

Carlos Caldas MD FACP FRCP FRCPath FMedSci

Carlos Caldas is Professor of Cancer Medicine at the University of Cambridge and an Honorary Consultant Medical Oncologist at Cambridge University Hospitals. He was a founder Senior Group Leader of the Cancer Research UK Cambridge Institute and the Founding Director of the Breast Cancer Programme at the Cambridge Cancer Centre. He is Fellow of the Academy of the Medical Sciences, Fellow of the European Academy of Cancer Sciences, Fellow of the American College of Physicians, Fellow of the Royal College of Pathologists, and EMBO Member.

He has published over 450 manuscripts, including in Nature, New England Journal of Medicine, Nature Genetics, Nature Medicine, Nature Cancer, Nature Metabolism, Nature Immunology, Nature Communications, Cell, Cancer Cell, Cell Reports, and Science Translational Medicine.

His research focus is the functional genomics of breast cancer and its biological and clinical implications. His laboratory redefined the molecular taxonomy of breast cancer, revealing novel subtypes and their respective genomic drivers and multi-omic landscapes, robustly validated this new molecular taxonomy, and showed that it determines the clinical trajectories of patients. He led the studies that established ctDNA as a monitoring biomarker in breast cancer and as a liquid biopsy to unravel therapy resistance. His laboratory pioneered and developed the use of patient-derived tumour explants as models of breast cancer, in particular as a platform to characterize and perturb tumour ecosystems, and to study the dynamics of malignant cell clones. In a recent landmark paper published in Nature, using multi-omics and machine learning, his group showed the biology of breast tumour ecosystems determines response to therapy.

He has been distinguished by Web of Science as a Highly Cited Researcher in 2018, 2019, 2020, 2021, 2022, 2023 and 2024. He received the 2016 ESMO Hamilton Fairley Award, the 2021 European Society of Human Genetics Award, the 2021 Susan G. Komen Brinker Award for Scientific Distinction in Basic Science, and the ARC Foundation 51st Leopold Griffuel Award in Translational Cancer Research in 2023.