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1933 Age-Associated B Cells: A T-bet–Dependent Effector with Roles in Protective and Pathogenic Immunity
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CUTTING EDGE
1939 Cutting Edge: cGAS Is Required for Lethal Autoimmune Disease in the Trex1-Deficient Mouse Model of
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Elizabeth E. Gray, Piper M. Treuting, Joshua J. Woodward, and Daniel B. Stetson

On the cover: Head of a juvenile medaka fish carrying fluorescent markers for chemokine receptors ccr9a (green) and ccr9b (red). ccr9a+ cells are located in the thymus, skin, and other tissues, whereas ccr9b+ cells are preferentially located in the thymus. Both receptors are involved in guiding thymocytes and triggering steps in their maturation. Bajoghli, B., P. Kuri, D. Inoue, N. Aghaallah, M. Hanel, T. Thumberger, M. Rauzi, J. Wirtzbodt, and M. Leptin. 2015. Noninvasive in toto imaging of the thymus reveals heterogeneous migratory behavior of developing T cells. J. Immunol. 195: 2177–2186.

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1945 Radiosensitive Hematopoietic Cells Determine the Extent of Skin Inflammation in Experimental Epidermolysis Bullosa Acquisita

1955 Genetic Interaction between Lyn, Ets1, and Btk in the Control of Antibody Levels
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1964 The T Cell Repertoire–Diversifying Enzyme TSSP Contributes to Thymic Selection of Diabetogenic CD4 T Cell Specificities Reactive to ChgA and IAPP Autoantigens
Christophe Viret, Karim Mahiddine, Rocky Lee Baker, Kathryn Haskins, and Sylvie Guerder

1974 IL-7/IL-7 Receptor Signaling Differentially Affects Effector CD4+ T Cell Subsets Involved in Experimental Autoimmune Encephalomyelitis
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1984 Au-ACRAMTU-PEt3 Alters Redox Balance To Inhibit T Cell Proliferation and Function
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1995 The Raf Kinase Inhibitor Sorafenib Inhibits JAK–STAT Signal Transduction in Human Immune Cells

2006 Chronic Psoriatic Skin Inflammation Leads to Increased Monocyte Adhesion and Aggregation
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