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1903 KoPT, a Tripeptide Derivative of α-Melanocyte–Stimulating Hormone, Suppresses IL-1β–Mediated Cytokine Expression and Signaling in Human Sebocytes
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1920 Altered Effector CD4+ T Cell Function in IL-21R−/− CD4+ T Cell-Mediated Graft-Versus-Host Disease

1927 Immune Dysregulation by the Rheumatoid Arthritis Shared Epitope
Denise E. De Almeida, Song Ling, Xiujuan Pi, Anne M. Hartmann-Scruggs, Paul Pumpens, and Joseph Holoshitz

1935 Antibodies to HLA-E in Nonalloimmunized Males: Pattern of HLA-Ia Reactivity of Anti–HLA-E–Positive Sera
Mepur H. Ravindranath, Hugo Kaneku, Nadim El-Awar, Luis E. Morales-Buenrostro, and Paul I. Terasaki

1949 Polymorphic Variants of LIGHT (TNF Superfamily-14) Alter Receptor Avidity and Bioavailability
Timothy C. Cheung, Ken Coppiesers, Hideki Sanjou, Lisa M. Óbore, Paula S. Norris, Amy Coddington, Steven W. Granger, Dirk Elewaut, and Carl F. Ware

1959 IL-17 Immunity in Human Type 1 Diabetes
Jarno Honkanen, Janne K. Nieminen, Ru Gao, Kristiina Luopajarvi, Harri M. Salo, Jorma Ilonen, Mikael Knip, Timo Otonkoski, and Outi Vaarala

1968 Inhibition of Glyceraldehyde-3-Phosphate Dehydrogenase Activity by Antibodies Present in the Cerebrospinal Fluid of Patients with Multiple Sclerosis
Johanna Källn, Ying Zhang, Gaby That, Michael Demetriou, Neal Hermanowicz, Pierre Duquette, Stanley van den Noort, and Yufen Qin
1976   Ischemia Reperfusion Induces IFN Regulatory Factor 4 in Renal Dendritic Cells, which Suppresses Postischemic Inflammation and Prevents Acute Renal Failure
Saraswati Lassen, Maciej Lech, Christoph Römmele, Hans-Willi Mittruecker, Tak W. Mak, and Hans-Joachim Anders

LETTERS OF RETRACTION

1984   Retraction: Activation of Discoidin Domain Receptor 1 Facilitates the Maturation of Human Monocyte-Derived Dendritic Cells Through the TNF Receptor Associated Factor 6/TGF-β-Activated Protein Kinase 1 Binding Protein 1β/p38α Mitogen-Activated Protein Kinase Signaling Cascade
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1985   Correction: Lysophosphatidylcholine Increases Neutrophil Bactericidal Activity by Enhancement of Azurophil Granule-Phagosome Fusion via Glycine-GlyRα2/TRPM2/p38 MAPK Signaling
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