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

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Portland Aerial Tram with Mount Hood in the background

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

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 Cutler, our fellowship coordinator, **cutlert@ohsu.edu**, or use the QR code here to do it for you with your camera phone!



Or. Schwab Pascale Schwab, MD Program Director

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

JUNE

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



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

SEPTEMBER
- DECEMBER

Work on IRB approval and collect data

RESEARCH BLOCKS

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

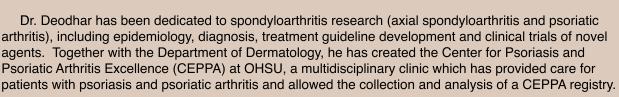
YEAR 2

OHSU Fellow

RESEARCH TIMELINE

Atul Deodhar, MD, MRCP

Professor of Medicine Director, Rheumatology Outpatient Clinics



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.



- [1] Gensler LS, Chakravarty SD, Cameron C, Peterson S, Spin P, Kafka S, Nair S, **Deodhar A.**Propensity score matching/reweighting analysis comparing intravenous golimumab to infliximab for ankylosing spondylitis using data from the GO-ALIVE and ASSERT trials. Clin Rheumatol. 2020 May 4.
 - [2] Deodhar AA, Miceli-Richard C, Baraliakos X, Marzo-Ortega H, Gladman DD, Blanco R, Das Gupta A, Martin R, Safi J Jr, Porter B, Shete A, Rosenbaum JT. Incidence of Uveitis in Secukinumab-treated Patients With Ankylosing Spondylitis: Pooled Data Analysis From Three Phase 3 Studies. ACR Open Rheumatol. 2020 Apr 30.
 - [3] **Deodhar A**, Sandoval D, Holdsworth E, Booth N, Hunter T. Use and Switching of Biologic Therapy in Patients with Non-Radiographic Axial Spondyloarthritis: A Patient and Provider Survey in the United States. Rheumatol Ther. 2020 Jun;7(2):415-423.
 - [4] **Deodhar A**, Helliwell PS, Boehncke WH, Kollmeier AP, Hsia EC, Subramanian RA, Xu XL, Sheng S, Agarwal P, Zhou B, Zhuang Y, Ritchlin CT; DISCOVER-1 Study Group. Guselkumab in patients with active psoriatic arthritis who were biologic-naive or had previously received TNFα inhibitor treatment (DISCOVER-1): a double-blind, randomised, placebo-controlled phase 3 trial. Lancet. 2020 Apr 4;395(10230):1115-1125, 1114.
 - [5] Deodhar A, van der Heijde D, Gensler LS, Kim TH, Maksymowych WP, Østergaard M, Poddubnyy D, Marzo-Ortega H, Bessette L, Tomita T, Leung A, Hojnik M, Gallo G, Li X, Adams D, Carlier H, Sieper J; COAST-X Study Group. Ixekizumab for patients with non-radiographic axial spondyloarthritis (COAST-X): a randomised, placebo-controlled trial. Lancet. 2020 Jan 4;395(10217):53-64.





Jennifer L. Barton, MD, MCR

as well as quality of care among Veterans with RA.

Associate Professor of Medicine VA Portland Rheumatology Section Chief



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

- [1] Décary S, **Barton JL**, Proulx L, Richards DP, Paterson G, de Wit M, Toupin-April K. How to Effectively Support Patients with Rheumatic Conditions Now and Beyond COVID-19. ACR Open Rheumatol. 2020 May 13.
- [2] Barton JL, Décary S. New galaxies in the universe of shared decision-making and rheumatoid arthritis. Curr Opin Rheumatol. 2020 May;32(3):273-278.
- [3] Liu LH, Garrett SB, Li J, Ragouzeos D, Berrean B, Dohan D, Katz PP, **Barton JL**, Yazdany J, Schmajuk G. Patient and clinician perspectives on a patient-facing dashboard that visualizes patient reported outcomes in rheumatoid arthritis. Health Expect. 2020 Apr 9;.
- [4] Maynard C, Mikuls TR, Cannon GW, England BR, Conaghan PG, Østergaard M, Baker DG, Kerr G, George MD, Barton JL, Baker JF. Sex Differences in the Achievement of Remission and Low Disease Activity in Rheumatoid Arthritis. Arthritis Care Res (Hoboken). 2020 Mar;72(3):326-333.
- [5] McCulley CB, Barton JL, Cannon GW, Sauer BC, Teng CC, George MD, Caplan L, England BR, Mikuls TR, Baker JF. Body mass index and persistence of conventional DMARDs and TNF inhibitors in rheumatoid arthritis. Clin Exp Rheumatol. 2019 May-Jun;37(3):422-428.





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

- [1] Schwab P, Sayles H, Bergman D, Cannon GW, Michaud K, Mikuls TR, Barton J. Utilization of Care Outside the Veterans Affairs Health Care System by US Veterans With Rheumatoid Arthritis. Arthritis Care Res (Hoboken). 2017 Jun;69(6):776-782.
- [2] England BR, Sokolove J, Robinson WH, Thiele GM, Ganti AK, Sayles H, Michaud K, Caplan L, Davis LA, Cannon GW, Sauer B, Singh N, Blair Solow E, Reimold AM, Kerr GS, **Schwab P**, Baker JF, Mikuls TR. Associations of Circulating Cytokines and Chemokines With Cancer Mortality in Men With Rheumatoid Arthritis. Arthritis Rheumatol. 2016 Oct;68(10):2394-402.
- [3] England BR, Sayles H, Michaud K, Caplan L, Davis LA, Cannon GW, Sauer BC, Solow EB, Reimold AM, Kerr GS, **Schwab P**, Baker JF, Mikuls TR. Cause-Specific Mortality in Male US Veterans With Rheumatoid Arthritis. Arthritis Care Res (Hoboken). 2016 Jan;68(1):36-45.
- [4] Solow EB, Yu F, Thiele GM, Sokolove J, Robinson WH, Pruhs ZM, Michaud KD, Erickson AR, Sayles H, Kerr GS, Gaffo AL, Caplan L, Davis LA, Cannon GW, Reimold AM, Baker J, **Schwab P**, Anderson DR, Mikuls TR. Vascular calcifications on hand radiographs in rheumatoid arthritis and associations with autoantibodies, cardiovascular risk factors and mortality. Rheumatology (Oxford). 2015 Sep;54(9):1587-95.
- [5] Lipton S, Warren G, Pollock J, **Schwab P**. lgG4-related disease manifesting as pachymeningitis and aortitis. J Rheumatol. 2013 Jul;40(7):1236-8.



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

- [1] Friedman MA, Stevens J, Desmarais J, Seifer D, Le B, Ogle K, Harrington CA, Jackson P, Choi D, Rosenbaum JT. Tofacitinib as a steroid-sparing therapy in pulmonary sarcoidosis: Two prospective cases and molecular analysis. 2020. *Under review.*
- [2] Ortega-Loayza AG, **Friedman MA**, Greiling TM, Cassidy PB, Marzano AV, Gao L, Fei SS, Liu Y, Simpson EL, Rosenbaum JT. Insights into pyoderma gangrenosum: potential use of gene expression profiling for pathogenesis and diagnosis. 2020. *Under review.*
- [3] Friedman MA, Choi D, Planck SR, Rosenbaum JT, Sibley CH. Gene Expression Pathways across Multiple Tissues in Antineutrophil Cytoplasmic Antibody-associated Vasculitis Reveal Core Pathways of Disease Pathology. J Rheumatol. 2019;46(6):609–615.
- [4] Friedman MA, Winthrop KL. Vaccines and Disease-Modifying Antirheumatic Drugs: Practical Implications for the Rheumatologist. Rheum Dis Clin North Am. 2017 Feb;43(1):1-13.
- [5] Friedman MA, Winthrop K. Vaccinations for rheumatoid arthritis. Curr Opin Rheumatol. 2016 May;28(3):330-6.

Kevin Winthrop, MD, MPH

Professor of Infectious Diseases and Opthalmology 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

- [1] Mikuls TR, Johnson SR, Fraenkel L, Arasaratnam RJ, Baden LR, Bermas BL, Chatham W, Cohen S, Costenbader K, Gravallese EM, Kalil AC, Weinblatt ME, **Winthrop K**, Mudano AS, Turner A, Saag KG. American College of Rheumatology Guidance for the Management of Rheumatic Disease in Adult Patients During the COVID-19 Pandemic: Version 1. Arthritis Rheumatol. 2020 Apr 29. doi: 10.1002/art.41301.
- [2] Burmester GR, Curtis JR, Yun H, FitzGerald O, **Winthrop KL**, Azevedo VF, Rigby WFC, Kanik KS, Wang C, Biswas P, Jones T, Palmetto N, Hendrikx T, Menon S, Rojo R. An Integrated Analysis of the Safety of Tofacitinib in Psoriatic Arthritis across Phase III and Long-Term Extension Studies with Comparison to Real-World Observational Data. Drug Saf. 2020 Apr;43(4):379-392.
- [3] George MD, Baker JF, **Winthrop KL**, Goldstein SD, Alemao E, Chen L, Wu Q, Xie F, Curtis JR. Immunosuppression and the risk of readmission and mortality in patients with rheumatoid arthritis undergoing hip fracture, abdominopelvic and cardiac surgery. Ann Rheum Dis. 2020 May;79(5):573-580.
- [4] Winthrop KL. (2020), Who Needs a Corona?. Arthritis Rheumatol, 72: 874-876.
- [5] Winthrop KL, Wouters A, Choy EH, Chen C, Biswas P, Wang L, Soma K, Needle E, Valdez H, Rigby WF. Long-term effectiveness of live herpes zoster vaccine in patients with rheumatoid arthritis subsequently treated with tofacitinib. Ann Rheum Dis. 2020 May;79(5):669-671.





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

- [1] Rosenbaum JT, Hamilton H, Choi D, Weisman MH, Reveille JD, Winthrop KL. Biologics, spondylitis and COVID-19. Ann Rheum Dis. 2020 Jun 10:annrheumdis-2020-217941.
- [2] Gill T, Brooks SR, **Rosenbaum JT**, Asquith M, Colbert RA. Novel Inter-omic Analysis Reveals Relationships Between Diverse Gut Microbiota and Host Immune Dysregulation in HLA-B27-Induced Experimental Spondyloarthritis. Arthritis Rheumatol. 2019 Nov;71(11):1849-1857.
- [3] Asquith M, Sternes PR, Costello ME, Karstens L, Diamond S, Martin TM, Li Z, Marshall MS, Spector TD, le Cao KA, **Rosenbaum JT**, Brown MA. HLA Alleles Associated With Risk of Ankylosing Spondylitis and Rheumatoid Arthritis Influence the Gut Microbiome. Arthritis Rheumatol. 2019 Oct;71(10):1642-1650.
- [4] Rosenbaum JT, Asquith M. The microbiome and HLA-B27-associated acute anterior uveitis. Nat Rev Rheumatol. 2018 Dec;14(12):704-713.
- [5] Rosenbaum JT, Dick AD. The Eyes Have it: A Rheumatologist's View of Uveitis. Arthritis Rheumatol. 2018 Oct;70(10):1533-1543.





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

- [1] Tao S, Song PF, Zhang XW, Zhang LS, **Chu CQ**. Single stranded DNA aptamers against TNF and their potential applications. Methods Mol Biol, 2020, 2018:181-196
 - [2] Zhang L, Song P, Zhang X, Metea C, Schleisman M, Karstens L, Leung E, Zhang J, Xu Q, Liu Y, Asquith M, **Chu CQ**. Alpha-glucosidase inhibitors alter gut microbiota and ameliorate collagen-induced arthritis. Frontiers in Pharmacology, 2020, 10:1684.
 - [3] Shi XF, Song P, Tao S, Zhang X, **Chu CQ**. Silencing RORyt in human CD4+ T cells with CD30 aptamer-RORyt shRNA chimera. Scientific Reports 2019 Jul 17;9(1):10375.
 - [4] Zhang X, Wu S, Naccarato T, Prakash-Damani M, Chou Y, **Chu CQ** and Zhu Y. Regeneration of Hyaline-Like Cartilage in situ with SOX9 Stimulation of Bone Marrow-Derived Mesenchymal Stem Cells. PLOS One 2017 Jun 30;12(6):e0180138.
 - [5] Song PF, Zhou YK, Remo-Mazar, R, Yomogida K and **Chu CQ**. CD4 aptamer-RORC shRNA mediated suppression of Th17 cells. Biochem Biophys Res Commun 2014, 452:1040-5.



Tejpal Gill, PhDResearch 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

- [1] Gotschlich EC, Colbert RA, **Gill T**. Methods in microbiome research: Past, present, and future. Best Pract Res Clin Rheumatol. 2020 Apr 24;:101498.
- [2] Gill T, Breban M. Preface. Best Pract Res Clin Rheumatol. 2020 Apr 15;:101512.
- [3] Gill T, Brooks SR, Rosenbaum JT, Asquith M, Colbert RA. Novel Inter-omic Analysis Reveals Relationships Between Diverse Gut Microbiota and Host Immune Dysregulation in HLA-B27-Induced Experimental Spondyloarthritis. Arthritis Rheumatol. 2019 Nov;71(11):1849-1857.
- [4] Colbert RA, Navid F, **Gill T**. The role of HLA-B*27 in spondyloarthritis. Best Pract Res Clin Rheumatol. 2017 Dec;31(6):797-815.
- [5] Gill T, Asquith M, Brooks SR, Rosenbaum JT, Colbert RA. Effects of HLA-B27 on Gut Microbiota in Experimental Spondyloarthritis Implicate an Ecological Model of Dysbiosis. Arthritis Rheumatol. 2018 Apr;70(4):555-565.



Ruth J. Napier, PhD

Affiliate Faculty of Molecular Microbiology & Immunology VA Portland Prinicipal Investigator/Research Microbiologist



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

- [1] Napier RJ, Lee EJ, Vance EE, Snow PE, Samson KA, Dawson CE, Moran AE, Stenzel P, Davey MP, Sakaguchi S, Rosenzweig HL. Nod2 Deficiency Augments Th17 Responses and Exacerbates Autoimmune Arthritis. Journal of Immunology, 2018 Oct 1; 201(7):1889-1898.
- [2] Napier RJ, Adams E, Gold MC, Lewinsohn DM. The role of mucosal associated invariant T cells in antimicrobial immunity. Frontiers in Immunology, 2015 Jul 6;6:344.
- [3] Sharma PK, Wong EB, **Napier RJ**, Pearson SS, Bishai WR, Ndung'u T, Kasprowicz VO, Lewinsohn DA, Lewinsohn DM, Gold MC. High Expression of CD26 Accurately Identifies Human Pathogen Reactive MAIT cells. Immunology, 2015 Jul; 145(3): 443–453.
- [4] Napier RJ, Norris BA, Swimm A, Giver CR, Harris WA, Laval J, Napier BA, Patel G, Crump R, Peng Z, Bornmann W, Pulendran B, Buller RM, Weiss DS, Tirouvanziam R, Waller EK, Kalman D. Low Doses of Imatinib Induce Myelopoiesis and Enhance Host Anti-microbial Immunity. PLoS Pathogens, 2015 11(3): e1004770.
- [5] Baldwin P, Reeves AZ, Su A, Giesier K, Bommarius B, **Napier RJ**, Snyder JP, Kalman D, Liotta D. Monocarbonyl analogs of curcumin inhibit growth of antibiotic sensitive and resistant strains of Mycobacterium tuberculosis. Eur J Med Chem. 2015 Jan 10;92C:693-699.



FRONTIERS IN EDUCATION

Leslie Kahl, MD

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



Dr. Kahl is a 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

- [1] Haemel A, **Kahl LE**, Callen J, Werth VP, Fiorentino D, Fett N. Supplementing Dermatology Physician Resident Education in Vasculitis and Autoimmune Connective Tissue Disease: A Prospective Study of an Online Curriculum. JAMA Dermatol. 2019;155(3):381-383.
- [2] Carney PA, Bonura EM, Kraakevik JA, Miller Juve A, **Kahl LE**, Deiorio NM. Measuring Coaching in Undergraduate Medical Education: The Development and Psychometric Validation of New Instruments. JGIM . 2019; 34(5): 677-683.
- [3] Carney P, Haedinger LA, **Kahl LE**, Deiorio NM, Bonura E, Kraakevik JA. The association between assigned independent learning schedule and medical student performance on examinations. Medical Science Educator 2017; 27 (2): 253-257
- [4] Deiorio N, Carney P, **Kahl LE**, Bonura E, Juve A. Coaching: A New Model for Academic Achievement. Med Educ Online 2016; 21: 33480.

FRONTIERS IN EDUCATION

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
- [2] Layoun ME, **Desmarais J**, Heitner SB, Masri A. Hot hearts on bone scintigraphy are not all amyloidosis: hydroxychloroquine-induced restrictive cardiomyopathy. Eur Heart J. 2020 Feb 20.
- [3] **Desmarais J**, Schwab P. Gout Management in Chronic Kidney Disease: Pearls and Pitfalls. Curr Treat Options in Rheum 5, 326–335 (2019).
- [4] **Desmarais J**, Chu C. Utility of Anakinra in Acute Crystalline Diseases: A Retrospective Study Comparing a University Hospital with a Veterans Affairs Medical Center. J Rheum. 2019 Jul;46(7):748-750.

