



ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ
Εθνικόν και Καποδιστριακόν
Πανεπιστήμιον Αθηνών
— ΙΔΡΥΘΕΝ ΤΟ 1837 —

**Τελετή αναγόρευσης
της καθηγήτριας
Laurie Hollis Glimcher
σε επίτιμη διδάκτορα
της Ιατρικής Σχολής του ΕΚΠΑ**

Αθήνα, 27 Μαΐου 2022

Ομιλία από τον Πρύτανη Καθηγητή Μ.-Α. Δημόπουλο

It is with great honor that we welcome here today, in the historic Great Hall of our University, an important personality who has contributed in many ways to Science.

The National and Kapodistrian University of Athens, by decision of the Senate and following also relevant decisions of the

School of Medicine and the School of Health Sciences, awards its highest honor and declares Professor Laurie Hollis Glimcher, Doctor Honoris Causa of the School of Medicine of the National and Kapodistrian University of Athens. Since 2016, Dr. Glimcher holds the position of President and Chief Executive Officer of the Dana-Farber Cancer Institute in Boston (Massachusetts, USA) and the Director and Principal Investigator of the Dana-Farber/Harvard Cancer in Boston (USA). Since 2016, Laurie Glimcher has been appointed as the “Richard and Susan Smith Professor” of Medicine in the Harvard Medical School and since 2017 Professor of Microbiology and Immunobiology in the same University.

Professor Glimcher has also served for 4 years (2012-2016) as “Stephen and Suzanne Weiss” Dean of Weill Cornell Medical College in New York, where she was also Professor of Medicine. In addition, she was the Provost for Medical Affairs of Cornell University in New York, USA.

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Laurie Hollis Glimcher completed her undergraduate degree in Biology Bachelor of Arts in 1972 from the Radcliffe College of Cambridge in Massachusetts, USA (magna cum laude - with great distinction) and completed her MD in Immunology from the Harvard Medical School in Boston in 1976 (cum laude – with honor). She then completed her Residency in Medicine and Immunology (1976-1982) and she received her postdoctoral training at Harvard Medical School and in the Laboratory of Immunology at the Institute of Allergy and Infectious Diseases in Bethesda.

Prof Glimcher was firstly appointed as Instructor in Medicine in Harvard Medical School (1982) and then as Assistant Professor in Medicine in Harvard Medical School in 1983 and as Assistant Professor of Immunology in Harvard School of Public Health in 1984. Subsequently, she was appointed as Associate Professor of Immunology in 1986 and of Medicine in 1987 and as Professor of

Immunology in 1989 and of Medicine in 1990 in the same Harvard Schools.

She is board certified in Internal Medicine and Rheumatology and she was a Senior Rheumatologist at the Brigham and Woman's Hospital of Harvard Medical School. She led the Immunology Program at Harvard Medical School and the Division of Biological Sciences program at the Harvard School of Public Health.

Professor Glimcher has contributed significantly in the development of Immunology and revealed its role in therapeutics. Her lab firstly isolated the first transcription factor, XBP-1, required for controlling B lymphocyte differentiation to the antibody-producing plasma cell. When introduced into B lineage cells, XBP-1 initiated plasma cell differentiation. XBP-1 is the first transcription factor shown to be selectively and specifically required for the terminal differentiation of B lymphocytes to plasma cells. XBP1 also controls the survival of the malignant counterpart of the plasma cell,

the multiple myeloma cell. Professor Glimcher showed that XBP-1 is the actual therapeutic targets for lactacystin and the other proteasome inhibitors that are used to treat multiple myeloma, work that may provide a conceptual framework to manipulate these responses therapeutically.

Her group also discovered transcriptional regulatory proteins including c-maf, NFATs and NIP45 that lead to the development of and cytokine production by Th2 helper cells. The naïve CD4⁺ T helper lymphocyte can differentiate along at least two distinct pathways termed type 1 (T_H1) and type 2 (T_H2); a choice that has far reaching consequences for the outcome of the immune response against infectious microorganisms, cancer cells, allergens and self-tissues. This developmental event of T_H1 and T_H2 polarization had been recognized since the early 1980's but the molecular basis for this key process was a mystery, although it was known to be regulated by IL-4, IL-12 and interferon gamma. Her lab

was the first to characterize a T_H subset-specific transcription factor with the identification of the T_H2 specific transcription factor, the proto-oncogene c-maf, as the mediator of IL-4 expression and, subsequently, isolated a second novel coactivator protein, NIP45, which together with c-maf and the NFAT family of transcription factors, controls IL-4 gene expression and T_H2 differentiation.

Professor Glimcher's group discovered the first T_H1-specific transcription factor, T-bet, a T-box family member, and demonstrated that this single factor is a master regulator of both IFN- γ gene expression and the T_H1 phenotype. This work overturned the paradigm in the field of cellular immunology that differentiated T_H cells are deviated irrevocably in one way or another, since T-bet single-handedly controls this critical checkpoint at all stages of differentiation. Her lab exploited this discovery to create the first mouse model for spontaneous asthma accompanied by chronic airway remodeling, pathognomonic of human asthma

and showed that polymorphisms in the human T-bet gene associate with human asthma. Further, she showed that T-bet is a central mediator in the development of either of two types of inflammatory bowel disease that are defined by their relative production of T_H1 or T_H2 cytokines. She also developed a potent model of transmissible ulcerative colitis driven by T-bet in innate immunity that is amenable to therapy by manipulation of the intestinal microbiota, opening up the possibility that a transcription factor related to cell differentiation can be a target for therapy of many immune mediated diseases.

She identified the function of XBP1 in the mammalian Unfolded Protein or Endoplasmic Reticulum Stress Response. Following the recognition that XBP-1 is the homologue of yeast Hac1 and involved in the unfolded protein response (UPR), her lab went on to develop the first conditional XBP-1 animal models and characterized XBP-1 in the mammalian UPR and identified previously unrecognized functions for XBP-1 in lipogenesis, the

regulation of numerous types of mammalian secretory cells, in the pathogenesis of intestinal inflammation in humans, in neurodegenerative diseases and most recently as a key driver of triple negative breast cancer in rodents and in patients. in the settings of autoimmune disease, allergic and infectious diseases, and cancer. She also showed that XBP-1 is essential for dendritic cell development and survival, and in a 2008 paper in *Science* demonstrated XBP-1 is required for normal fatty acid biosynthesis in the liver. This unexpected role for this transcription factor has revealed a new regulatory pathway for hepatic lipogenesis and has major implications for understanding human lipid diseases.

Finally, skeletal biology is a separate interest of her laboratory arising from the discovery of a novel protein Schnurri-3 that controls adult bone formation. Large scale screens have identified additional proteins including members of the MAPK pathway that control osteoblast and osteoclast commitment and activation and thus her lab contributes in

understanding the pathophysiology of several bone disorders.

Professor Glimcher's research work is described in more than 400 original publications in the most prestigious journals, including *Nature*, *Science*, *Cell*, *Nature Immunology*, *Nature Medicine*, *Cancer Cell* and *Annual Review in Immunology*. These publications have been referred in more than 60,000 citations and Prof Glimcher has an h-index of 129 in ISI/Web of Knowledge. She is the owner of more than 35 patents in the US and she serves as a chair or member of more than 60 USA or International Committees in Immunology, Medicine, Public Health, Immunobiology and Allergy, Arthritis and Musculoskeletal and Skin Disease, AIDS Research, Rheumatology and Cancer Immunology and Prevention.

She was the President of the American Association of Immunologists (2003-2004) and Councilor of the same Association for 5 years (1998-2003), while she also served as a Chair of

the Rheumatology Section (1990) and of the Immunology Section of the American Society of Clinical Investigation for 9 years (1991-2000). She is a Fellow of the American Academy of Arts and Sciences, a Member of the Institute of Medicine of the National Academy of Sciences and a Member of the National Academy of Sciences. She is also a member of the American Asthma Foundation, Immune Diseases Institute, Health Care Ventures, Burroughs-Wellcome Fund and Memorial Sloan Kettering Cancer Center Scientific Advisory Boards and serves on the Cancer Research Institute Fellowship Committee. Professor Glimcher serves as a member on the Corporate Board of Directors of the Bristol-Myers Squibb Pharmaceutical Corporation and the Waters Corporation.

She is the Editor or member of editorial board of several respected journals including *Annual Review of Immunology*, *Journal of Clinical Investigation*, *Annals of Internal Medicine* and *Journal of Immunology*.

Professor Glimcher has received several prestigious awards including the Soma Weiss Award for Undergraduate Research, the Distinguished Young Investigator Award from the American College of Rheumatology, the Leukemia Society's Stohlman Memorial Scholar Award, the Arthritis Foundation's Lee S. Howley Award, the FASEB Excellence in Science Award, the American Society of Clinical Investigation Investigator Award, the Klemperer Award, the AAUW Senior Scholar award, the Huang Meritorious Career Award, and the American College of Rheumatology Distinguished Investigator Award.

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Dear Professor Glimcher,

Dear Colleague, Dear Laurie

The academic community of the oldest University of the country, the first Greek-speaking University in the world, the National

and Kapodistrian University of Athens, is happy to welcome you.

We extend to you warm wishes for health and the continuation of your work, which has already had a tremendous impact in Medicine.

Your presence and your appointment, today, here at the National and Kapodistrian University of Athens, which this year completes 185 years of uninterrupted operation and contribution, is highly symbolic for us, honoring an important Scientist and Doctor, at the same time that the vast majority of our professors, young researchers and students are in the Amphitheaters and the Laboratories and Clinics, under adverse conditions indeed, but with faith, love and passion for Science.

That is why your appointment today as Doctor Honoris Causa is also a message of hope and optimism for our students and young physicians and researchers that you can achieve your dreams if you work hard.

Dear Laurie, we are welcoming you in our academic family and we are looking forward to a fruitful collaboration.



Thank you for your attention.