



JBC Monthly Newsletter

March 2024

JBC UPDATES

- Please join us on March 22 for the **JBC Synergy Meeting** 12:30-1:30 over Zoom:
 - **Gregory McDermott M.D., M.P.H.** (BWH)
 - “Polygenic risk scores in RA research”
 - **Tiffany Hsu M.D., Ph.D.** (BCH)
 - “RNA exosome cofactor C1D restrains aberrant MDA5 signaling”
- Please join us on **April 4th at 4:30 PM in the Hale BTM First Floor Atrium** to celebrate our mentee-mentor matches for the 2024 **JBC Mentorship Program!** More details will be announced as we approach the date.
- **The JBC Data Club** has relaunched meetings and introduced Open Office Hours! Wednesday intensive meetings occur every 2-3 weeks with Open Office Hours from 2-4 on afternoons when there are no intensive meetings. Office Hour slots are One-To-One appointments with **Dr. Maria Gutierrez-Arcelus** (BCH) that are booked through this Calendly link: calendly.com/mgutierrez-jbc. If you are interested in attending these meetings, please email maria.gutierrez-arcelus@childrens.harvard.edu to be added to the distribution list!

The JBC Team:

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

- The Rheumatology COVID-19 Study team led by **Drs. Jeffrey Sparks** and **Zachary Wallace** received a MGB Pillars of Excellence award for their innovative research collaboration across the Brigham and Women’s Hospital and Massachusetts General Hospital
- **Dr. Pui Lee** (BCH) was awarded a Rheumatology Research Foundation Innovative Research Award for his proposal entitled “IL-15 as a driver of cytokine storm in macrophage activation syndrome.”
- **Dr. Novalia Pishesha** (BCH) and **Dr. Peter Nigrovic** (BCH/BWH) were awarded a Rheumatology Research Foundation Innovative Research Award for their proposal entitled “Engineering alpaca-derived single domain antibody fragments that target class II MHC to induce antigen-specific tolerance in rheumatoid arthritis.”

JBC MEMBER PUBLICATIONS

- Müller F*, Taubmann J*, Bucci L, Wilhelm A, Bergmann C, Völkl S, Aigner M, Rothe T, Minopoulou I, Tur C, Knitza J, Kharboutli S, Kretschmann S, Vasova I, Spoerl S, Reimann H, Munoz L, Gerlach RG,

Schäfer S, **Grieshaber-Bouyer R**, Korganow AS, Farge-Bancel D, Mougiakakos D, Bozec A, Winkler T, Krönke G, Mackensen A*, Schett G*. A Case Series with Extended Follow-up of CD19-CAR-T Cell Therapy in Autoimmune Disease NEJM 2024. February 22, 2024. PMID: 38381673 DOI: <https://doi.org/10.1056/NEJMoa2308917>.

- **Patel NJ**, Wang X, Lin M, Kowalski EN, Cook CE, Vanni KMM, Guzzo K, Qian G, Bade KJ, Saavedra A, Venkat R, Srivatsan S, Williams ZK, Hanberg JS, Kawano Y, Schiff AE, **Sparks JA***, **Wallace ZS***. Factors associated with an electronic health record-based definition of post-acute sequelae of COVID-19 in patients with systemic autoimmune rheumatic disease. *J Rheumatol*. 2024 (In Press). *Contributed equally.
- **Kim T**, Martínez-Bonet M, Wang Q, **Sparks JA**, Baglaenko Y, Koh BH, **Darbousset R**, **Laza-Briviesca R**, Chen X, **Gutierrez-Arcelus M**, **Brenner MB**, Westra HJ, Weirauch MT, **Raychaudhuri S**, **Rao DA**, **Nigrovic PA**. Non-coding autoimmune risk variant defines role for ICOS in T peripheral helper cell development. *Nat Commun*. 2024 Mar 9;15(1):2150. doi: 10.1038/s41467-024-46457-8.
- Nassar AH, El Zarif T, Khalid AB, Rahme S, Zhong C, Kwak L, Salame M, Farhat EB, Freeman D, El-Am E, Ravishankar A, Ahmad B, Nana FA, Kaldas D, Naqash AR, Sharon E, LeBoeuf N, Cortellini A, Malgeri A, Gupta S, Al-Hader A, **Sparks JA**, Linnoila J, Hamnvik OPR, Mouhieddine TH, Marron TU, Parikh K, McKay RR, Dilling T, Choueiri TK, Adib E, Najem E, Kim SY, Sonpavde GP. Clinical outcomes and safety of immune checkpoint inhibitors in patients with solid tumors and paraneoplastic syndromes. *J Immunother Cancer*. 2024 (In Press).
- **Kronzer VL**, **Sparks JA**, **Raychaudhuri S**, Cerhan JR. Low-frequency and rare genetic variants associations with rheumatoid arthritis risk. *Nat Rev Rheumatol*. 2024 (In Press).
- **Sparks JA**. Pre-existing autoimmune diseases and immune checkpoint inhibitors for cancer treatment: Considerations about initiation, flares, immune-related adverse events, and cancer progression. *Rheum Dis Clin*. 2024 (In Press).
- Ladouceur A, Clifford A, Ezzoglian A, Jamal S, Hudson M, **Sparks JA**, Roberts J, Ye C. The utility of laboratory investigations for the assessment and management of rheumatic immune-related adverse events. *Rheum Dis Clin*. 2024 (In Press).
- **Juge PA**, **Dellaripa PF**, **Sparks JA**. Pulmonary damage biomarkers for risk of rheumatoid arthritis-associated interstitial lung disease: Enabling early detection and risk stratification. *Arthritis Rheumatol*. 2024 Feb 15. doi: 10.1002/art.42827. Online ahead of print.
- **McDermott GC**, **Sparks JA**. Rheumatoid arthritis and bronchiectasis risk: Additional evidence linking autoimmunity and airways disease. *Chest*. 2024 (In Press).
- Ford JA, Cho MH, **Sparks JA**. Bi-directional association of RA and COPD: Linking arthritis, inflammation, smoking, airways disease, and emphysema. *Rheumatology*. 2024 (In Press).
- **Chang MH**, Fuhlbrigge RC, **Nigrovic PA**. Joint-specific memory, resident memory T cells, and the rolling window of opportunity in arthritis. *Nat Rev Rheumatol*. 2024 (In Press).

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.

The Chang Lab is hiring for a postdoctoral position in the areas of T cell biology and human and animal models of arthritis. Please direct inquiries to margaret.chang@childrens.harvard.edu.

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