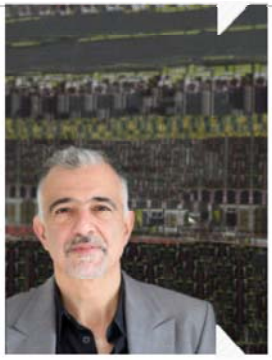

PROFESSOR CHRISTOFER TOUMAZOU

/// Faculty of Engineering, Department of Electrical and Electronic Engineering

Winston Wong Chair, Biomedical Circuits

SUMMARY

Chris Toumazou FRS, FREng, FMedSci, FIET, FIEEE, FCGI, FRSM, CEng, DEng, PhD, BSc

Professor Chris Toumazou, Regius Professor of Engineering, Chair in Biomedical Circuit Design, Director of the Centre for Bio-Inspired Technology and Founder and Chief Scientist for the Institute of Biomedical Engineering at Imperial College. He is also Founder, Chairman or CEO of two successful Medical Device Companies (Toumaz Technology and DNA Electronics) and Chief Scientific Advisor to GENEU. He is distinguished for his innovative silicon technology and integrated circuit design for electronic device in the field of devices for medical diagnosis and therapy. Professor Toumazou is pre-eminent amongst the global community of contemporary medical engineers. In 1994 Toumazou was appointed the youngest Professor ever to be appointed at Imperial College, at the age of 33. In 2013 he became London's First Regius Professor of Engineering conferred to Imperial College during the Queen's Diamond Jubilee.

Toumazou's research include cochlear implants for born-deaf children, an artificial pancreas for type 1 diabetics, wireless heart monitors for personalised ambulatory health monitoring pre- and post- operatively, inventing semiconductor-based DNA sequencing and inventing an intelligent neural stimulator as a drug alternative for obesity. In this and many other areas he has published over 750 research papers, holds over 50 patents and employs over 300 people in his combined medical device companies and Institute of Biomedical engineering at Imperial College London

He is the recipient of the 2005 Institute of Electrical and Electronic Engineers (IEEE) CAS Education Award for pioneering contributions to biomedical circuits and systems. In 2006 he founded (IEEE BIOCAS). He received the UK Royal Academy of Engineering Silver Medal in 2007 for pioneering contributions to British industry and the UK Institute of Engineering Technology (IET) Premium best paper award and the IEEE CAS outstanding young author award. He was elected in 2006 to Academia Europea. In 2008 he was appointed to the Fellowship of the Royal Academy of Engineering and the Fellowship of the Royal Society, which is the highest honour in UK science. He was appointed a Fellow of Academy of Medical Sciences in 2013 and is now one of the few who is a Fellow of three premium societies.

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AFFILIATIONS

> Cancer Technology Network
> Centre for Bio-inspired Technology
> Circuits and Systems
> Department of Electrical and Electronic Engineering
> Nutrition and Food Network

LINKS

> College Directory
> Search College Directory
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> Department of Electrical and Electronic Engineering
> Expert Directory

Chris received in 2009 the World Technology Award, sponsored by Time Magazine, for Health & Medicine; In 2011 he received the JJ Thompson IET Achievement Award for major contributions to the low power medical electronics industry. In 2010 Toumazou received the Times Higher Education Innovation Award for his founding of the Institute of Biomedical Engineering at Imperial College. The Institute was formally opened by Her Majesty The Queen in 2009. In addition Toumazou previously created and founded one of the largest technology transfer laboratories in the field of radio frequency (RF) semiconductors for international collaboration. HRH Princess Ann formally opened the laboratory in 1996. In 2009 his commercial laboratories at DNA Electronics Ltd were used to launch the Government's Life Sciences blueprint and were visited by a ministerial delegation led by the Prime Minister. In 2011 he was invited to speak at the prestigious TEDMED conference in San Diego. His lecture was entitled the "Biological IP Address". He also won the 2013 Gabor Medal of the Royal Society for his invention of semiconductor based genetic testing.

In June 2014 Chris won the European Inventor Award of the European Patent Office and has become the first British winner of a prize in this contest since 2008.

AWARDS

- 2016 Elektra Lifetime Achievement Award
- Winner of the IEEE Biomedical Engineering Award
- Winner of The IET 2014 Faraday Award
- Winner of 2014 European Inventor Award, European Patent Office here
- 2013 Awarded Regius Professorship here
- 2013 Gabor Medal: "for success in applying semiconductor technology to biomedical and life-science applications, most recently to DNA analysis, Royal Society, 2013
- e-Legacy Award for Medical Advances - DNA Electronics Ltd., voted by Electronic Product Design Readers and Electronic
- IET Innovation Awards in Electronics, Emerging Technologies and Healthcare - DNA Electronics Ltd., 2010
- Innovation Award, Times Higher (THES), 2009
- Best British Inventions, BBC Focus Magazine, 2009
- European Electronics Industry Award for R&D - DNA Electronics Ltd., Elektra09, 2009
- Emerging Technology of the Year Award, National Microelectronics Institute, 2009
- Winner of the World Technology Award for Health and Medicine, Sponsored by Time Magazine, World Technology Network, 2009
- Innovation in Engineering Award, Institution of Engineering and Technology, 2008

- Silver Medal for Pioneering Contributions to British Industry, Royal Academy of Engineering, 2007
- Start-Up of the Year Award, National Microelectronics Institute, 2007
- Outstanding Innovation Award, Oracle, 2006
- IEEE Circuits and Systems Education Award for pioneering contributions to telecommunications and biomedical circuits and system, IEEE, 2005
- The Clifford Patterson Lecture Prize Bronze Medal, The Royal Society, 2003
- Recipient of the IEE Electronics Letters Premium Award, IEE, 1993
- Recipient of the Outstanding Young Author Award, IEEE CAS, 1992
- Recipient of the IEE Rayleigh Best Book Award, Imperial College is recognition of research in the Department of Electrical Engineering, 1991

EXTERNAL POSITIONS

- Member, Technology Transfer Committee, The Wellcome
- Member, Sub-Committee for Engineering Research Grants, The Royal Society
- Senior Advisor, Board of Grace Semiconductor, Taiwan
- Member, Critical Technologies - Power Scavenging, Joint DSB/DSAC Task Force
- Member, Foresight Committee on the Detection & Identification of Infectious Diseases (DIID), DTI
- Internatiional Advisor, Medical Devices, Singapore Government
- Chairman, Healthcare Panel, UK EPSRC, 2000
- Chairman, Biomedical Technical Committee, IEEE CAS Society, 2000
- Member, Board of Governors, IEEE CAS Society, 1999 - 2001
- Member, President's Advisory Committee, IEEE CAS, 1997 - 1998
- Vice President, Technical Activites, IEEE CAS Society, 1996 - 1997
- Chairman, Circuits and Technical Committee on Analog Signal Processing, International IEEE, 1993 - 1995
- Member, Board of Governors, IEEE CAS Society, 1993
- Member, International Circuits and System Chapter of the UK and Republic of Ireland Section, IEEE, 1992
- Member, Professional Group E10 Technical Committee, UK IEE, 1992
- European Liaison Officer (1st UK representative), IEEE Circuits and Systems Technical Analog Signal Processing, International IEEE, 1989

MEMBERSHIP OF PROFESSIONAL BODIES

- Elected Fellow (FRS), The Royal Society, 2008
- Elected Fellow (FREng), The Royal Academy of Engineering (RAEng), 2008
- Elected Fellow, Academia Europaea (European Academy), 2007
- Fellow (FIET), The Institution of Engineering Technology (IET), UK, 2004
- Fellow (FIEEE), The Institute of Electrical and Electronics Engineers (IEEE), USA, 2000

COMMERCIAL SPIN-OFFS

- DNA Electronics, Chairman
- Toumaz Technology, Chairman
- GENEU, Chief Scientific Advisor

EDITORIAL BOARDS

IET Electronics Letters, Editor-in-Chief

PUBLICATIONS

JOURNALS

Chen C-H, Karvela M, Sohbati M, et al., 2018, PERSON-Personalized Expert Recommendation System for Optimized Nutrition, *Ieee Transactions on Biomedical Circuits and Systems*, Vol:12, ISSN:1932-4545, Pages:151-160
DOI Author Web Link

Cork SC, Eftekhar A, Mirza KB, et al., 2018, Extracellular pH monitoring for use in closed-loop vagus nerve stimulation, *Journal of Neural Engineering*, Vol:15, ISSN:1741-2560
DOI Author Web Link Open Access Link

Pesl P, Herrero P, Reddy M, et al., 2017, Case-Based Reasoning for Insulin Bolus Advice., *J Diabetes Sci Technol*, Vol:11, Pages:37-42
DOI Author Web Link

Reddy M, Pesl P, Xenou M, et al., 2016, Clinical Safety and Feasibility of the Advanced Bolus Calculator for Type 1 Diabetes Based on Case-Based Reasoning: A 6-Week Nonrandomized Single-Arm Pilot Study, *Diabetes Technology & Therapeutics*, Vol:18, ISSN:1520-9156, Pages:487-493
DOI Author Web Link Open Access Link

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El Sharkawy M, Herrero P, Reddy M, et al., 2016, *A LOW-POWER BIO-INSPIRED ARTIFICIAL PANCREAS*, MARY ANN LIEBERT, INC, Pages:A54-A54, ISSN:1520-9156
Author Web Link

More Publications

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