



VERITY Newsletter

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

SPRING 2023

VERITY Updates

- **Registration is now open for the 2023 VERITY mini course.** Please see the VERITY website to register by 12pm EST on Thursday, May 18, 2023.
- **The May 2023 VERITY Journal Club** will take place at 8am EST on Tuesday, May 23. Discussion will be led by Daniel Solomon, MD, MPH, and Yakir Reshef, MD, PhD.

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2023 Spring VERITY Bioinformatics Mini Course

VERITY is pleased to announce the upcoming 2023 Bioinformatics mini course on Natural Language Processing & Knowledge Networks for Clinical Research. This course is free of cost and will consist of two 2-hour long Zoom sessions on June 1st and June 8th from 1-3pm.

Our VERITY faculty will present on natural language processing techniques and provide a hands-on workshop using an NLP tool. These sessions will be followed by discussion of knowledge networks and how they are applied to clinical research studies. Although all members are welcome to attend, course content is best geared toward junior faculty and fellows interested in rheumatology clinical research.

Please visit the website for more information regarding the mini course schedule, how to register for the course, and our course prerequisites. Feel free to contact Jackie Stratton, jstratton1@bwh.harvard.edu, with any further questions.

2023 Pilot & Feasibility Award

VERITY would like to announce the release of the application for the 2023 VERITY Pilot & Feasibility (P&F) Research Award.

All application materials due Wednesday, June 14, 2023, by 5PM.

Click [here](#) for more information.

VERITY Publications

Tedeschi SK, Solomon DH, Chen Y, Ellrodt J, Whelan MG, Stratton J, Hayashi K, Whiteman NB, Chen L, Adejorin I, Marks KE, Gomez-Rivas E, Rao DA, Jonsson AH, Wesemann DR. Humoral and cellular immune responses in persons with rheumatoid arthritis after a third dose of mRNA COVID-19 vaccine. *Semin Arthritis Rheum.* 2023 Apr;59:152177.

Kronzer VL, Sparks JA. Occupational inhalants, genetics and the respiratory mucosal paradigm for ACPA-positive rheumatoid arthritis. *Ann Rheum Dis.* 2023 Mar;82(3):303-305.

Kostic AM, Leifer VP, Gong Y, Robinson MK, Collins JE, Neogi T, Messier SP, Hunter DJ, Selzer F, Suter LG, Katz JN, Losina E. Cost-Effectiveness of Surgical Weight-Loss Interventions for Patients With Knee Osteoarthritis and Class III Obesity. *Arthritis Care Res (Hoboken).* 2023 Mar;75(3):491-500.

Patel NJ, D'Silva KM, Li MD, Hsu TYT, Dilorio M, Fu X, Cook C, Prisco L, Martin L, Vanni KMM, Zaccardelli A, Zhang Y, Kalpathy-Cramer J, Sparks JA, Wallace ZS. Assessing the Severity of COVID-19 Lung Injury in Rheumatic Diseases Versus the General Population Using Deep Learning-Derived Chest Radiograph Scores. *Arthritis Care Res (Hoboken).* 2023 Mar;75(3):657-666.

Weij J, Zhang W, Doherty M, Wallace ZS, Sparks JA, Lu N, Li X, Zeng C, Lei G, Zhang Y. Comparative effectiveness of BNT162b2 and ChAdOx1 nCoV-19 vaccines against COVID-19. *BMC Med.* 2023 Feb 28;21(1):78.

Wen J, Zhang X, Rush E, Panickan VA, Li X, Cai T, Zhou D, Ho YL, Costa L, Begoli E, Hong C, Gaziano JM, Cho K, Lu J, Liao KP, Zitnik M, Cai T. Multimodal representation learning for predicting molecule-disease relations. *Bioinformatics.* 2023 Feb 3;39(2):btad085.

Kronzer VL, Hayashi K, Yoshida K, Davis JM 3rd, McDermott GC, Huang W, Dellaripa PF, Cui J, Feathers V, Gill RR, Hatabu H, Nishino M, Blaustein R, Crowson CS, Robinson WH, Sokolove J, Liao KP, Weinblatt ME, Shadick NA, Doyle TJ, Sparks JA. Autoantibodies against citrullinated and native proteins and prediction of rheumatoid arthritis-associated interstitial lung disease: A nested case-control study. *Lancet Rheumatol.* 2023 Feb;5(2):e77-e87.

Cui J, Malspeis S, Choi MY, Lu B, Sparks JA, Yoshida K, Costenbader KH. Risk prediction models for incident systemic lupus erythematosus among women in the Nurses' health study cohorts using genetics, family history, and lifestyle and environmental factors. *Semin Arthritis Rheum.* 2023 Feb;58:152143.

Bensen GP, Rogers AC, Leifer VP, Edwards RR, Neogi T, Kostic AM, Paltiel AD, Collins JE, Hunter DJ, Katz JN, Losina E. Does gabapentin provide benefit for patients with knee OA? A benefit-harm and cost-effectiveness analysis. *Osteoarthritis Cartilage.* 2023 Feb;31(2):279-290.

Patel NJ, Wang X, Fu X, Kawano Y, Cook C, Vanni KMM, Qian G, Banasiak E, Kowalski E, Zhang Y, Sparks JA, Wallace ZS. Factors associated with COVID-19 breakthrough infection among vaccinated patients with rheumatic diseases: A cohort study. *Semin Arthritis Rheum.* 2023 Feb;58:152108.

Whelan MG, Santacroce L, Mastro L, Qian G, Kowalski E, Vanni K, Kanjilal S, Weinblatt ME, Sparks JA, Tedeschi SK. Predictors of low spike antibody response in patients with systemic rheumatic disease after an initial course of COVID-19 vaccination. *Clin Rheumatol.* 2023 Jan 19:1-6.

VERITY Member Spotlight: Aleksander Lenert, MD

Aleksander Lenert, MD, MS, FRCPC, is a Clinical Associate Professor at the University of Iowa (UI), and clinical researcher in adults with SAPHO syndrome and chronic nonbacterial osteomyelitis (SAPHO-CNO), a painful and disabling autoinflammatory disease primarily targeting bones and joints, with no FDA-approved therapies. His long-term career goal is to develop into an independent clinical investigator focused on patient-oriented clinical and translational research. Dr. Lenert has been a VERITY member since 2018 and was the recipient of VERITY's first Pilot & Feasibility Award to develop a natural language processing-based phenotyping algorithm for autoinflammatory disease cohort building with VERITY's Bioinformatics Core (Drs. Kat Liao & Tianxi Cai). Currently, Dr. Lenert is spearheading a unique prospective observational study in adult SAPHO-CNO (the SCS study) designed to address critical knowledge gaps about disease activity assessments, risk factors for severe outcomes, and influence of variants in IL-1 pathway genes on clinical phenotypes in adults. Dr. Lenert's research is guided by an exceptional multi-disciplinary mentoring team, including direct mentorship from Dr. Polly Ferguson (world-leading expert in CNO at UI), Dr. Daniel H. Solomon (HMS/BWH), Dr. Robyn T. Domsic (University of Pittsburgh), Dr. Mary Vaughan-Sarrazin (UI) and Dr. Jonathan Templin (UI). Through his work, Dr. Lenert hopes to directly benefit patients and improve outcomes for adults with SAPHO-CNO.



***For each issue, the newsletter will feature a VERITY member. For more information, please contact Jackie Stratton (jstratton1@bwh.harvard.edu) or visit verityresearch.org to become a VERITY member.

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