

Activity Report 2012

Background on iAR institutions

The iAR is established in Lausanne since 2009 and has been created to support basic and translational research in arthritis. The iAR consists of 4 different prestigious Swiss research institutions.

Activities of the iAR members in 2012

- Institute in Geneva (Head, Prof C. Gabay)

Cytokines play a critical role in regulating inflammatory and immune responses. Therapies targeting cytokines are currently used in the treatment of rheumatic diseases. The laboratory of Prof. Gabay has published interesting results on the role of a novel cytokine, IL-36, on immune responses.

- Institute in Lausanne (Head, Prof N. Fasel)

Several major contributions by the Department of Biochemistry have been made on the dissection of such pathways using molecular and cellular tools, leading in the reappraisal of therapies of inflammatory disease such as gout. Results on the pathogenesis of osteoarthritis have been obtained.

- Institute in Zürich (Head, Prof S. Gay)

Epigenetics is the study of all heritable and potentially reversible changes in genome function that do not alter the nucleotide sequence within the DNA. The laboratory of Prof. Gay has obtained interesting results on the role of epigenetic in inflammatory arthritis.

- Institute in Bellinzona (Head, Prof. A. Lanzavecchia)

Interactions exist between the immune and the skeletal systems. Interesting results were published on the role of the cytokine IL-1 on T cells responses as well as on innate immune mechanisms triggered by endogenous danger signals such as HMGB1.

Collaborations between iAR institutes

The Institutes collaborate on different research projects, including the function of microRNA in inflammatory responses (Lausanne/Zürich), the autoantibodies in rheumatoid arthritis (Bellinzona/Geneva), the role of cytokines in T cell responses (Geneva/Bellinzona)

iAR visibility

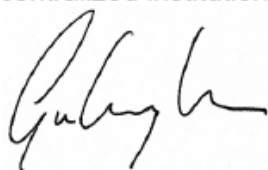
In 2012 the 4 iAR laboratories have published 20 articles in Journals with high international visibility. The research projects supported by iAR were presented during the iAR meeting in Geneva on December 20th in the presence of the scientific advisory board. The iAR has also supported an international research meeting on Cytokines and Interferon that took place in Geneva in September 2012

Financial support in 2012

The iAR has received a donation of 1.6 MCHF that was used to support the 4 participating institutions and the transgenic mouse repository facility located in Lausanne. This funding will also support the future "junior group" that will be established in Geneva in 2013. The iAR accounts have been audited with a positive evaluation by an external organism in 2012.

Future objectives

In 2013, iAR will pursue its financial support to the research projects. The iAR will also start a fundraising campaign to support the expansion of its activities beyond 2014 to create a centralized institution that will be able to host several research groups working on arthritis.



Professor Cem Gabay
President of iAR

December 20th 2012