clinical trials, and an advanced imaging suite that will include a new-generation 7.0 Tesla MRI upon installation later this year.



Michael B. Brenner, MD Chief, Division of Rheumatology, Immunology, and Allergy

For more information on the Building for Transformative Medicine, visit brighamandwomens.org/BFTM





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Page 2

Landmark Study Evaluates Antifibrotic Therapy in Patients with Interstitial Lung Disease Associated with Rheumatoid Arthritis

Page 3

Multidisciplinary Team Delivers Rapid Care for Patients with Giant Cell Arteritis to Prevent Irreversible Vision Loss and Other Serious Complications

Page 4

BWH News

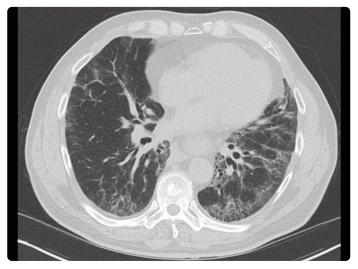
Landmark Study Evaluates Antifibrotic Therapy in Patients with Interstitial Lung Disease Associated with Rheumatoid Arthritis

Experts in the Lung Center at Brigham and Women's Hospital (BWH) are leading a groundbreaking trial to assess the use of antifibrotic therapy in patients with rheumatoid arthritis-related interstitial lung disease (RA-ILD).

"Improvement in the management of articular and cardiovascular effects of rheumatoid arthritis has reduced morbidity and mortality of RA patients, but we are challenged with addressing severe respiratory complications in many of these patients, particularly as they age," said Ivan O. Rosas, MD, Director of the Interstitial Lung Disease Program at BWH. "There are currently no effective treatments for progressive fibrotic lung disease in patients with rheumatoid arthritis."

International Study in RA-ILD

Dr. Rosas is the International Principal Investigator of the first randomized clinical trial testing medication for pulmonary fibrosis in rheumatoid arthritis patients. Scheduled to open in early 2017, this double-blinded study (Phase II Study of Safety, Tolerability and Efficacy of Pirfenidone in Patients with Rheumatoid Arthritis Interstitial Lung Disease) will enroll approximately 270 adult participants (ages 18 to 85) at 16 sites in the United States, 10 sites in the United Kingdom, and four sites in Canada. Patients will be randomized to receive either pirfenidone or placebo for 52 weeks. The primary outcome of the study is to assess the efficacy of pirfenidone in RA-ILD as defined by progression-free survival over the course of the study.



Chest scan of a patient with rheumatoid arthritis and interstitial lung disease

"Patients with rheumatoid arthritis-associated interstitial lung disease have clinical features that closely resemble idiopathic pulmonary fibrosis, so we anticipate that the results of previous trials can be quickly translated to the RA-ILD patient population," said Dr. Rosas. "In addition, we expect that his trial will provide us with a tremendous amount of information about the natural history of RA-ILD and help us better understand this vastly understudied patient population."

Eligible participants must meet 2010 ACR/EULAR criteria for RA, as well as ILD, determined by imaging as well as lung biopsy (when available). Participants also are required to have a percent predicted FVC > 40 and < 80 and percent predicted DLCO > 30 and < 80 at screening. The trial is inclusive of patients receiving stable doses of currently available treatments for RA. Specialists in the Lung Center at BWH also are participating in a second study of antifibrotic agents for the treatment of systemic sclerosis-associated interstitial lung disease (SSc-ILD) and other connective tissue diseases.

For more information regarding the RA-ILD trial, please contact Dr. Rosas at (617) 732-7821 or irosas@partners.org.

Changing the Standard of Care for Pulmonary Fibrosis

Researchers at BWH were key contributors in the Idiopathic Pulmonary Fibrosis Clinical Research Network (IPFnet) studies that established that steroids or other forms of immunosuppression should no longer be used to treat idiopathic pulmonary fibrosis (N Engl J Med. 2012 May 24;366(21):1968-77.). Additional multicenter clinical trials that have led to the groundbreaking approval of two new antifibrotic drugs, pirfenidone and nintedanib, have been shown to slow progression of idiopathic pulmonary fibrosis (N Engl J Med 2014;370:2071–2082 and N Engl J Med 2014;370:2083–2092).

"Collectively, these studies have revised the management of patients with IPF and have opened opportunities, such as our new study in RA-ILD, to evaluate the use of these recently approved antifibrotic therapies in additional patient populations impacted by pulmonary fibrosis," said Dr. Rosas.



Ivan O. Rosas, MD Interstitial Lung Disease Program, **Lung Center**

Multidisciplinary Team Delivers Rapid Care for Patients with Giant Cell Arteritis to Prevent Irreversible Vision Loss and Other Serious Complications

Recently established to expedite care for patients with giant cell arteritis, the new Fast Track Clinic for Giant Cell Arteritis comprises a multidisciplinary team of rheumatologists, vascular medicine specialists, vascular surgeons, and pathologists from the Division of Rheumatology, Immunology and Allergy, Division of Cardiovascular Medicine, Division of Vascular and Endovascular Surgery, and Department of Pathology at Brigham and Women's Hospital.

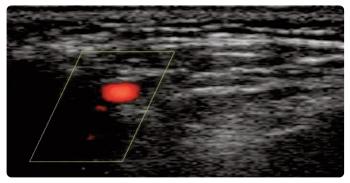
"While giant cell arteritis is the most common of the systemic vasculitides, it can be associated with serious complications," said William P. Docken, MD, Co-Director of the Fast Track Clinic for Giant Cell Arteritis. "Currently, permanent vision loss occurs in 10-20 percent of reported case series, but this is preventable with prompt diagnosis and timely initiation of treatment."

To prevent these complications, patients are quickly evaluated within one day of referral by a rheumatologist and by vascular ultrasound examination of the temporal and axillary arteries to diagnose giant cell arteritis. If warranted, urgent temporal artery biopsy also is arranged.

Specialized Noninvasive Imaging for Definitive Diagnosis

With a resolution of 0.1mm, vascular ultrasound can visualize the temporal arteries and their branches. In the presence of active arteritis, a hypochogenic area appears around the vascular lumen. The technique is noninvasive and provides immediate data; additionally, it can visualize large arteries, such as the axillary and subclavian arteries. More than 400 vascular ultrasound examinations have been conducted in the Vascular Lab at Brigham and Women's Hospital over the past three years.

Access and Referrals - If you would like to refer a patient, please call our dedicated line at (617) 732-9562 or email us at fasttrackgca@partners.org.



Vascular ultrasound of the temporal artery (normal — no "halo" effect around artery)



Vascular ultrasound of the temporal artery (giant cell arteritis is present — as seen by the darker "halo" effect around the artery)



William P. Docken, MD Co-Director, Fast Track Clinic for Giant Cell Arteritis, Division of Rheumatology, Immunology and Allergy

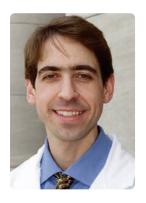


Piotr S. Sobieszczyk. MD Co-Director, Fast Track Clinic for Giant Cell Arteritis, Division of Cardiovascular Medicine

Center for Arthritis and Joint Diseases

The Brigham and Women's Hospital Center for Arthritis and Joint Diseases evaluates and treats the entire spectrum of the more than 100 causes of arthritis, with a specialized focus in rheumatoid arthritis, systemic lupus erythematosus, psoriatic arthritis, and spine disorders. From its origins as the Robert Breck Brigham Hospital, the first teaching hospital in this country wholly devoted to the treatment of rheumatoid arthritis and related diseases, the Center has become a focus for pioneering research, innovative therapeutics and world-class care for arthritis sufferers. The Division of Rheumatology, Immunology and Allergy has among the largest research funding base and investigative team of any rheumatology and allergy program in the country. Our team of over 40 board-certified rheumatologists and allergists is one of the largest and most diversified such teams in the country. Our physicians collaborate with specialists in bone and joint radiology, occupational and physical therapy, podiatry, orthopaedics, pain management, dermatology, physiatry, neurology and other services to provide comprehensive and effective arthritis care to more than 30,000 patients each year.

BWH NEWS



Peter A. Nigrovic, MD, Receives \$4.4M NIAMS Grant for Rheumatic Disease Resource Center

Peter A. Nigrovic, MD, director of the Center for Adults with Pediatric Rheumatic Illness (CAPRI) in the Division of Rheumatology, Immunology and Allergy at Brigham and Women's Hospital, was recently awarded a five-year, \$4.4 million grant from the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) to fund the Joint Biology Consortium (JBC). JBC is a cooperation between Brigham and Women's Hospital, Boston Children's Hospital, the Broad Institute and more than 10 other hospitals and research centers. The goals of the consortium are to accelerate research into how inflammatory arthritis develops – using human tissue and blood samples, plus cutting-edge analytic methodologies - and to mentor junior investigators.

Co-investigators on the grant include Elizabeth Karlson, MD, of BWH Rheumatology, Allergy and Immunology; James Lederer, PhD, of BWH Department of Surgery, BWH; Jeffrey Sparks, MD, MMSC, of BWH Rheumatology, Allergy and Immunology; Lauren Henderson, MD, of Boston Children's Hospital; and Chad Nusbaum, PhD, of Broad Technology Labs. Dr. Nigrovic is an Associate Professor of Medicine and an adult and pediatric rheumatologist whose laboratory studies how the immune system mediates arthritis.

Gang Li, PhD, Received Kelly Award from Arthritis National Research Foundation

Gang Li, PhD, a researcher in the Division of Rheumatology, Immunology and Allergy at Brigham and Women's Hospital, recently received a Kelly Award from the Arthritis National Research Foundation (ANRF) for outstanding research on juvenile arthritis. Dr. Li's work focuses on developing novel techniques to translate genome-wide association studies data into biological mechanisms underlying the contribution of disease-associated genetic variants. The ANRF supports innovative researchers studying new treatments and cures for arthritis and related autoimmune diseases.





Jeffrey Sparks, MD, MMSc Named Chair of American College of Rheumatology **Early Career Investigators Committee**

Jeffrey Sparks, MD, MMSc, of the Division of Rheumatology, Immunology and Allergy, was recently selected as chair of the American College of Rheumatology's (ACR) Early Career Investigators Committee for a three-year term. The committee is composed of national leaders in rheumatology research who are at an early stage in their careers. The committee focuses on issues pertinent to encouraging research as a career in rheumatology, such as mentorship, funding opportunities, scientific writing and career development. Dr. Sparks was selected by the ACR after serving on the committee for two years. As part of his duties, he will also serve as the Early Career Investigators Committee's representative on the ACR's Committee on Research.

Contact Us – To learn more about our services or to refer a patient, please call our referral coordinators at (617) 732-9894



