



JBC Monthly Newsletter

January 2020

JBC Updates

- **Next JBC Synergy Meeting** will be January 31st, 12:30-1:30 p.m. (Marshall A. Wolf Conference Room, 60 Fenwood 3rd Floor).
Talk 1: Susan Maclaughlan, PhD (Gravallese lab) “The role of the intracellular DNA sensor STING in bone homeostasis”
Talk 2: Maria Gutierrez-Arcelus, PhD (Raychaudhuri lab) “What inter-individual differences in T cell activation can tell us about autoimmune disease mechanisms”.
- **Next Aims Review Committee Meeting** will be held on January 23rd, 12:30-1:30pm, location TBD
- **JBC Microgrant Deadline** is February 5th! Please visit our website <http://www.jbcwebportal.org/jbc-microgrant-program/> for more information about how to apply for up to \$5,000 in free JBC services including patient samples, CyTOF, and RNAseq.
- **Save the date:** The 2020 JBC Visiting Professor will be **Dr. Timothy Niewold**, NYU, to give BWH Rheumatology Grand Rounds 8-9am and lunch conference 12:30-1:30pm on June 16.

JBC Member News

AWARDS AND GRANTS

Congratulations to **Lauren A. Henderson, MD, MMSc** on her promotion to Assistant Professor of Pediatrics at Harvard Medical School.

Shing Law, MD has been awarded the **Oxford University Public Engagement Research Seed Fund**. He will engage the public to demonstrate how ultrasound may help visualize needle placement for ultrasound guided synovial biopsy procedures.

Julia F. Charles, MD, PhD was awarded an Orphan Disease Center Million Dollar Bike Ride grant (category Fibrous Dysplasia/McCune Albright Syndrome) entitled “Do osteoclasts mediate bone marrow fibrosis in fibrous dysplasia?”

Sander W. Tas, MD, PhD was awarded a Dutch Arthritis Foundation grant entitled “Extrathymic Autoimmune Regulator (AIRE) expressing cells to induce tolerance in patients with primary Sjögren’s Syndrome”.

Peter A. Nigrovic, MD was awarded NIH grants R21AR076630 “Modulation of neutrophil function through emperipolesis” and R21HL150575 “Impact of emperipolesis on platelet function”.

The JBC Team:

Peter Nigrovic, M.D.
Director (BWH & BCH)

Human Biosamples Core:

- **Elizabeth Karlson, M.D.**
Director
- **Jeffrey Sparks, M.D., M.M.Sc.**
Associate Director BWH
- **Lauren Henderson, M.D., M.M.Sc.**
Associate Director BCH

Cellular Systems Core:

- **Jim Lederer, Ph.D.**
Director
- **Peter Nigrovic, M.D.**
Associate Director
- **Kevin Wei, M.D., Ph.D.**
Associate Director

PUBLICATIONS

Geginat J, Vasco M, Gerosa M, **Tas SW**, Pagani M, Grassi F, Flavell RA, Meroni P, Abrignani S. IL-10 producing regulatory and helper T-cells in systemic lupus erythematosus. *Semin Immunol*. 2019 Aug;44:101330. doi: 10.1016/j.smim.2019.101330. Epub 2019 Nov 15. Review. PubMed PMID: 31735515.

Jeucken KCM, Koning JJ, Mebius RE, **Tas SW**. The Role of Endothelial Cells and TNF-Receptor Superfamily Members in Lymphoid Organogenesis and Function During Health and Inflammation. *Front Immunol*. 2019 Nov 20;10:2700. doi: 10.3389/fimmu.2019.02700. eCollection 2019. Review. PubMed PMID: 31824495; PubMed Central PMCID: PMC6879661.

Cunin P, Nigrovic PA. Megakaryocyte emperipolesis: a new frontier in cell-in-cell interaction. [review] *Platelets*. 2019 Nov 21:1-7.

Thomas C, Vaidya A, Kwiatkowski DJ, **Rao DA**, Vleugels RA. Facing Uncertainty. *N Engl J Med*. 2019 Nov 28;381(22):e39. doi: 10.1056/NEJMimc1905882.

Rao DA, Arazi A, Wofsy D, Diamond B. *Nat Rev Nephrol*. Design and application of single-cell RNA sequencing to study kidney immune cells in lupus nephritis. 2019 Dec 18. doi: 10.1038/s41581-019-0232-6. [Epub ahead of print] Review. PMID:31853010.

Lee PY*, Kellner ES, Huang Y, Furutani E, Bainter W, Alosaimi MF, Stafstrom K, Platt CD, Stauber T, Raz S, Tirosh I, Weiss A, Jordan MB, Krupski C, Eleftheriou D, Brogan P, Sobh A, Baz Z, Lefranc G, Kilic SS, El-Owaidy R, Pimpale P, Khubhandani R, Chambers EC, Chou J, Geha RS, **Nigrovic PA+**, Zhou Q+. Genotype and functional correlates of disease phenotype in Deficiency of Adenosine Deaminase 2 (DADA2). *J Allerg Clin Immunol* 2019 December 27 [in press]. (*corresponding, + co-senior authors)

Chen HJ, **Tas SW**, de Winther MPJ. Type-I interferons in atherosclerosis. *J Exp Med*. 2020 Jan 6;217(1). pii: e20190459. doi: 10.1084/jem.20190459. PubMed PMID: 31821440.

Zaccardelli A, Liu X, **Ford JA**, **Cui J**, **Lu B**, Chu SH, Schur PH, Speyer CB, **Costenbader KH**, **Robinson WH**, Sokolove J, **Karlson EW**, Camargo CA, **Sparks JA**. Elevated anti-citrullinated protein antibodies prior to rheumatoid arthritis diagnosis and risks for chronic obstructive pulmonary disease or asthma. *Arthritis Care Res*. 2020 (In Press).

Solomon DH, Glynn RJ, **Karlson EW**, **Lu F**, Corrigan CC, Colls J, Xu C, MacFadyen JG, Barbhaiya M, Berliner N, **Dellaripa PF**, Everett BM, Hammond S, **Murray M**, **Rao DA**, **Ritter SY**, Rutherford A, **Sparks JA**, Stratton J, Suh DH, **Tedeschi SK**, Vanni K, Paynter NP, Ridker PM. Adverse effects of low dose methotrexate in a randomized double-blind placebo-controlled trial: Adjudicated results from the Cardiovascular Inflammation Reduction Trial. *Ann Intern Med*. 2020 (In Press).

Mahler M, Martinez-Prat L, **Sparks JA**, Deane KD. Precision medicine in the care of rheumatoid arthritis: Focus on prediction and prevention of future clinically-apparent disease. *Autoimmun Rev*. 2020 (In Press).