



Curriculum Vitae Prof. Dr. Uğur Şahin

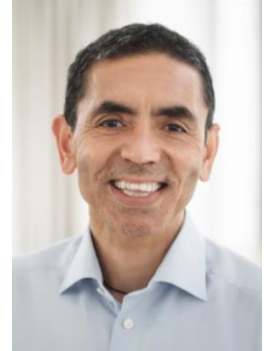


Image: Stefan Albrecht | BioNTech SE 2021

Name: Uğur Şahin
Born: 19 September 1965

Research interests: Molecular medicine, immunology, immunotherapy

Uğur Şahin is a physician and academic researcher in the field of immunology. His research interests lie in cancer research, immunology and immunotherapy, and he is a pioneer in the fields of mRNA vaccines and individualised cancer immunotherapy.

Academic and professional career

- 2010 - 2019 Founding Member and Managing Director, Translational Oncology (TRON), University Medical Center, Johannes Gutenberg University Mainz, Germany
- since 2014 W3 Professor, University Medical Center, Johannes Gutenberg University Mainz, Germany
- since 2008 Co-Founder and Chief Executive Officer (CEO), BioNTech SE, Mainz, Germany
- 2006 - 2013 W2 Associate Professor, Department of Experimental and Translational Oncology, Johannes Gutenberg University Mainz, Germany
- 2003 - 2015 Head of the Tumor Vaccine Center, Department of Internal Medicine, Hematology and Oncology, Johannes Gutenberg University Mainz, Germany
- 2001 Co-Founder, Ganymed Pharmaceuticals (now a subsidiary of Astellas Pharma Inc.), Mainz, Germany
- 2000 Visiting Scholar, Institute of Experimental Immunology, University Hospital Zurich, Switzerland
- 1999 Habilitation in Molecular Medicine and Immunology, Saarland University, Homburg (Saar), Germany

- 1992 - 2000 Physician working in internal medicine and haematology/oncology, Saarland University, Homburg (Saar), Germany
- 1992 - 1994 Degree in Mathematics, Hagen Distance-Learning University, Hagen, Germany
- 1991 - 1992 Assistant physician working in internal medicine and haematology/oncology, University of Cologne, Germany
- 1992 PhD in Human Medicine, University of Cologne, Germany
- 1984 - 1990 Degree in Medicine, University of Cologne, Germany

Roles within scientific associations and boards

- since 2018 Founding Member and Chair, Scientific Management Board, Helmholtz Institute for Translational Oncology (HI-TRON), Mainz, Germany
- since 2015 Member, American Society of Clinical Oncology (ASCO), USA
- since 2014 Member, American Association for Cancer Research (AACR), USA
- since 2017 Acting Head, University Center for Tumor Diseases Mainz (UCT Mainz), Germany
- 2008 - 2016 Chairperson, Scientific Advisory Board, Ganymed Pharmaceuticals AG, Mainz, Germany (now a subsidiary of Astellas Pharma Inc., Tokyo, Japan)
- since 2004 Member, German Society for Immunology (DGfI)

Project coordination and joint projects

- 2006 - 2008 Head, subproject A15, Collaborative Research Centre SFB 432, German Research Foundation (DFG)
- 2000 - 2005 Head, subproject D1, Collaborative Research Centre SFB 432, German Research Foundation (DFG)

Awards and honorary memberships

- 2023 Member, Orden Pour le mérite für Wissenschaften und Künste, Beauftragte der Bundesregierung für Kultur und Medien
- 2022 Honorary Ring, University Medical Center of the Johannes Gutenberg University Mainz, Germany
- 2022 Werner von Siemens Ring, Werner von Siemens Ring Foundation, Germany
- 2022 Paul Ehrlich and Ludwig Darmstaedter Prize, Paul Ehrlich Foundation, Frankfurt am Main, Germany

- 2021 Jeantet-Collen Prize for Translational Medicine, Louis-Jeantet Foundation, Geneva, Switzerland (together with Özlem Türeci and Katalin Karikó)
- 2021 Deutscher Zukunftspreis – the German Federal President's Award for Technology and Innovation (together with Özlem Türeci, Christoph Huber and Katalin Karikó)
- 2021 German Immunology Award, German Society for Immunology (DGfI)
- 2021 Inducted into the Hall of Fame for German Research, manager magazin, Hamburg, Germany
- 2021 Meyenburg Prize, Meyenburg Foundation, Heidelberg, Germany
- 2021 European Manager of the Year, European Business Press (EBP), Ljubljana, Slovenia
- 2021 Honorary Doctorate, Faculty of Medicine, University of Cologne, Germany
- 2021 Princess of Asturias Award for Technical & Scientific Research, Princess of Asturias Foundation, Oviedo, Spain
- 2021 Great Cross of Merit (with star) of the Order of Merit of the Federal Republic of Germany
- 2021 Axel Springer Award, Axel Springer SE, Berlin, Germany
- since 2021 Member of the German Academy of Sciences and Literature
- since 2021 Member, German National Academy of Sciences Leopoldina
- since 2021 Member, European Molecular Biology Organization (EMBO), Heidelberg, Germany
- 2020 Person of the Year, Financial Times, London, UK
- 2020 German Sustainability Award (DNP), German Sustainability Award Foundation
- 2019 Mustafa Prize, Tehran, Iran
- 2019 German Cancer Award, German Cancer Society (DKG)
- 2017 Advanced Grant in Life Sciences, European Research Council (ERC)
- 2012 Excellence Cluster Award for TRON Projects, German Federal Ministry of Education and Research (BMBF)
- 2011 STEP Award, F.A.Z. BUSINESS MEDIA GmbH – the F.A.Z. publishing house, Frankfurt am Main, Germany
- since 2008 Member, Program Committee, Association for Cancer Immunotherapy (CIMT) Regulatory Research Group, Mainz, Germany
- 2006, 2010 GO-Bio Award, German Federal Ministry of Education and Research (BMBF)
- 2005 Georges-Köhler Prize, German Society for Immunology (DGfI)

- 1997 Calogero Pagliarello Research Award, Calogero Pagliarello Foundation, Homburg, Germany
- 1995 Merit Award, American Society of Oncology (ASCO), USA
- 1995 Vincenz Czerny Prize, German Society of Hematology and Medical Oncology (DGHO)

Research interests

Uğur Şahin is a physician and scientist. His research interests lie in cancer research, immunology and immunotherapy, and he is a pioneer in the fields of mRNA vaccines and individualised cancer immunotherapy. Together with his wife and fellow physician Özlem Türeci and Austrian haematologist, oncologist and immunologist Christoph Huber, he founded the BioNTech company in Mainz/Germany. He and the BioNTech team went on to develop the first COVID-19 vaccine to be approved for use worldwide. Uğur Şahin and Özlem Türeci have since received numerous prizes and awards around the world in recognition of their vital contribution to the fight against the COVID-19 pandemic.

The main focus of Uğur Şahin's research is on the development of immunotherapy treatments for cancer, infectious diseases, diseases of the immune and nervous systems, and other rare diseases. To achieve this, Uğur Şahin and his team characterise new target molecules and develop vaccine candidates based on messenger ribonucleic acids (mRNA) which deliver genetic information. Their focus is on optimising the mRNA platform, in order to trigger an appropriate immune response, causing cancer tumours to shrink or neutralising pathogens in the case of infection.

Over the last 20 years, Uğur Şahin and Özlem Türeci have solved several of the challenges associated with mRNA vaccines. They have developed methods for delivering mRNA to dendritic cells using a suitable lipid carrier; improved the stability of the mRNA; and increased the level of protein transfer by 1000 times.

Uğur Şahin's contributions to more than 500 patents and innovative research approaches in the life sciences sector have provided a firm foundation for his research and the work of BioNTech SE. In their efforts to develop optimised RNA, he and the rest of the BioNTech team have achieved some remarkable successes, not least their COVID-19 vaccine, which has been deployed around the world and widely helped stem infections from SARS-CoV-2 during the COVID-19 pandemic.

In the field of oncology, Uğur Şahin's work focuses on individualised mRNA based immunotherapy, cell therapies and antibodies against various tumours.