

Rheumatology

Matching Opportunity: Karr Family Endowed Fellowship in Rheumatology

In 2015 Dr. Reynold (Rennie) Karr and his family established an endowment to support the training of future rheumatologists. Rennie and his wife Janet have both spent their lives working in healthcare. Rennie is a physician specializing in both Rheumatology and Allergy/Immunology. He has served on the UW clinical faculty since 1980, initially as a volunteer with an independent private practice. The Karr family recently announced the creation of a \$25,000 matching opportunity to double the impact of gifts made in support of fellows through the Karr Family Endowed Fellowship in Rheumatology.



“Janet and I are thrilled with the success of the Fellowship Program, and we feel compelled to help others experience a greater impact through this remarkable program that is attracting the best and brightest internal medicine graduates from around the country. That is why in partnership with the division, we have developed a matching challenge that – if successful – will see an additional \$50,000 donated to the Fellowship Program through our endowment. For every dollar donated to trainees through the Karr Family Endowed Fellowship in Rheumatology, we will match it 1:1 until December 31st or until our matching gift pool of \$25,000 is exhausted.”

Match donations can be made at: <https://app.mobilecause.com/vf/Karr2>. If you would like to learn more about how you can make a gift to enhance the Karr Fellowship Fund or to support the general Rheumatology Fellowship Training Fund, please contact Damien Chapman at damienc@uw.edu or 206-616-4483.

Research Spotlight: Clinical Trials



The Division has recently expanded our Clinical Trials program with the addition of Dr. Kwanghoon Han. In addition to other clinical trials Dr. Han will conduct trials in collaboration with Lupus Clinical Investigators Network (LUCIN). These trials will include a phase 2 study to evaluate efficacy and safety of BMS-986165 in subjects with systemic lupus erythematosus. BMS-986165 is a novel inhibitor of non-receptor tyrosine-protein kinase 2 (Tyk2), which is a subset of JAK kinase. Research has revealed that type I interferon (IFN), IL-12 and IL-23, which play important roles in lupus pathogenesis, signal through Tyk2. This study will contribute to the development of a new treatment option for lupus patients.

Three other exciting studies will be open in late 2018. The first is an investigator-sponsored study titled “Open-Label Study to evaluate biomarkers to Predict the Efficacy of Abatacept in Patients with Rheumatoid Arthritis” led by Dr. Han in collaboration with Dr. Natalia Giltaiy’s lab. This study will recruit RA patients who have an inadequate response to methotrexate or other conventional DMARDs and treat them with abatacept for 24 weeks. Patients who are enrolled in this study will receive a thorough evaluation for their RA including laboratory assessment and ultrasound exam. At the end of the study, laboratory biomarkers and clinical data will be compared between responders and non-responders to abatacept therapy. We hope this study will provide new insights into the subsets of RA patients based on the response to abatacept therapy and lead to a novel treatment strategy guided by precision medicine.

The Division is also working on two industry-sponsored clinical trials which help address unmet needs in the treatment of rheumatic diseases. “Phase III, Randomized, Double-blind Clinical Trial to Evaluate the Efficacy and Safety of Abatacept SC with Standard Treatment Compared to Standard Treatment Alone in Patients with Active Idiopathic Inflammatory Myopathy” will enroll patients with active inflammatory myositis including dermatomyositis and polymyositis and randomize them in either abatacept + standard treatment arm or the standard treatment alone arm. This study will potentially provide valuable information for a new treatment option in inflammatory myopathy. “Phase III, Randomized, Double-blind, Placebo-Controlled, Efficacy and Safety Study of 2 Dose Levels of Subcutaneous Anakinra in Patients with Still’s Disease” will enroll patients with Still’s disease from the rheumatology inpatient consultation service as well as outpatient clinics. Rheumatologists at the University of Washington have been using anakinra for Still’s disease off-label for years but after completing this study, anakinra could be approved by FDA and widely available for treatment of Still’s disease. More information on our clinical trials is available on the Division website.

NEW FACULTY APPOINTMENTS

Dr. Tomas Mustelin, MD, D. Med. Sci. was appointed as a Professor of Medicine with the Division in July 2018. Dr. Mustelin will be based at our South Lake Union campus. He received his MD and D. Med. Sci. (PhD equivalent) from the University of Helsinki, Finland. Dr. Mustelin completed his postdoctoral training at the Research Institute of Scripps Clinic, La Jolla, California. Between 1991 and 2007, Dr. Mustelin had a very successful academic career, achieving the rank of full professor in just seven years before moving to an industry position.



Dr. Mustelin is committed to working on translational projects relevant to rheumatology and has served as a mentor for over 37 postdoctoral trainees and has over 240 original articles and reviews. His major contributions have been in discovery of kinases and phosphatases that regulate immune cell signal transduction (published in Cell and the Nature group of journals). These discoveries (especially PTPN22) have particular relevance to rheumatology as variants in the gene encoding this protein are increased in rheumatoid arthritis and other autoimmune diseases. He also works on protein citrullination in rheumatoid arthritis and mechanisms of autoimmunity in lupus.

Katherine Wysham, MD was appointed as an Acting Instructor with the Division of Rheumatology in July 2018. Dr. Wysham will be based at the Veterans Affairs Puget Sound Health Care Center. She received her Bachelor of Arts degree from Tufts University, Medford, MA in 2008. She graduated from the University Of Washington School Of Medicine in 2012 and completed her internship, residency and fellowship at



the University of California San Francisco (UCSF). She also received a certificate in Advanced Training in Clinical Research from UCSF's department of Epidemiology and Biostatistics in 2017. Dr. Wysham has received funding from the Rheumatology Research Foundation (RRF) to pursue her research evaluating clinical and biochemical risk factors for osteoporosis in patients with rheumatoid arthritis.

FACULTY AWARDS

SeattleMet

We congratulate Drs. **Gregory Gardner, Julie Carkin, Philip Mease, and Philip Moberg** for

being listed as Top Doctors in Seattle Magazine and

SAVE THE DATE: 2019 LANE LECTURE SERIES & RECEPTION



We are excited to announce that we have confirmed Dr. Antony Rosen as the speaker for the 2019 J. Lane Jr. Lecture Series. Dr. Rosen is a Professor of Medicine, Professor of Cell Biology, and Professor of Pathology at Johns Hopkins University, as well as being the Vice Dean for Research and the Director of the Division of Rheumatology.

Dr. Rosen will speak at the Department of Medicine Grand Rounds on Thursday March 14th, 2019 and attend our evening reception in addition to speaking at a special Division of Grand Rounds on Friday March 15th, 2019.

ARTHRITIS FOUNDATION CULTIVATING A NEW GENERATION OF RHEUMATOLOGISTS AWARD

The UW Rheumatology Fellowship Program was recently awarded the Arthritis Foundation Cultivating a New Generation of Rheumatologists Award. This award was designed to address the insufficient number of rheumatologists available to serve patients.



Without action to train more future rheumatologists this shortage will create increased barriers to care and worse disease outcomes. Our Division will use Arthritis Foundation funding to support an additional Fellow pursuing the Clinician Pathway of the Fellowship Program beginning in academic year 2019 with the goal of increasing the number of clinical rheumatologists in the underserved WWAMI (Washington, Wyoming, Alaska, Montana, & Idaho) region.

For over 40 years, our Fellowship Program has trained future leaders in rheumatology care, education and research. Fellows enjoy exceptional opportunities for clinical and scholarly development, and are mentored by American College of Rheumatology masters and NIH funded researchers. Utilizing three distinct hospital-based training sites, we offer our fellows the broadest range of clinical experience, including care of underserved populations. We look forward to expanding the training experiences our program can offer and supporting future clinical rheumatologists through this additional training track.

OPPORTUNITIES FOR GIVING

You can support programs and initiatives in the Division of Rheumatology. We have established four Professorships and eight endowments through generous donations. In addition, several gift funds target specific programs such as the Rheumatology Fellowship Fund, the Rheumatology Discretionary Fund, and the Rheumatology Research Fund for Junior Faculty.

Send Checks to:

Division of Rheumatology, Campus Box 356428,
1959 NE Pacific St, Seattle, WA 98195

To learn more about these opportunities for giving, please visit: <http://depts.washington.edu/rheum>

DIVISION PUBLICATIONS

Inhibition of Cyclic GMP-AMP Synthase Using a Novel Antimalarial Drug Derivative in Trex1-Deficient Mice. **An J, Woodward JJ, Lai W, Minie M, Sun X, Tanaka L, Snyder JM, Sasaki T, Elkong KB.** *Arthritis Rheumatol.* 2018 May 21. doi: 10.1002/art.40559. [Epub ahead of print] PMID: 29781188

The non-haemostatic role of platelets in systemic lupus erythematosus. Linge P, Fortin PR, **Lood C, Bengtsson AA, Boilard E.** *Nat Rev Rheumatol.* 2018 Mar 21;14(4):195-213. doi: 10.1038/nrrheum.2018.38. Review. PMID: 29559714

CD22: A Regulator of Innate and Adaptive B Cell Responses and Autoimmunity. **Clark EA, Giltaiy NV.** *Front Immunol.* 2018 Sep 28;9:2235. doi: 10.3389/fimmu.2018.02235. eCollection 2018. Review. PMID: 30323814

Regulation of B-lineage cells by caspase 6. Watanabe C, Shu GL, **Giltaiy NV, Clark EA.** *Immunol Cell Biol.* 2018 Jun 4. doi: 10.1111/imcb.12172. [Epub ahead of print]. PMID: 29863787

Spinal Tophi Causing Cord Compression and Mimicking Epidural Abscess in a Young Man With Lesch-Nyhan Variant. **Liew JW, Struthers SA, Cormack FC, Bays AM, Han BK.** *J Clin Rheumatol.* 2018 Sep 14. doi: 10.1097/RHU.0000000000000894. [Epub ahead of print] No abstract available. PMID: 30222628

Not so crystal clear: observations from a case of crystalline arthritis with cytokine release syndrome (CRS) after chimeric antigen receptor (CAR)-T cell therapy. **Chung SH, Hughes G, Koffman B, Turtle CJ, Maloney DG, Acharya UH.** *Bone Marrow Transplant.* 2018 Oct 5. doi: 10.1038/s41409-018-0357-4. [Epub ahead of print]. PMID: 30291306.

Erosive Gouty Arthropathy Resulting in a Telescoping Digit. **Liew JW, Thomason JL.** *J Clin Rheumatol.* 2018 May 24. doi: 10.1097/RHU.0000000000000793. [Epub ahead of print] No abstract available. PMID: 29794875

DIVISION AWARDS

Dr. Keith Elkong, MD, Professor and Head of Rheumatology was awarded \$600,000 for a new grant from the Lupus Research Alliance for his project entitled, "The cyclic GAMP Pathway in SLE". The project is scheduled to begin work in September for a three year term.

Dr. Bobby Han, MD, Clinical Assistant Professor of Rheumatology was awarded an investigator initiated clinical trial from Bristol-Myers Squibb. The 2-year \$350,000 study will evaluate biomarkers to predict the efficacy of Abatacept in subjects with Rheumatoid Arthritis.

Dr. James Andrews, MD, Acting Assistant Professor in the Division of Rheumatology was awarded a Career Development Award (K23) from the National Institute on Aging for his project "Sarcopenia as a Predictor of Hospital-Associated Disability in Older Adults".

Dr. Erika Noss, MD, PhD, Assistant Professor of Rheumatology was awarded a grant from the Arthritis National Research Foundation for her project entitled, "Targeting Platelet-Derived Growth Factor Receptor- α (PDGFR α) in Rheumatoid Arthritis".

Dr. James Andrews, MD, Acting Assistant Instructor of Rheumatology received funding from the Clinical Learning, Evidence and Research (CLEAR) Center's 2018-2019 Pilot and Feasibility Program for his project entitled, "Identifying Aging-related Sarcopenia as a Novel Risk Factor for the Development of Osteoarthritis in Older Adults - a Population-Based Approach"

Dr. Alison Bays, MD, MPH, Acting Instructor, received an Early Investigator Voucher Award from the ITHS Pilot Translational and Clinical Studies program. Dr. Bays will work with Dr. Pollock, Dr. Jernberg, and Dr. Saksen in the Division of Rheumatology on a project entitled, "Intima Media Thickness of the Temporal Artery using Ultra High Frequency Ultrasound Probe."

Dr. Natalia Giltaiy, PhD, Research Assistant Professor, received an Early Investigator Catalyst Award from the ITHS Pilot Translational and Clinical Studies program. Dr. Giltaiy was awarded \$5,000 for her project, "TLR7 expression in human SLE."

Dr. Sladjana Skopelja-Gardner, PhD, received an ITHS Catalyst Award for her project "Neutrophil signature in cutaneous lupus patients".

Dr. Bhargavi Duvvuri, PhD, Postdoctoral Fellow in the Lood Lab received a grant \$5,000 from ITHS Pilot Translational and Clinical Studies Program for her project Prognostic value of cell-free mitochondrial

The Division of Rheumatology Newsletter is published 2 times a year. For information regarding any content in this issue please contact the Division Office at 206-543-3414 or email rheum@uw.edu. Editors: Keith Elkon MD, Jenna Thomason MD, Peter Simkin MD, Jessica Bertram, and Kathryn McGhee.

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email: rheum@uw.edu



RECENT DIVISION PUBLICATIONS (CONTINUED)

Evidence for a direct link between PAD4-mediated citrullination and the oxidative burst in human neutrophils. Zhou Y, An LL, Chaerkady R, Mittereder N, Clarke L, Cohen TS, Chen B, Hess S, Sims GP, **Mustelin T**. *Sci Rep*. 2018 Oct 15;8(1):15228. doi: 10.1038/s41598-018-33385-z. PMID: 30323221

Serum biomarker profiles suggest that atopic dermatitis is a systemic disease. Thijs JL, Strickland I, Bruijnzeel-Koomen CAFM, Nierkens S, Giovannone B, Knol EF, Csomor E, Sellman BR, **Mustelin T**, Sleeman MA, de Bruin-Weller MS, Herath A, Drylewicz J, May RD, Hijnen D. *J Allergy Clin Immunol*. 2018 Apr;141(4):1523-1526. doi: 10.1016/j.jaci.2017.12.991. Epub 2018 Feb 2. No abstract available. PMID: 2941031.

Affinity maturation shapes the function of agonistic antibodies to peptidylarginine deiminase type 4 in rheumatoid arthritis. Shi J, Darrah E, Sims GP, **Mustelin T**, Sampson K, Konig MF, Bingham CO 3rd, Rosen A, Andrade F. *Ann Rheum Dis*. 2018 Jan;77(1):141-148. doi: 10.1136/annrheumdis-2017-211489. Epub 2017 Oct 25. PMID: 29070531

“NETting” the host: Breaking of tolerance in chronic inflammation and chronic infection. **Skopelja-Gardner S**, Jones JD, Rigby WFC. *J Autoimmun*. 2018 Mar;88:1-10. doi: 10.1016/j.jaut.2017.10.008. Review. PMID: 29100671