IMP Press Release

10 September, 2015

Geneticist George Church to give Max Birnstiel Lecture at the IMP

The IMP - Research Institute of Molecular Pathology cordially invites you to attend the talk

"New Technologies for Reading and Writing Biology" By George CHURCH, Harvard Medical School Date: Wednesday, 16 September 2015, 11.00 a.m. Venue: IMP Lecture Hall, Dr. Bohr-Gasse 7, 1030 Vienna

George Church is a well-known figure, not just within the scientific community. His name appears in magazines such as the Economist, National Geographic or Scientific American. His often radical ideas, the sheer scope of his knowledge and his visionary spirit fascinate researchers and the general public alike.

George Church is most famous for his pioneering contributions to the sequencing of genomes and interpreting such data, to synthetic biology and genome engineering. He was still working on his thesis in Harvard when he developed the first method that enabled direct sequencing of a genome. The technology was subsequently used to decipher the first bacterial genome. In 1984, he helped initiate the "Human Genome Project" and was one of the first people who had their own genome sequenced and published. His innovations have contributed to nearly all "next generation" genome sequencing methods and companies.

It is also thanks to George Church that new methods for genome-editing were developed in recent years. His lab was the first to use the innovative and highly efficient CRISPR/Cas9-technology to genetically engineer

human cells. With such potent tools at hand, Church is taking the possibilities of synthetic biology to the limits. His visionary projects include gene therapy protocols to induce resistance to all viruses, cloning of extinct species like the Woolly Mammoth, fighting Malaria with genetically designed mosquitoes or using bacteria to turn waste CO_2 into fuels.

To address the ethical questions that invariably arise in the course of such projects, George Church has pioneered new privacy, biosafety, environmental & biosecurity policies. Still, some of his ideas remain rather controversial and might give rise to a rather lively discussion after the talk.

About the Max Birnstiel Lectures

The Max Birnstiel Lectures are a special series of seminars at the Research Institute of Molecular Pathology (IMP) in Vienna and represent the highest award that the IMP can give to outside scientists. They are named after the founding director of the institute, Max L. Birnstiel, who passed away in 2014. Each year, around six scientists of the life sciences are invited to deliver one of these lectures, among them a number of Nobel Prize laureates. The Max Birnstiel Lectures attract considerable attention on campus and within the wider scientific community and invariably draw a large audience to the IMP.



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Programme of the Max Birnstiel Lectures:

www.imp.ac.at/seminars/max-birnstiel-lecture-series

About George Church

George McDonald Church (61) is an American geneticist, molecular engineer, and chemist. In 2015, he became Robert Winthrop Professor of Genetics at Harvard Medical School and Professor of Health Sciences and Technology at Harvard and MIT. Church has been a founding member of the Wyss Institute for Biologically Inspired Engineering at Harvard and of several other research initiatives, institutes and companies. He (co-) authored more than 370 papers and one book and holds over 60 patents.

About the IMP

The Research Institute of Molecular Pathology (IMP) in Vienna is a basic biomedical research institute largely sponsored by Boehringer Ingelheim. With over 200 scientists from 35 nations, the IMP is committed to scientific discovery of fundamental molecular and cellular mechanisms underlying complex biological phenomena. Research areas include cell and molecular biology, neurobiology, disease mechanisms and computational biology. The IMP is located at the Vienna Biocenter.

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