RESEARCH
OHSU DIVISION OF ARTHRITIS & RHEUMATIC DISEASES
JULY 2020

EPIDEMIOLOGY & TRANSLATIONAL MEDICINE
clinical trials, administrative databases, health disparities, and bioinformatics

BASIC SCIENCE
immunology, microbiology, HLA-B27, omics, RNAi and ssDNA aptamers

FRONTIERS IN EDUCATION
medical education, coaching for academic achievement, and interactive online modules

Mount Hood, OR
Photo by Sean Estegaard
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Dear fellow applicants,

How are you? Thank you for considering our rheumatology training program. Our division brings together a multi-generational group of faculty from a geographically wide background and with diverse academic interests.

Members of our faculty have gathered international recognition in research areas including spondyloarthritis, uveitis, vasculitis, animal models of rheumatoid arthritis and osteoarthritis, the microbiome, as well as shared decision-making and health care disparities. About half of our faculty are supported by the National Institutes of Health (NIH) or Veterans Affairs (VA) Merit Award funding and pursue bench, translational, and clinical research.

We have a strong presence at OHSU and the VA, whether in research oversight, department leadership, or in the Dean’s Office. Our fellows are an amazing group and foster a spirit of collegiality and academic curiosity that keeps our faculty bright and spirited.

We hope you enjoy reading about our faculty’s interests!

P.S. If you like what you read and want to request a faculty member during your interview, please email Travis Cutter, our fellowship coordinator, cutler@ohsu.edu, or use the QR code here to do it for you with your camera phone!

Dr. Schwab
Pascale Schwab, MD
Program Director

"We keep moving forward, opening new doors, and doing new things, because we’re curious and curiosity keeps leading us down new paths."

WALT DISNEY
OHSU Fellow

RESEARCH TIMELINE

YEAR 1

JULY-AUGUST
Meet with research coaches, Dr. Barton and Dr. Friedman, for a research feasibility overview

JANUARY - FEBRUARY
Present research idea (i.e. background and hypothesis) to rheumatology faculty during journal club and collect feedback

SEPTEMBER - DECEMBER
Meet with research coach monthly to narrow down research idea and start discussions with various research faculty

JUNE
Submit abstract to ACR Annual Meeting Meeting and present findings in progress at division retreat

RESEARCH BLOCKS
Work on IRB approval and collect data

If abstract not submitted to ACR in Year 1, submit abstract in Year 2 to either EULAR Annual Congress in January or ACR Annual Meeting in June

Write up manuscript

YEAR 2

Photo by Knopka Ivy
Dr. Deodhar has been dedicated to spondyloarthritis research (axial spondyloarthritis and psoriatic arthritis), including epidemiology, diagnosis, treatment guideline development and clinical trials of novel agents. Together with the Department of Dermatology, he has created the Center for Psoriasis and Psoriatic Arthritis Excellence (CEPPA) at OHSU, a multidisciplinary clinic which has provided care for patients with psoriasis and psoriatic arthritis and allowed the collection and analysis of a CEPPA registry.

Fellows will have opportunity to participate in small ‘compact’ clinical projects in the field of spondyloarthritis and psoriatic arthritis, as well as in writing case reports, case series, review articles, etc.
Jennifer L. Barton, MD, MCR
Associate Professor of Medicine
VA Portland Rheumatology Section Chief

Dr. Barton is an academic rheumatologist. Her research focus is on health communication and rheumatic diseases. Dr. Barton is the recipient of a K23 award from NIAMS to examine goal concordance between diverse populations with rheumatoid arthritis (RA) and their rheumatologists. She has participated in studies to examine disparities in RA and, with colleagues, developed and tested a low literacy medication guide and decision aid tool for vulnerable patients with RA. The overarching goal of Dr. Barton’s research is to study and identify ways to improve communication between clinicians and patients with rheumatic diseases from diverse populations and reduce health disparities among those patients most vulnerable to poor outcomes. As a co-investigator of the Veterans Affairs Rheumatoid Arthritis (VARA) Registry, she and collaborators have conducted studies looking at patterns of utilization as well as quality of care among Veterans with RA.

Projects that a fellow may contribute to any of the following projects: (1) Secondary data analysis of data from VARA or national VA data (e.g., to examine whether diagnosis of PTSD is associated with greater likelihood of discordance among Veterans with RA); (2) Secondary data analysis of survey data from the K23 study on goal concordance in RA; (3) Quality improvement project to examine proportion of Veterans who reside in rural or highly rural areas with poorly controlled gout or the proportion of Veterans with RA in whom disease activity measures and function are captured at point of care.

RECENT PUBLICATIONS


Pascale Schwab, MD
Associate Professor of Medicine
Program Director, Rheumatology Fellowship

Dr. Schwab is primarily engaged in clinical work and in the education of the rheumatology fellows. She does, however, participate in research and can assist fellows in identifying research projects. She is the site investigator for the Veterans Affairs Rheumatoid Arthritis (VARA) Registry, which is a multicenter longitudinal patient registry of US Veterans with rheumatoid arthritis. She also serves as the site investigator for the STOP-GOUT trial, a multicenter non-inferiority randomized controlled VA Cooperative Study comparing allopurinol to febuxostat in gout patients. Dr. Schwab also serves as an associate editor for Arthritis Care & Research and has experience critiquing and editing manuscripts.

RECENT PUBLICATIONS

Marcia Friedman, MD
Assistant Professor of Medicine
Director, Vasculitis Center

Dr. Friedman is a clinician-researcher in rheumatology studying vasculitis. After finishing her rheumatology fellowship at OHSU, she stayed on as junior faculty and completed a post-doctoral research fellowship through the Knight Cardiovascular Research Institute. She is now an Assistant Professor of Medicine and the director of the OHSU Vasculitis Center. She works with specialists in ophthalmology, dermatology, nephrology, pulmonology, and otolaryngology to care for patients with complex vasculitides. Her research centers on using molecular techniques to understand disease pathogenesis. Her primary focus is understanding endothelial cell biology in giant cell arteritis (GCA). She is investigating endothelial cell activation signals in affected tissues and peripheral blood of patients with GCA. She believes that endothelial cells have potential to serve as disease biomarkers, or possibly novel therapeutic targets in GCA. She is also involved in clinical trials for sarcoidosis, microscopic polyangiitis, granulomatosis with polyangiitis (GPA), and eosinophilic GPA. She is currently the recipient of the KL2 Program through the Oregon Clinical and Translational Institute (OCTRI), which supports highly ambitious and promising early career investigators on their way to research independence.

Fellows working with Dr. Friedman may take on projects including (but not limited to) using publicly available gene expression data to answer clinical questions, chart reviews of patients with vasculitis, and/or writing up case reports/series.

RECENT PUBLICATIONS


Kevin Winthrop, MD, MPH
Professor of Infectious Diseases and Ophthalmology
Professor of Public Health, OHSU/PSU

Dr. Winthrop received his undergraduate degree in biology from Yale University, New Haven, CT and his MD from OHSU. He completed his internal medicine residency training at Legacy Emanuel Hospital, Portland, OR. He then completed an infectious disease epidemiology fellowship at the US Centers for Disease Control and Prevention. In 2003, Dr. Winthrop was conferred a Master in Public Health from the University of California, Berkley, CA. In 2006, Dr. Winthrop returned to OHSU as Assistant Professor before progressing to his current appointment in 2012.

A former infectious disease epidemiologist in the Division of Tuberculosis Elimination at the US Centers for Disease Control and Prevention (CDC), Dr. Winthrop has co-authored over 200 publications, many regarding the epidemiologic and clinical aspects of opportunistic infections associated with immune-mediated inflammatory diseases, particularly those related to biologic immunosuppressive therapies.

As a primary or senior investigator in many clinical or epidemiologic studies in these fields, he has collaborated closely with the rheumatology community in the evaluation and prevention of opportunistic infections in that setting. In addition, he is also a member of the graduate faculty at OHSU where he mentors public health students, medical students, and physicians in post-graduate training.

RECENT PUBLICATIONS


To see more of Dr. Winthrop’s publications, please or
James T. Rosenbaum, MD
Division of Arthritis & Rheumatic Diseases Section Chief
Professor of Ophthalmology and Medicine
Edward E. Rosenbaum Chair for the Study of Inflammatory Disease

Dr. Rosenbaum’s laboratory conducts studies on the role of the microbiome in HLA-B27-related diseases. These studies are conducted in both human subjects and rats. Many of the studies are related to uveitis, but studies on synovitis are ongoing as well.

In addition, his team conducts studies to profile gene expression in uveitis using peripheral blood and orbital inflammatory diseases using formalin fixed biopsies. They are evaluating the use of tears as a diagnostic and prognostic aid for orbital and uveitic diseases.

The laboratory has been continuously NIH funded since 1981.

Fellows could participate in any of these studies and participation could be basic (at the lab bench) or more clinical, such as interrogation of a database.

RECENT PUBLICATIONS


To see more of Dr. Rosenbaum’s publications, please or
Cong-Qiu Chu, MD, PhD
Associate Professor of Medicine
Director, Early Arthritis Clinic

Dr. Chu is a physician-scientist. He conducts bench-based research in a lab at the Veterans Affairs (VA) Portland Health Care System. His research interests are the pathogenesis of rheumatoid arthritis (RA) and cartilage regeneration for therapy of osteoarthritis. His early work discovered over-expression of tumor necrosis factor (TNF) and TNF receptors in inflamed synovium and cartilage-pannus junction where the joint damage takes place in RA. These findings formed the scientific basis for development of blocking TNF as therapy for RA. Currently, his lab is working on the following projects: (1) developing aptamer-mediated targeted delivery of RNAi to Th17 cells for therapy of RA and other inflammatory diseases; (2) identifying ssDNA aptamers that specifically bind to human TNF for therapeutic agents to treat TNF mediated diseases; (3) exploring novel therapeutics targeting fibroblast-like synoviocytes for RA; (4) regeneration of articular cartilage for therapy of osteoarthritis models. Fellows are welcome to join Dr. Chu’s lab to work on any of his projects.

RECENT PUBLICATIONS


Tejpal Gill, PhD
Research Assistant Professor of Medicine

Dr. Gill’s research is focused on determining host-microbe interactions in HLA-B27-associated spondyloarthropathies (SpA). Previously, as a Research Fellow at National Institutes of Health (NIH), she demonstrated that HLA-B27, a major genetic risk factor for spondyloarthritis (SpA), causes background-dependent gut microbial dysbiosis in an experimental model of SpA. This study emphasized the importance of evaluating microbial communities and their functions, and suggested an ecological model of microbial dysbiosis.

Dr. Gill’s career goal is investigate the mechanisms by which HLA-B27 may lead to SpA pathogenesis. Broader interests include identification of microbial metabolites with a potential to ameliorate or alleviate SpA and associated gut inflammation. She is particularly interested in teasing out the role of host genetics in addition to HLA-B27 on the development of SpA. With the hypothesis tested in animal model of SpA, her future goals involve patient-oriented clinical research studying the relationship between gut microbes and host immune dysregulation in SpA. She is a member of the American College of Rheumatology (ACR) and has published several research articles and reviews highlighting the importance of Microbiome in SpA. She has been selected as a guest editor for the journal “Best Practice and Research: Clinical Rheumatology.”

RECENT PUBLICATIONS

Dr. Napier is a translational immunologist and microbiologist at the Veterans Affairs (VA) Portland Health Care System and Oregon Health & Science University (OHSU) in Portland, OR. She has extensive experience in basic and clinical research in the fields of microbiology, immunology, autoimmunity, inflammation, and drug development. Dr. Napier is a current recipient of a Career Development Award (CDA2) through the Biomedical Laboratory Research and Development at the VA and of an Early Clinical Investigator grant through the Medical Research Foundation of Oregon. Dr. Napier received her PhD from Emory University in Atlanta, GA where she re-purposed a previously FDA-approved cancer drug as a novel immunotherapy to treat tuberculosis, which is currently in a Phase II clinical trial. She then completed two postdoctoral fellowships at OHSU in the Departments of Pulmonary & Critical Care Medicine and Molecular Microbiology & Immunology. Dr. Napier’s independent research program is focused on understanding how microbial sensors, including NOD2 (which is linked to Blau Syndrome), control pathogenic cellular responses in autoimmune and autoinflammatory diseases such as rheumatoid arthritis, autoimmune uveitis, Blau Syndrome, and Yao Syndrome. Her long-term research goal is to use this information to further discovery of biomarkers associated with hard-to-diagnose inflammatory diseases, and to develop novel biologics that aim to reprogram pathogenic immune cells back to a quiescent state and thereby thwart progression of disease.

RECENT PUBLICATIONS


Leslie Kahl, MD  
Professor of Medicine  
Associate Dean for Strategic Initiatives  
Director, Lupus and Scleroderma Clinics

Dr. Kahl is a clinician-educator. She attends in two of the fellows' weekly continuity clinics, and works with a senior fellow in the weekly Lupus and Scleroderma clinic, which she directs. She is also OHSU Site Director for our fellowship. Her major areas of interest are lupus and medical education.

Dr. Kahl has led several major educational initiatives here at OHSU. First, she chaired the Curriculum Transformation Steering Committee from 2012 – 2014. This group was charged to envision an entirely new format for the medical students' curriculum. The new curriculum, titled Your MD, debuted in 2014 with an 18-month model of organ-system blocks with tight integration of clinical and basic sciences, followed by clinical experiences with basic science intersessions, a rural experience for all, and a required scholarly project. Its competency-based assessment model allows early clinical exposure and the possibility of early graduation. For this work she was awarded the Faculty Excellence in Education Award, OHSU's highest award in education.

During the development of this curriculum Dr Kahl noted that educators, unlike clinicians and researchers, do not have a natural home through which to network and share best practices. She led the development of the Educators’ Collaborative (EC), a grass-roots community of practice for educators. She chaired the EC for its first 4 years, and directs its monthly Education Grand Rounds. The EC also co-sponsors the annual Symposium on Educational Excellence, and the Innovations in Education Mini-grant Program. More than 230 faculty, staff and trainees are EC members.

Prior to coming to OHSU in 2011, Dr Kahl was on the faculty at Washington University School of Medicine for 23 years. In addition to her clinical work in rheumatology, she served as Associate Dean for Student Affairs for 18 years. She is the recipient of 12 Distinguished Service Teaching Awards from Wash U, as well as the Samuel R. Goldstein Award for Leadership in Medical Education, the medical school's highest award in education. During her time in St. Louis she was also a recipient of the ACR's Clinician Scholar Educator award.

**RECENT PUBLICATIONS**


Julianna Desmarais, MD
Assistant Professor of Medicine
Associate Program Director, Rheumatology Fellowship
Co-Director, ILD Clinic

Dr. Desmarais is an academic rheumatologist. She is co-director of the Interstitial Lung Disease (ILD) Clinic at OHSU, a combined rheumatology-pulmonology collaboration to care for multisystem diseases. Grant applications are in process to study the patient diseases encountered in the ILD clinic. She also is interested in education, helping to make interactive lupus cases published on the American College of Rheumatology (ACR) website directed at primary care providers.

RECENT PUBLICATIONS

[1] ACR Cases: https://www.rheumatology.org/Learning-Center/Educational-Activities/View/ID/1080