

Covid-19, SSI 50 years and Nobel: Three immunological reasons to remember 2020

In October each year, Stockholm becomes the scientific epicentre of the world due to the Nobel Prize announcements. Two years ago, immunotherapy against cancer was awarded the Nobel Prize in Physiology or Medicine, evoking joy and respect in the field of immunology. This year, immunologists can again look at two prizes of great importance for immunology: one for the discovery of the hepatitis C virus and one for the development of a groundbreaking method for genome editing.

The Nobel Prize in Physiology and Medicine was awarded to Harvey J. Alter, Michael Houghton and Charles M. Rice, whose work has led to the identification of the hepatitis C virus. The discovery of the hepatitis C virus revealed the cause of many cases of chronic hepatitis previously unexplained and made it possible to develop blood tests and new medicines that have saved millions of human lives. The Nobel Prize in chemistry was awarded to Emmanuelle Charpentier and Jennifer A. Doudna, for their discovery of one of gene technology's sharpest tools: the CRISPR/Cas9 genetic scissors. Using these, researchers can change the DNA of animals, plants and micro-organisms with extremely high precision, contributing to new cancer therapies and making the dream of curing inherited diseases come true.

The interactions between hepatitis C and the immune system have been widely studied, not the least testified by publications in this journal.^{1,2} The importance of CRISPR/Cas9 for science in general and for immunology cannot be overemphasized.^{3,4} Its impact can be paralleled by many key technical discoveries that have changed immunology such as the discoveries of monoclonal antibodies, development of flow cytometry and technologies for the generation of transgenic mice. The Scandinavian Journal of Immunology congratulates all Nobel Laureates in 2020 to their prizes!

COVID-19 has been in focus this year as it has profoundly changed the way we live and work. From a focus on physical meetings and long-distance travelling, we now meet online, even with family and friends, and international meetings are turned into e-meetings. When the second wave of COVID-19 eventually weakens and vaccines are ready, travel will resume and much-awaited personal interactions, personal and professional, will again be allowed. But what will be the new normal? Let us capitalize on our new way of living and meeting in the digital era. By promoting e-science, environmental impact is reduced and we will nourish

an influential tool to improve human health and the making of a better world.

For the Scandinavian Journal of Immunology, as well as for all other scientific journals, COVID-19 has meant being part of an international boom of scientific publishing. Articles on COVID-19 has been made free of charge and never before has the international immunology community turned towards one disease in such a coordinated fashion, resulting in an unparalleled explosion of new knowledge of benefit for humanity. It has been very rewarding to be part of this journey so far, and it will continue for years to come.

In the middle of the current COVID-19 pandemic, the Scandinavian Journal of Immunology has also celebrated the 50 years' anniversary of the Scandinavian Society for Immunology (SSI). This is the third issue in a row that contains specially invited articles for the SSI jubilee. We hope to continue with additional anniversary articles in the beginning of next year. To celebrate the anniversary, the SSI has also announced a competition for a new logotype, which you can find on the cover of this issue. It has been created by postdoctoral scientist Kushi Kushekhar at Oslo University and is based on the traditional Norwegian 'Selbuose' pattern, much associated with all of Scandinavia. Congratulations Kushi on a very artistic piece of work! The SSI 50 year's jubilee will culminate at the SSI meeting in Aarhus next fall.

We wish to thank all Associate Editors, the Editorial Board, the Editorial Office, all contributors and a large number of dedicated referees for an exciting year 2020. We look forward to continue working with all of you in the year to come!

Petter Höglund Editor-in-Chief
Hans-Gustaf Ljunggren Advisory Editor
Roland Jonsson Advisory Editor

REFERENCES

1. Wan Z, Zhou Z, Liu Y, et al. Regulatory T cells and T helper 17 cells in viral infection. *Scand J Immunol.* 2020;91:e12873.
2. Hartling HJ, Gaardbo JC, Ronit A, et al. Impaired thymic output in patients with chronic hepatitis C virus infection. *Scand J Immunol.* 2013;78:378-386.
3. Hille F, Charpentier E. CRISPR-Cas: biology, mechanisms and relevance. *Philos Trans R Soc Lond B Biol Sci.* 2016;371:20150496.
4. Ding J, Orozco G. Identification of rheumatoid arthritis causal genes using functional genomics. *Scand J Immunol.* 2019;89:e12753.