HDACs as regulators of T cell-mediated immunity in health and disease

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SFB F70 Seminar - ONLINE

VitD-directed transcriptional programs in T cells and their role in COVID-19

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Registration

Wednesday, 24th of March, 2021, 16:45-17:30 Uhr

Location: Online seminar - Zoom (**link**)

Host: Michael Bonelli

Biosketch

Ben Afzali is currently an Earl Stadtman Investigator and a consultant nephrologist at the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), NIH. He received his medical and doctoral training in the United Kingdom at the medical schools of Guy's and St Thomas' and King's College London, respectively, before undertaking post-doctoral training with John O'Shea at the NIH. His laboratory studies how environmental signals in tissues are integrated via networks of transcription factors to direct the basic mechanisms of autoimmunity, tissue injury and wound healing. His research contributions include the description of BRIDA syndrome, a novel primary immunodeficiency disease mediated by haplo-insufficient loss of function mutations in the BACH2 transcription factor, followed by description of the CD161+ sub-population of human regulatory T cells as a BACH2-dependent Treg population with wound healing properties in the gastrointestinal mucosa.

Selected recent publications

- Kolev M et al., Diapedesis-Induced Integrin Signaling via LFA-1 Facilitates Tissue Immunity by Inducing Intrinsic Complement C3 Expression in Immune Cells. Immunity (2020) 52:513-527.e8
- Povoleri et al. Human retinoic acid-regulated CD161+ regulatory T cells support wound repair in intestinal mucosa. Nat Immunol (2018) 19:1403-1414
- McGregor et al. An Autocrine Vitamin D-driven Th1 shutdown program can be exploited for COVID-19. bioRxiv 2020.
- Yan et al. SARS-CoV2 drives JAK1/2-dependent local and systemic complement hyperactivation. ResearchSquare 2020.
- Yan et al. Host-virus chimeric events in SARS-CoV2 infected cells are infrequent and artifactual. bioRxiv 2021.