

Basic, translational and clinical
research for the benefit of the patient



IMMUNOLOGY RESEARCH CLUSTER
MEDICAL UNIVERSITY OF VIENNA

IRC SEMINAR

**“MicroRNA-mediated regulation of T
follicular helper and Th17 cells”**

Dirk BAUMJOHANN, PhD

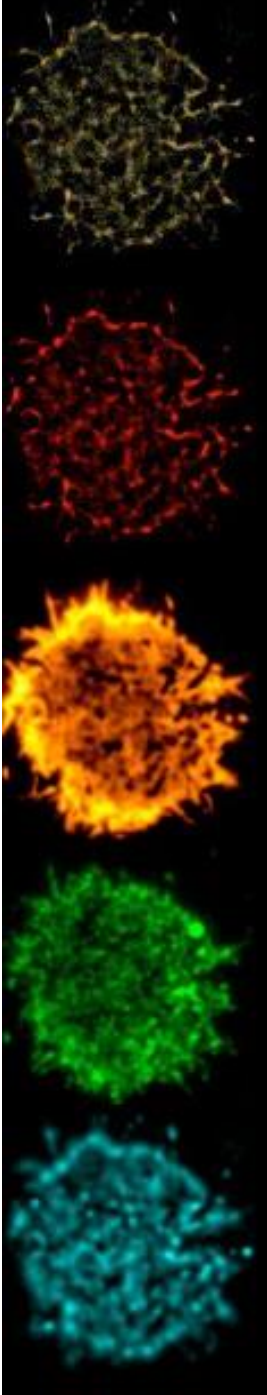
*(Emmy Noether Research Group Leader, Ludwig-
Maximilians-Universität München, Biomedical
Center, Institute for Immunology, Planegg-
Martinsried, Germany)*

Host: Nicole Boucheron

**Monday, 24th of September
10:00 Uhr**

Vienna Competence Center
Seminar Room, 1st Floor,
Lazarettgasse 19, 1090 Vienna

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Biosketch

Dirk Baumjohann studied Molecular Medicine in Erlangen, Germany, with his diploma thesis on non-invasive in vivo imaging of dendritic cell migration. He then earned his PhD degree in Cell Biology/Immunology with Federica Sallusto at the Institute for Research in Biomedicine in Bellinzona, Switzerland, with work on T cell-B cell interactions and a focus on T follicular helper (Tfh) cells. Next, he joined K. Mark Ansel's lab at UCSF in San Francisco for his postdoctoral work on cellular and molecular regulation of T helper cell differentiation, in particular the role of miRNAs and transcription factors. Since 2014, he is an independent Emmy Nother Research Group Leader at the LMU in Munich (funded by the German Research Foundation), where he currently investigates the molecular basis of T helper cell diversity in various disease models and patient-derived samples.



Selected recent publications

- Matthias J, Maul J, Noster R, Meinl H, Chao YY, Gerstenberg H, Jeschke F, Gilles G, Welle A, Walter J, Nordstroem K, Eberhardt K, Renisch D, Donakonda S, Knolle P, Soll D, Grabbe S, Garzorz-Stark N, Eyerich K, Biedermann T, Baumjohann D, Zielinski CE. (2018). Sodium chloride is an ionic checkpoint for human Th2 cell responses and shapes the atopic skin microenvironment. **bioRxiv** 390393; doi: <https://doi.org/10.1101/390393>
- Essig K, Hu D, Guimaraes JC, Alterauge D, Edelmann S, Raj T, Kranich J, Behrens G, Heiseke A, Floess S, Klein J, Maiser A, Marschall S, Hrabě de Angelis M, Leonhardt H, Calkhoven CF, Noessner E, Brocker T, Huehn J, Krug AB, Zavolan M, Baumjohann D, and Heissmeyer V. (2017). Roquin Suppresses the PI3K-mTOR Signaling Pathway to Inhibit T Helper Cell Differentiation and Conversion of Treg to Tfr Cells. **Immunity** 47, 1067-1082.
- Montoya MM, Maul J, Singh PB, Pua HH, Dahlström F, Wu N, Huang X, Ansel KM, and Baumjohann D. (2017). A Distinct Inhibitory Function for miR-18a in Th17 Cell Differentiation. **J Immunol** 199, 559-569.
- Maul J., and Baumjohann D. (2016). Emerging roles for microRNAs in T follicular helper cell differentiation. **Trends Immunol** 37, 297-309.