

## JBC Updates

- The next JBC Synergy Meeting on 12/16 will focus on the Human Biosamples Core. Dr. Beth Karlson will demonstrate the use of the Biobank portal as well as how to use RPDR to access clinical data. **Dr. Jeff Sparks** will present a practical utilization of HBC resources for his clinical research. For remote access, please contact Minah.
- We are pleased to announce the decisions for the first cycle of JBC Microgrants! JBC will be awarding \$18,800 in grants to the following recipients:
  - Deepak Rao, M.D., Ph.D. "Association between peripheral helper T cells and rheumatoid factor titer in rheumatoid arthritis patients" Brigham and Women's Hospital (Boston)
  - Hui-Hsin Chang, Ph.D. "Regulatory roles of citrullination in the differentiation/function of Th cells" Brigham and Women's Hospital (Boston)
  - Sander Tas, M.D, Ph.D. "Molecular profiling of extrathymic AIRE-expressing cells (eTACs) in rheumatoid arthritis synovial tissue" AMC (Amsterdam)
  - Halima Moncrieffe, Ph.D. "Identifying signaling aberrations in JIA synovial mononuclear cells" Cincinnati Children's Hospital Medical Center (Cincinnati)
  - Ricardo Grieshaber. "RNAseq-driven differentiation of neutrophil subsets defined by CD177" Brigham and Women's Hospital (Boston)
- Upcoming JBC talk: Nigrovic, PA. "The Joint Biology Consortium - A new arthritis research infrastructure," at the EULAR Synovitis Study Group on November 14 at the ACR meeting (Marriott Marquis, Meeting Level 3, Shaw room, 12:30-2:30pm).

## JBC Member News

### Awards

Dr. **Julia Charles** was selected for the BWH Faculty Career Development Award for the proposal 'Skeletal alterations induced by the gut microbiome: serotonin and IGF1 connect bugs to bones.'

### Grants

- R01 AI118855-01; Kriegel (PI); NIH/NIAID  
Title: Human Gut Commensal Cross-reactivity in Antiphospholipid Syndrome
- BRI FY15109842; Kriegel (PI); NIH Cooperative Study Group for Autoimmune Disease Prevention  
Title: Shaping of the Human Gut Microbiome by an Autoimmune Risk Allele

### JBC SYNERGY MEETING

**Date: December 16th, 2016**

**Time: 12:30-1:30 p.m.**

**Location: BTM Room 06014**

### JBC Team

Director: Dr. Peter Nigrovic (BWH + BCH)  
 Human Biosamples Core Director: Dr. Elizabeth Karlson (BWH); Associate Directors: Dr. Jeffrey Sparks (BWH) & Dr. Lauren Henderson (BCH)  
 Cellular Systems Core Director: Dr. Jim Lederer (BWH); Associate Directors: Dr. Chad Nusbaum (Broad) & Dr. Peter Nigrovic (BWH + BCH)  
 JBC Coordinator: Minah Iqbal (BWH)

## JBC Member News

- AF# 6473 Kriegel (PI); Arthritis Foundation  
Title: Commensal Prokaryotic Ro60 Orthologs as Causal Triggers for Lupus
- AbbVie ID# YA-009; Kriegel (PI); AbbVie  
Title: Bcl-2 Inhibition in Antiphospholipid Syndrome as a Novel Therapeutic Avenue
- LRI; Kriegel (PI); Lupus Research Institute  
Title: A Role for Diet-Sensitive Gut Commensals in Antiphospholipid Syndrome

## Publications (JBC running total: 3)

- Li G, Cunin P, Wu D, Diogo D, Yang Y, Okada Y, Plenge R., Nigrovic, P. (2016) The Rheumatoid Arthritis Risk Variant CCR6DNP Regulates PARP-1. *PLoS Genet* 12(9): e1006292. doi:10.1371/journal.pgen.1006292
- O'Brien W, Fissel BM, Maeda Y, Yan J, Ge X, Gravallesse EM, Aliprantis AO., Charles JF (2016) Receptor activator of nuclear factor kappa-B (RANK) independent osteoclast formation and bone erosion in inflammatory arthritis. *Arthritis Rheumatol.* doi: 10.1002/art.39837
- Ruff WE, Kriegel MA. Autoimmune host-microbiota interactions at barrier sites and beyond. *Trends in Mol Med* 2015; 21(4):233-244.
- Konig MF, Abusleme L, Reinholdt J, Palmer RJ, Teles RP, Sampson K, Rosen A, Nigrovic PA, Sokolove J, Giles JT, Moutsopoulos NM, Andrade F. *Aggregatibacter actinomycetemcomitans*-induced hypercitrullination links periodontal infection to autoimmunity in rheumatoid arthritis. *Sci Trans Med* [in press].
- Rao DA, Gurish MF, Marshall JL, Slowikowski K, Fonseka C, Liu Y, Donlin LT, Henderson LA, Wei K, Mizoguchi F, Teslovich NC, Weinblatt ME, Massarotti EM, Coblyn JS, Helfgott SM, Lee YC, Todd DJ, Bykerk VP, Goodman SM, Pernis AB, Ivaskiv LB, Karlson EW, Nigrovic PA, Filer A, Buckley CD, Lederer JA, Raychaudhuri S and Brenner MB. Pathologically expanded 'peripheral' B cell-helper T cells in rheumatoid arthritis. *Nature* [in press]. (JBC#3)
- Hinks A, Bowes J, Cobb J, Ainsworth HC, Marion MC, Comeau ME, Sudman M, Han B, Juvenile Arthritis Consortium for Immunochip, Becker ML, Bohnsack JF, de Bakker PIW, Haas JP, Hazen M, Lovell DJ, Nigrovic PA, Nordal E, Punjaro M, Rosenberg AM, Rygg M, Smith SL, Wise CA, Videm V, Wedderburn LR, Yarwood A, Yeung RSM, Prahalad S, Langefeld CD, Raychaudhuri S, Thompson SD, Thomson W. Fine-mapping the MHC locus in juvenile idiopathic arthritis (JIA) reveals genetic heterogeneity corresponding to distinct adult inflammatory arthritic diseases. *Ann Rheum Dis* [in press].