



JBC Monthly Newsletter

AUGUST 2017

Next JBC Synergy Meeting:

Date: September 29th,
2017

THE JBC TEAM

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

Human Biosamples Core:

- Elizabeth Karlson, M.D.
Director (BWH)
- 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 (BWH)
- Chad Nusbaum, Ph.D.
Associate Director
Broad Institute
- Peter Nigrovic, M.D.
Associate Director BWH

JBC Updates

- There will be no Synergy Meeting in August.
- Based on popular demand, we will now be introducing “JBC In Action” portion to this monthly Newsletter which highlights some of JBC’s work. They can also be viewed on our website (www.jbcwebportal.org).

JBC Member News

Awards :

Dr. Ellen Gravallesse (Chief, Rheumatology, UMass Memorial Medical Center) received the 2017 Stephen M. Krane Award from ASBMR for research in inflammation and bone. Dr. Gravallesse is also a recipient of the new R01 and R21, as well as a grant from CTSA .

JBC member Dr. I-Cheng Ho (BWH) received a NIAMS R01 award entitled “Causes and roles of hypercitrullination in preclinical rheumatoid arthritis.” JBC member Dr. Yvonne Lee (BWH) is co-investigator on the award.

Publications (JBC running total: 8)

McIntosh LA, Marion MC, Sudman M, Comeau ME, Becker ML, Bohnsack JF, Fingerlin TE, Griffin TA, Haas JP, Lovell DJ, Maier LA, Nigrovic PA, Prahalad S, Punaro M, Rosé CD, Wallace CA, Wise CA, **Boston Children’s JIA Registry**, German Society for Pediatric Rheumatology (GKJR), JIA Gene Expression Studies, NIAMS JIA Genetic Registry, TREAT Study, Understanding TNF Therapy in JIA Project, **Moncrieffe H**, Howard TD, Langefeld CD, Thompson SD. Genome-wide association meta-analysis reveals novel juvenile idiopathic arthritis susceptibility loci. *Arthritis Rheumatol* 2017 [in press].

JBC Member News (continued)

Bai M*, **Grieshaber-Bouyer R***, Wang JX, **Schmider AB**, Wilson ZS, Zeng L, **Halyabar O**, Godin MD, Nguyen HN, **Levescot A**, **Cunin P**, Lefort CT, **Soberman RJ**, **Nigrovic PA**. CD177 modulates human neutrophil migration through activation-mediated integrin and chemoreceptor regulation. *Blood* 2017 blood-2017-03-768507; (JBC #8)

Charles JF, Sury M, Tsang K, Urso K, Henke K, Huang Y, Russell R, Duryea J, Harris MP. Utility of quantitative micro-computed tomographic analysis in zebrafish to define gene function during skeletogenesis. *Bone*. 2017, May 2;101:162-171.

Yan, J and **Charles, JF**. Gut microbiome and bone: to build, destroy or both? *Curr Osteoporos Rep*. 2017, Aug 15; 4 :376-384.

Yan J, Takakura A, Zandi-Nejad K, **Charles JF**. Mechanisms of gut-microbiota mediated bone remodeling. *Gut Microbes*, 2017, in press.

Sinha B, Wu Q, Li W, Tu Y, Sirianni AC, Chen Y, Jiang J, Zhang X, **Zhou S**, Chen W, Reiter RJ, Manning S, Patel NJ, Aziz-Sultan AM, Inder TE, Friedlander RM, Fu J, Wang X. Protection of melatonin in experimental models of newborn hypoxic-ischemic brain injury through MT1 receptor. *J Pineal Res*. 2017 Aug 10. doi: 10.1111/jpi.12443. [Epub ahead of print] PubMed PMID: 28796402.

Li J, Padwa BL, **Zhou S**, Mullokandova J, LeBoff MS, **Glowacki J**. Synergistic effect of $1\alpha,25$ -dihydroxyvitamin D(3) and 17β -estradiol on osteoblast differentiation of pediatric MSCs. *J Steroid Biochem Mol Biol*. 2017 Jul 29. pii: S0960-0760(17)30197-8. doi: 10.1016/j.jsbmb.2017.07.032. [Epub ahead of print] PubMed PMID: 28765038.

JBC In Action



Dr. Ho

Dr. I-Cheng Ho is currently collaborating with **Dr. Lauren Henderson**, Associate Director of Human Biosamples Core at Boston Children's Hospital (BCH), to prospectively recruit patients with Juvenile Idiopathic Arthritis (JIA) to evaluate the role of PTPN22 in inflammatory arthritis. Recruitment is focused on collecting samples from patients with various forms and subtypes of JIA for isolation of peripheral blood mononuclear cells (PBMC).



Dr. Henderson

Kacie Hoyt, one of JBC's research coordinators, identifies subject by their medical records, and approaches them during a clinic visit. Once the patients have consented for participation, a blood sample is obtained. This sample is processed and stored in Dr. Henderson's laboratory and the BCH Biorepository respectively.

Over a period of 10 months, 36 samples have been obtained from enrolled subjects. At the close of the recruitment period, the samples will be transferred to Dr. Ho for use in his studies.



Kacie Hoyt

"This project was conceived during one of the monthly JBC meetings. Through JBC, I was able to connect with Dr. Henderson, who has an ongoing program recruiting JIA patients and collecting their PBMC. Her team has so far collected PBMC from nearly 40 JIA patients for me while my laboratory has chipped in very little, if any at all, personnel or financial effort. Although this project is still at a very early stage, it would never get to this point without JBC and the collaboration with Dr. Henderson. The saving in personnel and financial cost on my side is tremendous. However, the opportunity to meet face-to-face with other investigators, such as Dr. Henderson, who have different clinical and research background but shared research interest, through the monthly JBC meetings is priceless. "

-Dr. I-Cheng Ho