

AUSTRIAN ACADEMY OF SCIENCES





INVITATION TO THE SIXTH TALK OF THE PUBLIC LECTURE SERIES ÖAW – IST AUSTRIA LECTURES

THERAPEUTIC OPPORTUNITIES IN GLYCOSCIENCE

CAROLYN BERTOZZI

School of Humanities and Sciences, Stanford University

WELCOME

ANTON ZEILINGER

President, Austrian Academy of Sciences

THOMAS HENZINGER

President, IST Austria

TUESDAY, 23 NOVEMBER, 2021, 5 PM
THIS TALK WILL BE HELD ONLINE VIA ZOOM.

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IST Austria and the Austrian Academy of Sciences have initiated a joint lecture series in 2016 aiming to bring to Austria speakers of the highest international standing active in fields that are of mutual interest to both institutions and to a wider public. The lecture series will be continued by an online talk of Carolyn Bertozzi, Anne T. and Robert M. Bass Professor in the School of Humanities and Sciences and Professor, by courtesy, of Chemical and Systems Biology and of Radiology at Stanford University.

Professor Carolyn Bertozzi's research interests span the disciplines of chemistry and biology with an emphasis on studies of cell surface sugars important to human health and disease. Her research group profiles changes in cell surface glycosylation associated with cancer, inflammation and bacterial infection, and uses this information to develop new diagnostic and therapeutic approaches, most recently in the area of immuno-oncology. Named a MacArthur Fellow in 1999, Dr. Bertozzi has received many awards for her dedication to chemistry, and to training a new generation of scientists fluent in both chemistry and biology. She has been elected to the Institute of Medicine, National Academy of Sciences, and American Academy of Arts and Sciences; and received the Lemelson-MIT Prize, the Heinrich Wieland Prize, the ACS Award in Pure Chemistry, and the Chemistry of the Future Solvay Prize, among others.

Abstract²

Cell surface glycans constitute a rich biomolecular dataset that drives both normal and pathological processes. Their "readers" are glycan-binding receptors that can engage in cell-cell interactions and cell signaling. Our research focuses on mechanistic studies of glycan/receptor biology and applications of this knowledge to new therapeutic strategies. Our recent efforts center on pathogenic glycans in the tumor microenvironment and new therapeutic modalities based on the concept of targeted degradation.