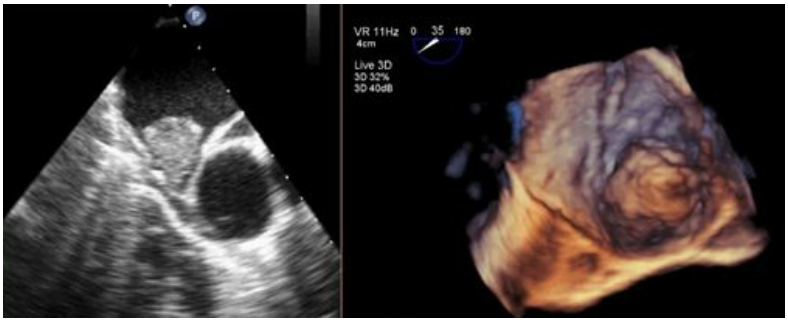
Academic Clinical Cardiovascular Medicine at City Hospital



Group leader: **Prof Gregory Y H Lip (/staff/profiles/cem/CVRS/Lip-Gregory.aspx)**

Overview

Our research interests are stroke and diseases of the heart disease (coronary heart disease, heart failure, high blood pressure, diabetes etc). Our work examines risk factors for developing these diseases, how we can reduce these risks through appropriate treatment and interventions, and also the emotional and social impact of these diseases and how people cope.

Our research group

We are a multidisciplinary team of clinicians, academics, basic scientists, psychologists, and nurses. Our research involves cardiovascular and cerebrovascular epidemiology and pathophysiology, as well as ethnic differences in disease and outcomes, patient centred research and systematic reviews.

One of our major focuses is risk stratification for stroke and bleeding in patients with atrial fibrillation and we have developed and widely validated two risk scoring systems (CHA_2DS_2-VASc and HAS-BLED, for stroke and bleeding risk assessment, respectively) which have been implemented in international clinical guidelines. We are also involved in evidence synthesis related to treatments for cerebrovascular and cardiovascular diseases, and clinical decisions tools.

Our epidemiological research has investigated patients with malignant hypertension (the west Birmingham Malignant Hypertension project), stroke (the west Birmingham Stroke project), atrial fibrillation, heart failure (E-ECHOES, the Ethnic Echocardiographic Heart of England Study – in collaboration with Primary Care), etc.

Within the group, the pathophysiological aspects are studied within a dedicated Haemostasis Thrombosis and Vascular Biology Unit, that investigates clinical aspects of thrombosis.

We also have a unique programme of patient-centred research, which investigates patients' perceptions of disease and treatments (both quantitatively and qualitatively), as well as developing interventions to improve patient education and clinical outcomes.

We also have an independent clinical trials unit which co-ordinates and participates in large-scale international clinical trials for conditions such as atrial fibrillation, acute coronary syndromes, hypertension, heart failure, stroke, and diabetes mellitus.

Current Projects

Open all sections

- Assessments of stroke and bleeding risk in atrial fibrillation, in relation to ethnic differences and 'high risk subgroups' eg chronic renal impairment
- Clinical epidemiology and pathophysiology of thromboembolism in heart failure
- Clinical epidemiology and pathophysiology of thromboembolism in hypertension
- Monocyte subsets, microparticles, biomarkers etc in cardiovascular disease.
- Qualitative research into patients' experience of living with atrial fibrillation and treatments for stroke thromboprophylaxis
- Physicians prescribing decisions related to anticoagulation for atrial fibrillation: a qualitative study
- Educational intervention on patients' knowledge of Atrial fibrillation and anticoagulant therapy, INR control, and outcome of Treatment with warfarin (TREAT)
- Clinical decision rule for cessation of anticoagulant therapy in patients with idiopathic venous thromboembolism (VTE)

Recent Publications

- Banerjee A, Fauchier L, Vourc'h P, Andres CR, Taillandier S, Halimi JM and Lip GY (2013) Renal impairment and ischaemic stroke risk assessment in patients with atrial fibrillation: The Loire Valley Atrial Fibrillation Project. *J Am Coll Cardiol*. doi:pii: S0735-1097(13)01113-3. 10.1016/j.jacc.2013.02.035
- Friberg L, Benson L, Rosenqvist M and Lip GY (2012) Assessment of female sex as a risk factor in atrial fibrillation in Sweden: nationwide retrospective cohort study. *BMJ* 344:e3522
- Rasmussen LH, Larsen TB, Graungaard T, Skjøth F and Lip GY (2012) Primary and secondary prevention with new oral anticoagulant drugs for stroke prevention in atrial fibrillation: indirect comparison analysis. *BMJ* 345:e7097. doi:10.1136/bmj.e7097
- Friberg L, Rosenqvist M and Lip GY (2012) Net clinical benefit of warfarin in patients with atrial fibrillation: a report from the Swedish atrial fibrillation cohort study. *Circulation* 125(19):2298-307
- Friberg L, Rosenqvist M and Lip GY (2012) Evaluation of risk stratification schemes for ischaemic stroke and bleeding in 182 678 patients with atrial fibrillation: the Swedish Atrial Fibrillation cohort study. *Eur Heart J* 33(12):1500-10
- Apotolakis S, Lane D, Gao Y, Buller H and Lip GY (2012) Performance of the HEMORR2HAGES, ATRIA and HAS-BLED bleeding risk prediction scores in anticoagulated patients with atrial fibrillation: The AMADEUS study. *J Am Coll Cardiol* 60:861-7
- Lip GY, Larsen TB, Skjøth F and Rasmussen LH (2012) Indirect Comparisons of New Oral Anticoagulant Drugs for Efficacy and Safety When Used for Stroke Prevention in Atrial Fibrillation. *J Am Coll Cardiol* 60:738-46
- Pisters R, Lane DA, Nieuwlaat R, de Vos CB, Crijns HJGM and Lip GYH (2010) A novel user-friendly score to assess one-year risk of major bleeding in atrial fibrillation patients: *The Euro Heart Survey* 138: 1093-100

- Lip GYH, Nieuwlaat R, Lane DA, Pisters R and Crijns HJGM (2010) A simple, new risk factor based approach to refining clinical risk stratification for predicting stroke and thromboembolism in atrial fibrillation: *The Euro Heart Survey on Atrial Fibrillation* 137:263-72

Staff

Principal Investigators
Professor Gregory Y H Lip (/staff/profiles/cem/CVRS/Lip-Gregory.aspx) - School of Clinical and Experimental Medicine
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Dr Andrew Blann (https://www.swbh.nhs.uk/work-for-us/cardiovascular-sciences/dr-andrew-d-blann/) - University of Birmingham Centre for Cardiovascular Sciences, City Hospital
Dr Amitava Banerjee (/staff/profiles/cem/CVRS/Banerjee-Amitava.aspx) - School of Clinical and Experimental Medicine
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PhD/MD Students
All students are based at the University of Birmingham Centre for Cardiovascular Sciences, City Hospital
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Angie Ghattas
Parveen Ranjit

Honorary Staff
Dr Andrew Blann

Internal Collaborators
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Dr James Fisher (http://www.birmingham.ac.uk/staff/profiles/sportex/fisher-james.aspx) - School of Sport and Exercise Sciences
Dr Paramjit Gill - Primary Care Clinical Sciences
Dr David Moore
Professor Steve Watson (/staff/profiles/cem/CVRS/Watson-Steve.aspx) - School of Clinical and Experimental Medicine
Dr Marie Lordkipanidze (/staff/profiles/cem/CVRS/lordkipanidze-marie.aspx) - School of Clinical and Experimental Medicine

Clinical Trials Staff
All Clinical Trials Staff are based at the University of Birmingham Centre for Cardiovascular Sciences, City Hospital
Ronnie Haynes (also Department Manager)
Jayne Partridge
Rebecca Brown
Andrew Cooley

External Collaborators
Professor Helen Griffiths (http://www1.aston.ac.uk/lhs/]) - Aston University
Professor Helen Pattison (http://www1.aston.ac.uk/lhs/]) - Aston University
Dr Rachel Shaw (http://www1.aston.ac.uk/lhs/]) - Aston University
Dr Arie Nouwen - University of Middlesex

Various collaborations with Universities of Murcia, Aalborg, Copenhagen, Belgrade, Tours, Athens, Hong Kong, Taipei, etc.

Administrative Support
Susan Cartwright (PA to Prof Lip) - University of Birmingham Centre for Cardiovascular Sciences, City Hospital

Funding Bodies

Funding Bodies:

- **British Heart Foundation (http://www.bhf.org.uk/)**
- **Heart Research UK (http://www.heartresearch.org.uk/)**
- **Arthritis and Rheumatism Council (http://www.arthritisresearchuk.org/)**
- **National Institute of Health Research (NIHR) (http://www.hta.ac.uk)**

Useful Links

- Winner - **BMJ Group Awards 'Cardiovascular Team of the Year' 2013 (http://groupawards.bmj.com/winners-announced#Cardiovascular%20Team%20of%20the%20Year)**
- **Who and what was hot in Scientific Research in 2012 (http://sciencewatch.com/articles/hottest-research-2012)**. Find out about the hottest papers and researchers of 2012 (issued June 2013).
- **AFib Toolkit (http://www.cardiosource.org/en/Science-And-Quality/Clinical-Tools/Atrial-Fibrillation-Toolkit.aspx)** from the American College of Cardiology (issued March 2013)
- **2012 ESC focussed update on the guidelines for the management of atrial fibrillation (http://spo.escardio.org/sessiondetails.aspx?eevtid=54&fp=3755&doc=webcast#.UETpztuF9el)**

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