



# JBC Monthly Newsletter

January 2024

## JBC UPDATES

- Please join us at **JBC Synergy Meeting** on January 26<sup>th</sup> 12:30-1:30 (Zoom) with speakers:
  - **Michelle Robinette M.D., Ph.D.** (BWH) “Identifying somatic genetic drivers of systemic inflammation”
  - **Roxane Darbousset, Ph.D.** (BCH) “GPVI-activated platelets modulate neutrophil profibrotic function in systemic sclerosis”
- The next **JBC Aims Review Committee at BWH** will be on January 11<sup>th</sup> from 1:00-2:00 P.M.. Please email [ktmueller@bwh.harvard.edu](mailto:ktmueller@bwh.harvard.edu). Aims have been submitted – please let Kevin or Alisa know if you are interested in attending.

## JBC MEMBER NEWS

- **Dr. Lauren Henderson** received an NIH RO1 grant titled “T peripheral regulatory cells as modulators of T cell-B cell interactions in arthritis”.
- **Dr. Sander Tas** received a grant titled “Human 3D synovial tissue organoids as a versatile tool to facilitate anti-rheumatic drug development for rheumatoid arthritis (3D4RA)” from ZonMw (The Dutch Research Council).
- **Dr. Aakanksha Jain (BCH)** received a NIH HEAL Initiative® Pathway to Independence Award (K99/R00) titled “Elucidating the neuroimmune mechanisms underlying pain and inflammation in autoimmune arthritis.”
- Congratulations to all 9 Year 8 Cycle 1 Microgrant Recipients:
  - Aakanksha Jain (**Wolf** Lab/BCH)
  - Ayobami Akenroye (**Allergy & Immunology**/BWH)
  - Flavien Margeurie (**Ho** Lab/BWH)
  - Kazuhiko Higashioka (**Rao** Lab/BWH)
  - Meng Liu (**Lee** Lab/BCH)
  - Monica Martinez Blanco (**Chatila** Lab/BCH)
  - Pierre-Antoine Juge (**Sparks** Lab/BWH)
  - Taehyeung Kim (**Nigrovic** Lab/BCH)
  - Vivian Lee (**Jang** Lab/BWH)

### The JBC Team:

- Peter Nigrovic, M.D.  
Director (BCH & BWH)
- Elizabeth Karlson, M.D., M.S.  
Associate Director
- Jeffrey Sparks, M.D., M.M.Sc.  
Multi-PI, Associate Director

### Human Biosamples Core:

- Jeffrey Sparks, M.D., M.M.Sc.  
Director
- Lauren Henderson, M.D., M.M.Sc.  
Associate Director BCH
- Deepak Rao, M.D., Ph.D.  
Associate Director

### Cellular Systems Core:

- Jim Lederer, Ph.D.  
Director
- Kevin Wei, M.D., Ph.D.  
Associate Director
- Maria Gutierrez-Arcelus, Ph.D.  
Associate Director

## JBC MEMBER PUBLICATIONS

- **Mizuno S**, Vadala G, Kang JD. Biological Therapeutic Modalities for Intervertebral Disc Diseases: An Orthoregeneration Network (ON) Foundation Review. *Arthroscopy: The Journal of Arthroscopic & Related Surgery*, 2023 Oct 31. <https://doi.org/10.1016/j.arthro.2023.10.032>.
- Merino-Vico A, van Hamburg JP, Tuijnenburg P, Frazzei G, Al-Soudi A, Bonasia CG, Helder B, Rutgers A, Abdulahad WH, Stegeman CA, Sanders JS, Bergamaschi L, Lyons PA, Bijma T, van Keep L, Wesenhagen K, Jongejan A, Olsson H, de Vries N, Kuijpers TW, Heeringa P, **Tas SW**. Targeting NF- $\kappa$ B signaling in B cells as a potential new treatment modality for ANCA-associated vasculitis. *J Autoimmun*. 2023 Nov 4;142:103133. doi: 10.1016/j.jaut.2023.103133. Epub ahead of print. PMID: 37931331.
- Kang JB, Shen AZ, Gurajala S, Nathan A, Rumker L, **Aguiar VRC**, Valencia C, Lagattuta KA, Zhang F, **Jonsson AH**, Yazar S, Alquicira-Hernandez J, Khalili H, Ananthkrishnan AN, Jagadeesh K, Dey K, Accelerating Medicines Partnership Program: Rheumatoid Arthritis and Systemic Lupus Erythematosus (AMP RA/SLE) Network, Daly MJ, Xavier RJ, Donlin LT, Anolik JH, Powell JE, **Rao DA**, **Brenner MB**, **Gutierrez-Arcelus M**, Luo Y, Sakaue S, **Raychaudhuri S**. Mapping the dynamic genetic regulatory architecture of HLA genes at single-cell resolution. *Nature Genetics* 55, 2255–2268 (2023). <https://doi.org/10.1038/s41588-023-01586-6>
- **Schiff AE**, Wang X, Patel NJ, Kawano Y, Hanberg J, Kowalski EN, Cook CE, Vanni KMM, Qian G, Bade KJ, Saavedra A, Srivatsan S, Williams ZK, Venkat RK, **Wallace ZS\***, **Sparks JA\***. Immunomodulators and risk for breakthrough COVID-19 after third COVID-19 mRNA vaccine among patients with rheumatoid arthritis: A cohort study. *Ann Rheum Dis*. 2023 (In Press). \*Contributed equally.
- **Kronzer VL**, Davis JM III, Hanson AC, **Sparks JA**, Myasoedova E, Ernste FC, Duarte-Garcia A, Hinze AH, Makol A, Koster MJ, Vassallo R, Warrington KJ, Wright K, Crowson CS. Association between sinusitis and incident rheumatic diseases: A population-based study. *RMD Open*. 2023 (In Press).
- Li Y, Choudhary MC, Regan J, Boucau J, Nathan A, Liew MY, Edelstein G, **Kawano Y**, Uddin R, Deo R, Marino C, Reynold Z, Barry M, Gilber RF, Tien D, Sagar S, Vyas TD, Flynn JP, **Wallace ZS**, **Sparks JA**, Seaman MS, Gaiha G, Siedner MJ, Barczak AK, Lemieux JE, Li JZ. Severe acute respiratory syndrome coronavirus 2 omicron and delta variant infection in immunocompromised and non-immunocompromised individuals: A cohort comparative study. *Sci Trans Med*. 2023 (In Press).
- Taubmann J, Müller F, Yalcin Mutlu M, Völkl S, Aigner M, Bozec A, Mackensen A, **Grieshaber-Bouyer R**, Schett G. CD19 CAR-T cell treatment: Unraveling the role of B cells in Systemic Lupus Erythematosus. *Arthritis Rheumatol*. 2023 Dec 19. <https://doi.org/10.1002/art.42784>
- **Nigrovic PA**, de Benedetti F, Kimura Y, Lovell DJ, Vastert SJ. The 4th NextGen Therapies for SJIA and MAS: part 1 the elephant in the room: diagnostic/classification criteria for systemic juvenile idiopathic arthritis and adult-onset still's disease. *Pediatric Rheum* 2024 epub 2024-01-05. 10.1186/s12969-023-00864-1

## OPEN POSITIONS

The Nigrovic lab (BCH) is seeking new postdoctoral fellows in the fields of (1) non-coding genetic variants in human autoimmunity and (2) megakaryocyte-neutrophil emperipolesis using 2-photon microscopy and other methods. Please direct inquiries to [peter.nigrovic@childrens.harvard.edu](mailto:peter.nigrovic@childrens.harvard.edu).

Please let us know if you would like your open positions posted here!