CURRICULUM VITAE (abbreviated) Gregory Y. H. Lip

UNIVERSITY EDUCATION: University of Glasgow, Glasgow G12 8QQ. **Graduated July 1988 with the degrees of M.B., Ch.B. (with commendation)** with the following prizes for the **most distinguished graduate** in medicine and surgery of the year: - the BRUNTON MEMORIAL PRIZE and the Robert Fullerton Prize.

MEMBERSHIP OF THE ROYAL COLLEGES OF PHYSICIANS M.R.C.P.(U.K.) March 1991 DIPLOMA OF FORENSIC MEDICINE (DFM) with Class Prize. September 1993 DOCTOR OF MEDICINE (M.D.) University of Glasgow, September 1994 FELLOW OF THE AMERICAN COLLEGE OF CARDIOLOGY (F.A.C.C.) August 1996 FELLOW OF THE EUROPEAN SOCIETY OF CARDIOLOGY (F.E.S.C.) June 1997 FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH (F.R.C.P.Edin) Sept 1998 FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS AND SURGEONS OF GLASGOW (F.R.C.P.Glasg) 1999 FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS OF LONDON (F.R.C.P.Lond) May 2001 FELLOW OF THE EUROPEAN HEART RHYTHM SOCIETY (F.E.H.R.A.) December 2016 Associate Fellow, Higher Education Authority (AFHEA) March 2021 (PR210091) Honorary doctorates DOCTOR MEDICINAE HONORIS CAUSA Aalborg University, Denmark: April 2013 DOCTOR HONORIS CAUSA, University of Medicine & Pharmacy "Carol Davila", Bucharest, Romania; September 2016 DOCTOR HONORIS CAUSA, Belgrade University, Republic of Serbia; October 2016 DOCTOR HONORIS CAUSA, i'Universite de Tours, France, conferred March 2017 DOCTOR HONORIS CAUSA, Medical University of Silesia in Katowice, conferred July 2020 DOTTORE DI RICERCA (Dott. Ric. or Ph.D) HONORIS CAUSA in Clinical and Experimental Medicine, University of Modena and Reggio Emilia, Modena, Italy; conferred December 2021

Honorary Fellowship (the university's highest honour) of Liverpool John Moores University; conferred October 2024 <u>https://www.ljmu.ac.uk/about-us/fellows/honorary-fellows-2024</u>

PRESENT APPOINTMENT: Price-Evans Chair of Cardiovascular Medicine, and Director of the Liverpool Centre of Cardiovascular Science, University of Liverpool, UK (2019-).

National Institute for Health Research (NIHR) Senior Investigator (2017-2025).

Distinguished Professor, Faculty of Medicine, Aalborg University, Denmark (2018-). Hon. Consultant Cardiologist, Liverpool Heart & Chest Hospital NHS Trust, Liverpool (2019-).

My present appointment allows full clinical responsibilities in cardiovascular medicine, with responsibilities for acute cardiology, inpatient wards, outpatients, etc. I run consultant-led specialist services for atrial fibrillation and hypertension. My research interests are in atrial fibrillation, hypertension, stroke, thrombosis and antithrombotic therapy.

PREVIOUS APPOINTMENTS:

August 1993 to July 1995 Registrar (and Hon Postdoctoral Research Fellow) In Medicine & Cardiology - University Dept of Medicine and Dept of Cardiology, City Hospital, Birmingham.

August/September 1995 to November 1996 Senior Registrar, West Midlands Region, based at Walsgrave Hospital, Coventry (and Lecturer in Medicine, University Dept of Medicine, City Hospital, Birmingham)

December 1996 to January 2019 Professor of Cardiovascular Medicine, University of Birmingham [previously Hon. Senior Lecturer/Reader, then Hon Professor (2001-2009), and from 2009, Professor] and honorary consultant cardiologist, Sandwell and West Birmingham Hospitals NHS Trust (1996-2019).

Other responsibilities: Editor in Chief (Clinical), Thrombosis & Haemostasis; Guest editor, Circulation/American Heart Journal; Associate editor, Europace; Clinical adviser to the NICE national guidelines on atrial fibrillation management (2006), Guideline Development Group (2013-14); Writing Committee, 8th and 9th American College of Chest Physicians (ACCP) Guidelines on Antithrombotic Therapy; Writing Committee for ESC guidelines on atrial fibrillation [2010, 2012, 2020], heart failure [2012] and hypertension [2018]; Chairman, Writing group for 10th ACCP Guidelines in Antithrombotic therapy for atrial fibrillation [2018]; Writing Group for the Asia-Pacific Heart Rhythm Society (APHRS) 2021 Focused Update on Stroke Prevention in Atrial Fibrillation (2021); Writing Group on American College of Chest Physicians (ACCP) Expert Panel Guidelines on Antithrombotic Therapy for Arterial Thromboembolism in COVID-19 (2022); Writing Committee for the American Heart Association scientific statement "Management of Patients at Risk for and with Left Ventricular Thrombus" (2022); Writing Group for the Scottish Intercollegiate Guidelines Network (SIGN) Guidelines on Dementia (2023); Writing Committee, Cystic Fibrosis Trust Position Paper 'Managing an ageing cystic fibrosis population: Challenges and priorities (2025); Writing Committee, UK Kidney Association Clinical Practice Guideline: Anticoagulation for atrial fibrillation in adults with advanced kidney disease (due 2025).

RESEARCH ACHIEVEMENTS

My research work has delivered crucial impacts in changing national and international clinical practice guidelines and improvements in patient care within three principal areas: (i) treatment decisions related to stroke and bleeding risk in **atrial fibrillation (AF)**, which is the commonest cardiac arrhythmia in the general population, (ii) screening practice in primary care, and (iii) stroke and bleeding risk assessment. These ultimately lead to reduced morbidity and mortality for a significant proportion of the population, particularly among the elderly.

With regard to *clinical management*, clinical risk scores developed and validated by my work to assess stroke & bleeding risk in atrial fibrillation (AF) (ie. CHA₂DS₂-VASc & HAS-BLED) are used in national/international management guidelines, My development of SAMe-TT₂R₂ score (2013) aids decision-making between warfarin and new anticoagulants. This score is incorporated into ESC/NICE consensus recommendations, Clinical Commissioning Group (CCG) for AF (2014) and the PRIMIS Warfarin Patient Safety audit tool (2014), as well as CCG AF patient pathways streamlining decision making (the 'Birmingham 3-step' AF pathway, 2016).

My **ABC (Atrial fibrillation Better Care) pathway** (2017/PMID:28960189) reduces mortality/ hospitalisation/adverse outcomes (PMID:30551910, 30659810), tested in my mAFA-II clinical trial (PMID:32241367). The ABC Pathway is <u>recommended in international guidelines</u>: ACCP/2018; Korean Heart Rhythm Society (PMID:30144419; 30403013); ESC consensus papers (PMID:30882141,31976747); new 2020 ESC Guidelines (PMID:32860505). <u>Implemented globally</u> (Sri Lanka/China/Brazil) via my NIHR AF Global Health project.

Other work has investigated incident AF risks (C₂HEST score, identifying high risk patients for screening (PMID:31234697); used novel methodologies - machine learning (PMID:30615112) and mHealth/Apps: Huawei Heart Study/mAFA trial (PMID:31487545

Overall, I have successfully attracted major grant funding (total >£60 million cumulative) from the European Union H2020, NIHR, Wellcome Trust, British Heart Foundation, Heart Research UK, Medical Research Council, NHS HTA Programme, Arthritis Research Council, etc).

Academic supervision and training: I have successfully supervised ~50 awarded higher degrees (MD/PhD/MPhil) since 1997 [20 theses since 2012]. Currently supervising 6 students, with ongoing research or awaiting thesis submission. ~4410 publications cited on PubMed/Medline, on atrial fibrillation, hypertension, stroke, thrombosis, antithrombotic therapy, etc.

h-index 262; i10-index 1954; 643569 citations on Google Scholar, as on 17 May 2025; >£60 million research income.

Links: Google scholar profile: <u>https://scholar.google.co.uk/citations?user=cqY4wxQAAAAJ&hl=en</u> Publications on PubMed: <u>https://pubmed.ncbi.nlm.nih.gov/?term=lip+g&sort=date&size=200</u> AD Scientific Index Rankings: <u>https://www.adscientificindex.com/scientist.php?id=1590656</u>

Selected recent or key publications [*joint 1st author and/or senior author]

Chu M, Zhang S, Gong J, Yang S, Yang G, Sun X, Wu D, Xia Y, Jiao J, Peng X, Peng Z, Hong L, Wang Z, Li M, **Lip GYH**^{*}, Chen M^{*}; MIRACLE-AF Investigators. Telemedicine-based integrated management of atrial fibrillation in village clinics: a cluster randomized trial. **Nature Med.** 2025 Feb 21. doi: 10.1038/s41591-025-03511-2

Fairbairn TA, Mullen L, Nicol E, **Lip GYH**, Schmitt M, Shaw M, et al. Implementation of a national AI technology program on cardiovascular outcomes and the health system. **Nature Med.** 2025 Apr 4. doi: 10.1038/s41591-025-03620-y. PMID: 40186078.

Werring DJ, Dehbi HM, Ahmed N, ... Lip GYH, et al; OPTIMAS investigators. Optimal timing of anticoagulation after acute ischaemic stroke with atrial fibrillation (OPTIMAS): a multicentre, blinded-endpoint, phase 4, randomised controlled trial. Lancet. 2024 Oct 23:S0140-6736(24)02197-4.

McEvoy JW, Jennings C, Kotseva K, ... Lip GYH, et al. Variation in secondary prevention of coronary heart disease: the INTERASPIRE study. Eur Heart J. 2024 Oct 14;45(39):4184-4196.

Teppo K*, **Lip GYH***, Airaksinen KEJ, et al. Comparing CHA₂DS₂-VA and CHA₂DS₂-VASc scores for stroke risk stratification in patients with atrial fibrillation: a temporal trends analysis from the retrospective Finnish AntiCoagulation in Atrial Fibrillation (FinACAF) cohort. **Lancet Reg Health Eur.** 2024 Jun 10;43:100967. doi: 10.1016/j.lanepe.2024.100967. PMID: 39171253; PMCID: PMC11337097.

Kuźma Ł, Dąbrowski EJ, Kurasz A, ... **Lip GYH**. Effect of air pollution exposure on risk of acute coronary syndromes in Poland: a nationwide population-based study (EP-PARTICLES study). **Lancet Reg Health Eur.** 2024 Apr 22;41:100910. doi: 10.1016/j.lanepe.2024.100910

Nielsen PB*, Brøndum RF, Nøhr AK, Overvad TF, Lip GYH*. Risk of stroke in male and female patients with atrial fibrillation in a nationwide cohort. **Nature Commun.** 2024 Aug 7;15(1):6728. doi: 10.1038/s41467-024-51193-0. PMID: 39112527; PMCID: PMC11306344.

Frost F, Nazareth D, Fauchier L, ... Lip GYH. Prevalence, risk factors and outcomes of cardiac disease in cystic fibrosis: a multinational retrospective cohort study. Eur Respir J. 2023 Oct 26;62(4):2300174..

Romiti GF, Corica B, Proietti M, ... Lip GYH; GLORIA-AF Investigators. Patterns of oral anticoagulant use and outcomes in Asian patients with atrial fibrillation: a post-hoc analysis from the GLORIA-AF Registry. EClinicalMedicine. 2023 Aug 25;63:102039.

Krittayaphong R, Treewaree S, Wongtheptien W, Kaewkumdee P, **Lip GYH**. Clinical phenotype classification to predict risk and optimize the management of patients with atrial fibrillation using the Atrial fibrillation Better Care (ABC) pathway: A report from the COOL-AF registry. **QJM**. 2023 Oct 3:hcad219. doi: 10.1093/qjmed/hcad219.

Kwon S, Lee SR, Choi EK, ... Lip GYH. Association Between Atrial Fibrillation and Diabetes-Related Complications: A Nationwide Cohort Study. Diabetes Care. 2023 Dec 1;46(12):2240-2248.

Chung JW, Lee SR, Choi EK, ... Lip GYH. Cumulative Alcohol Consumption Burden and the Risk of Stroke in Young Adults: A Nationwide Population-Based Study. **Neurology**. 2023 Jan 31;100(5):e505-e515. doi: 10.1212/WNL.000000000201473. Epub 2022 Nov PMID: 36323515; PMCID: PMC9931082.

17 May 2025