

Christopher L (Kit) Vaughan
BSc (Honours) *Rhodes* PhD
Iowa DSc (Med) *Cape Town*



Abbreviated CV

Qualifications

1975 BSc (Honours) with distinction, Physics and Applied Mathematics, Rhodes University
1980 PhD in Musculoskeletal Biomechanics, University of Iowa, USA
1983-84 Post-Doctoral Fellow, Orthopaedic Engineering, Oxford University, UK
2009 DSc (Med) in Biomedical Engineering, University of Cape Town, South Africa

Academic and Administrative Experience

1980-86 Senior Lecturer, Biomedical Engineering, Faculty of Medicine, University of Cape Town
1986-89 Associate Professor, Bioengineering, Faculty of Engineering, Clemson University, USA
1989-95 Professor, Orthopaedics & Biomedical Engineering, University of Virginia, USA
1996-10 Hyman Goldberg Professor of Biomedical Engineering, University of Cape Town
1996-03 Head of Department, first Biomedical Engineering and then Human Biology, UCT
2000-10 Director, MRC/UCT Medical Imaging Research Unit, Cape Town
2002-09 Member of Council and Senate Executive Committee, University of Cape Town
2003 Ernest Walton Fellow, Electrical Engineering, University College Dublin, Ireland
2005-10 Deputy Dean, Research and Postgraduate Affairs, Faculty of Health Sciences, UCT
2010- Emeritus Professor of Biomedical Engineering, University of Cape Town

Business Experience

1998-19 Director and Deputy Chairman, Sports Science Institute of South Africa
1998-09 Director, Disa Vascular (Pty) Ltd, a manufacturer of stents for cardiovascular disease
2002-05 Director and Chairman, Acorn Technologies (Pty) Ltd, incubator for start-up companies
2007-09 Director, Leatt Incorporated, a manufacturer of neck braces for motor sports
2010- Chief Executive Officer, CapeRay Medical, a manufacturer of breast imaging systems
2012- Director, Strait Access Technologies, a manufacturer of cardiovascular devices

Awards and Honours

1974 Abe Bailey Travel Fellowship to the United Kingdom, Rhodes University representative
1984 President's Award, Council for Scientific and Industrial Research
1999 Elected a Life Fellow of the University of Cape Town
2003-14 Awarded an A Rating by the National Research Foundation of South Africa
2005 Elected a Fellow of the International Academy for Medical and Biological Engineering
2006 Elected a Fellow of the South African Academy of Engineering

Professional Service

1989-95 Executive Council, Program Chair and Editor, American Society of Biomechanics, USA
1991-95 Scientific Peer Review Panel, National Science Foundation, Washington, DC, USA
1999-01 President, International Society of Biomechanics; Executive Council (1991-2003)
1999-13 Associate Editor, Medical Engineering & Physics, Journal of Biomechanical Engineering

Noteworthy Publications

Vaughan CL, "Theories of bipedal gait: an odyssey", Journal of Biomechanics,36(4):513-523, 2003.
Vaughan CL, Davis BL, O'Connor JC, Dynamics of Human Gait (2nd edition), ISBN 0 620 23558, 6, Kiboho Publishers, Cape Town, 155 pages, 1999.
Vaughan CL, Imagining the Elephant: A Biography of Allan MacLeod Cormack, ISBN 978-1-86094-988-3, Imperial College Press, London, 304 pages, 2008.
Vaughan CL, On the Shoulders of Oldenburg: A Biography of the Academic Rating System in South Africa, ISBN 978-1-86868-111-2, National Research Foundation, 324 pages, 2015.
Vaughan CL, "Novel imaging approaches to screen for breast cancer: Recent advances and future prospects", Medical Engineering and Physics, 72: 27-37, 2019.

Teaching and Student Supervision

During the past 40 years, Kit Vaughan has taught courses in mathematics, physics, biomedical engineering and grant writing to undergraduate and postgraduate students in the Faculties of Engineering, Medicine and Science. He has supervised the theses of 17 honours students, 42 at the master's level, and 15 doctoral candidates, and also been a mentor to 11 post-doctoral fellows.