A newsletter brought to you by VERITY at Brigham & Women's Hospital

VERITY Updates

FALL 202

- VERITY has awarded Greg McDermott, MD, the 2022 VERITY Pilot & Feasibility Research Award. Congratulations to Dr. McDermott!
- VERITY announces a new mini course to be held in the Spring of 2023. Check back in to the VERITY Winter newsletter for more details.

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Announcing VERITY's Renewal!

VERITY recently received good news; the grant was renewed by the NIH! As we celebrate our last five years of groundbreaking research conducted by the VERITY Research Community (you), we look forward to more exciting work. During the last 5-year cycle, VERITY helped produce 160 original articles that have now been cited over 1280 times already. The services and skills of the three VERITY Cores (Enrichment, Methodology, and Bioinformatics) have attracted a robust and active Research Community. During the last 5-years, the Methodology and Bioinformatics Core conducted 185 consultations and delivered services to 120 projects.

The current proposal builds on the successes of the prior cycle. We are planning for an enhanced Enrichment Program increasing the focus on under-represented minority researchers in rheumatology; a Methodology Core that ensures methodologic

rigor while incorporating behavioral theory and economics into studies focused on racial and ethnic minorities; and a Bioinformatics Core that provides bioinformatic support to better phenotype patient cohorts, allowing for studies of social determinants of health.

We look forward to continue to help you conduct novel research driving the NIAMS clinical research mission forward. Please let us know how we can help you with your next research project.

Check out the Visiting Research Internship Program (VRIP)

An eight-week mentored, summer research program designed to support medical student develop their interests in research and health-related careers.

All application materials due <u>December 16, 2022.</u>

See https://catalyst.harvard.edu/diversity-inclusion/vrip/ for more information.

VERITY Publications

Kawano Y, Patel NJ, Wang X, Cook CE, Vanni KMM, Kowalski EN, Banasiak EP, Qian G, Dilorio M, Hsu TYT, Weinblatt ME, Todd DJ, Wallace ZS, Sparks JA. Temporal trends in COVID-19 outcomes among patients with systemic autoimmune rheumatic diseases: From the first wave to Omicron. medRxiv [Preprint]. 2022 Jun 20:2022.06.19.22276599.

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McDermott G, Gill R, Gagne S, Byrne S, Huang W, Wang X, Prisco LC, Zaccardelli A, Martin LW, Masto L, Kronzer VL, Shadick N, Dellaripa PF, Doyle TJ, Sparks JA. Demographic, Lifestyle, and Serologic Risk Factors for Rheumatoid Arthritis (RA)-associated Bronchiectasis: Role of RA-related Autoantibodies. J Rheumatol. 2022 Jul;49(7):672-679.

Williams EE, Katz JN, Leifer VP, Collins JE, Neogi T, Suter LG, Levy B, Farid A, Safran-Norton CE, Paltiel AD, Losina E. Cost-Effectiveness of Arthroscopic Partial Meniscectomy and Physical Therapy for Degenerative Meniscal Tear. ACR Open Rheumatol. 2022 Jul 21.

Collins JE, Shrestha S, Losina E, Marx RG, Guermazi A, Jarraya M, Jones MH, Levy BA, Mandl LA, Williams EE, Wright RW, Spindler KP, Katz JN; METEOR Investigator Group. Five-Year Structural Changes in the Knee Among Patients With Meniscal Tear and Osteoarthritis: Data From a Randomized Controlled Trial of Arthroscopic Partial Meniscectomy Versus Physical Therapy. Arthritis Rheumatol. 2022 Aug;74(8):1333-1342.

Paik JJ, Sparks JA, Kim AHJ. Immunogenicity, breakthrough infection, and underlying disease flare after SARS-CoV 2 vaccination among individuals with systemic autoimmune rheumatic diseases. Curr Opin Pharmacol. 2022 Aug;65:102243.

Cai T, He Z, Hong C, Zhang Y, Ho YL, Honerlaw J, Geva A, Ayakulangara Panickan V, King A, Gagnon DR, Gaziano M, Cho K, Liao K, Cai T. Scalable relevance ranking algorithm via semantic similarity assessment improves efficiency of medical chart review. J Biomed Inform. 2022 Aug;132:104109.

Ashburner JM, Chang Y, Wang X, Khurshid S, Anderson CD, Dahal K, Weisenfeld D, Cai T, Liao KP, Wagholikar KB, Murphy SN, Atlas SJ, Lubitz SA, Singer DE. Natural Language Processing to Improve Prediction of Incident Atrial Fibrillation Using Electronic Health Records. J Am Heart Assoc. 2022 Aug 2;11(15):e026014.

VERITY Member Spotlight: Greg McDermott, MD

Greg McDermott, M.D. is a third-year rheumatology fellow in the Division of Rheumatology at Brigham and Women's Hospital. He is a graduate of Weill Cornell Medical College (MD, 2015) and Massachusetts General Hospital's Internal Medicine residency program (2018). He is currently completing an MPH degree from the Harvard T.H. Chan School of Public Health with a focus in clinical effectiveness research. He has a longstanding interest in genetics research and multi-system rheumatic diseases. His recent research has focused on clinical and genetic risk factors for rheumatoid arthritis-associated lung diseases and predictors of treatment response in rheumatoid arthritis. His work with Dr. Jeffrey Sparks investigated the effect of genetic risk factors on the timing of interstitial lung disease in rheumatoid arthritis and clinical risk factors for bronchi-

ectasis development among patients with RA. He is also working with Dr. Kat Liao investigating reasons for medications switching in RA patients and genetic markers among patients with inadequate response to treatment. He has also completed work with Dr. Zachary Wallace at the Massachusetts General Hospital investigating lifestyle risk factors and serologic markers of disease prognosis in ANCA-associated vasculitis.

vasculitis.

Dr. McDermott recently received the VERITY Pilot and Feasibility award to identify RA patients with interstitial lung disease using electronic health record data and investigate the effect of viral infections on the development of lung disease. He has also received a research award from the Spondyloarthritis Research and Treatment Network (SPARTAN) to investigate de-

terminants of diagnostic delay in axial spondyloarthritis.

