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Medical education in Bern and Geneva, MD 1978. PhD 1984 and FMH in pathology 1988 in Basel. Positions held: 1974 Immunology University of Bern, 1979 Pharmacology, Sandoz Pharma Basel, 1991 Professor at University of Zurich, Pharmacology-Toxicology, 1975 Professor of Immunology University Cape Town, RSA. Since 2001 Director of research, CNRS Immunology, Orleans, France with active research, and advisor of pharma companies. Founder of IBR Inc, Artimmune SAS and Phenotec AG.



Research: Mechanisms of inflammation, especially respiratory inflammation, fibrosis, emphysema and COPD, but also in skin, hepatic, intestinal, renal and CNS inflammation:

Innate immune danger sensing and cGAS/STING, ROS and Inflammasome activation in models of human inflammatory diseases and tumor development, role of microbiome and metabolome.

TNF and IL-1 family members, in cell death and IL-33 and T2 / T17 polarization and differentiation.

APB drug candidate: Stable butyrate to treat chronic lung inflammation and fibrosis in development.

Recent publications (>550, HF98)

Bugaut H, El Morr Y, Mestdagh M, Darbois A, Paiva RA, Salou M, Le Gac AL, **Ryffel B**, Montagutelli X, Lantz O, Legoux F. A conserved transcriptional program for MAIT cells across mammalian evolution. *J Exp Med*. 2024 Feb 5;221(2):e20231487. doi: 10.1084/jem.20231487

Cutrin JC, Alves-Filho JC, **Ryffel B**. Editorial: Sepsis: studying the immune system to highlight biomarkers for diagnosis, prognosis and personalized treatments. *Front Immunol*. 2023 22;14:1325020. doi: 10.3389/fimmu.2023.1325020.

Russo RC, Quesniaux VFJ, **Ryffel B**. Homeostatic chemokines as putative therapeutic targets in idiopathic pulmonary fibrosis. *Trends Immunol*. 2023 Nov 9;S1471-4906(23)00210-7. doi: 10.1016/j.it.2023.10.003.

Carignon S, De Moura Rodrigues D, Gosset D, Culerier E, Huot-Marchand S, Savigny F, Kaya E, Quesniaux V, Gombault A, Couillin I, **Ryffel B**, Le Bert M, Riteau N. Lung inflammation and interstitial fibrosis by targeted alveolar epithelial type I cell death. *Front Immunol*. 2023. 14:1261483. doi: 10.3389/fimmu.2023.1261483.

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Bergant V, Schnepf D, de Andrade Krätzig N, Hubel P, Urban C, Engleitner T, Dijkman R, **Ryffel B**, Steiger K, Knolle PA, Kochs G, Rad R, Staeheli P, Pichlmair A. mRNA 3'UTR lengthening by alternative polyadenylation attenuates inflammatory responses and correlates with virulence of Influenza A virus. *Nat Commun.* 2023 Aug 15;14(1):4906. doi: 10.1038/s41467-023-40469-6

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Leinardi R, Pochet A, Uwambayinema F, Yakoub Y, Quesniaux V, **Ryffel B**, Broz P, Pavan C, Huaux F. Gasdermin D membrane pores orchestrate IL-1 α secretion from necrotic macrophages after NFS-rich silica exposure. *Arch Toxicol.* 2023 Apr;97(4):1001-1015. doi: 10.1007/s00204-023-03463-x.

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