

PROFESSOR LIS NEUBECK

Professor Lis Neubeck (FRSE) is a clinical nurse with over 30 years of experience. She is Professor of Cardiovascular Nursing and leads the Centre for Cardiovascular Health at Edinburgh Napier University. She is the National Health Service Scotland Cardiovascular Research Clinical Network Lead (2021-present). She completed a National Health and Medical Research Council of Australia (NHMRC) Early Career Fellowship in 2016. She has a Bachelor of the Arts (Honours) in Nursing (1994) and a PhD (2012) in Secondary Prevention of Cardiovascular Disease. She is an Honorary Professor at the Susan Wakil School of Nursing and Midwifery, based at the Charles Perkins Centre, University of Sydney, and Adjunct Professor at Flinders University, Adelaide. Professor Neubeck is Past President of the Australian Cardiovascular Health and Rehabilitation Association (President 2015-17) and is Past President of the Association of Cardiovascular Nursing and Allied Health (ACNAP) of the European Society of Cardiology (ESC) (2020-22). She now leads the ESC patient forum (2024-26). Her nursing and public health research has had a strong focus on the use of new technology to improve healthcare. She has over 200 peer-reviewed publications; including a first-author paper in *Nature Reviews Cardiology*, ranked 29/333 cardiology journals. Her overall research funding exceeds £8m. Prof Neubeck has won notable prizes and awards for her research, including the prestigious Cardiac Society of Australia and New Zealand Nursing Prize (2013). She is regularly invited to present nationally and internationally and serves on numerous national and international committees.

RELEVANT PUBLICATIONS OVER LAST FIVE YEARS

- Neubeck, L., Galbraith, M., Drossart, I., & Mindham, R. (2023). The essential role of patients in advocacy and policy. *European Heart Journal*
- Doudesis D, Lee KK, Boeddinghaus J, Bularga A, Ferry AV, Tuck C, Lowry MT, Lopez-Ayala P, Nestelberger T, Koechlin L, Bernabeu MO. Machine learning for diagnosis of myocardial infarction using cardiac troponin concentrations. *Nature Medicine*. 2023 May 11:1-0.
- Binnie, K., Neubeck, L., McHale, S., & Hanson, C. L. (2023). What do spontaneous coronary artery dissection survivors want to support their recovery? A qualitative study. *European Journal of Cardiovascular Nursing*
- Neubeck, L., Ross, C., Jones, J., Simpson, M., Mindham, R., Jaarsma, T., ...Astin, F. (2023). The Core Curriculum for Cardiovascular Nurses and Allied Professionals. *European Journal of Cardiovascular Nursing*, Article zvad035
- Orchard, J. J., Giskes, K., Orchard, J. W., La Gerche, A., Neubeck, L., Hespe, C., ...Freedman, B. (2023). In a large primary care data set, the CHA₂DS₂-VASc score leads to an almost universal recommendation for anticoagulation treatment in those aged ≥ 65 years with atrial fibrillation. *European Journal of Cardiovascular Nursing*, Article zvad002
- Gallagher, R., Chow, C. K., Parker, H., Neubeck, L., Celermajer, D., Redfern, J., ...Figtree, G. (2023). The effect of a game-based mobile app "MyHeartMate" to promote lifestyle change in coronary disease patients: a randomised controlled trial. *European Heart Journal – Digital Health*, 33-42
- Pearsons, A., Neubeck, L., Hendricks, J., & Hanson, C. (2023). Justification, rationale and methodological approaches to realist reviews. *European Journal of Cardiovascular Nursing*, 107-112
- Pearsons, A., Hanson, C., & Neubeck, L. (2022). What lifestyle management interventions are needed for atrial fibrillation? *British Journal of Cardiac Nursing*
- Schulberg, S. D., Ferry, A. V., Jin, K., Marshall, L., Neubeck, L., Strachan, F. E., & Mills, N. L. (2022). Cardiovascular risk communication strategies in primary prevention. A systematic review with narrative synthesis. *Journal of Advanced Nursing*, 3116-3140
- Neubeck, L., McHale, S., Ross, M., MacGillivray, S., Galbraith, M., & Hanson, C. (i2022).

PROFESSOR LIS NEUBECK

Spontaneous coronary artery dissection: a systematic review of physical and psychosocial recovery following discharge from hospital

Alharbi, M., Bauman, A., Alabdulaali, M., Neubeck, L., Smith, S., Naismith, S., ...Gallagher, R. Comparison of Different Physical Activity Measures in a Cardiac Rehabilitation Program: A Prospective Study

Ling Zhang, Ding Ding, Lis Neubeck, Patrick Gallagher, Glenn Paull, Yan Gao, and Robyn Gallagher. "Mobile Technology Utilization Among Patients From Diverse Cultural and Linguistic Backgrounds Attending Cardiac Rehabilitation in Australia: Descriptive, Case-Matched Comparative Study." JMIR Cardio 2, no. 1 (2018): e13.

Nicola Straiton, Muaddi Alharbi, Adrian Bauman, Lis Neubeck, Janice Gullick, Ravinay Bhindi, Robyn Gallagher: The validity and reliability of consumer-grade activity trackers in older, community-dwelling adults: a systematic review. Maturitas 03/2018;, DOI:10.1016/j.maturitas.2018.03.016

Li J, Lowres N, Jin K, Zhang L, Neubeck L, Gallagher R: Quality and Cultural Sensitivity of Linguistically Appropriate Cardiovascular Disease Information for Chinese Immigrants: A Review of Online Resources From Heart Foundations. The Journal of cardiovascular nursing 01/2018; 33(3):1., DOI:10.1097/JCN.0000000000000457

Coorey, GM, Neubeck, L, Mulley J and Redfern J. 2018. Effectiveness, acceptability and usefulness of mobile applications for cardiovascular disease self-management: Systematic review with meta-synthesis of quantitative and qualitative data. European journal of preventive cardiology, p.2047487317750913.

Jin K, Gullick J, Neubeck L, Koo F, & Ding D (2017). Acculturation is associated with higher prevalence of cardiovascular disease risk-factors among Chinese immigrants in Australia: Evidence from a large population-based cohort. European journal of preventive cardiology, 24(18), 2000-2008.

Neubeck, L., Freedman, B., Lowres, N., Hyun, K., Orchard, J., Briffa, T., ... & Redfern, J. (2017). Choice of Health Options in Prevention of Cardiovascular Events (CHOICE) Replication Study. Heart, Lung and Circulation.

Jennings, C., Astin, F., Fitzsimons, D., Lambrinou, E., Neubeck, L., & Thompson, D. R. (Eds.). (2021). The ESC Textbook of Cardiovascular Nursing. Oxford: Oxford University Press

PEER-REVIEWED RESEARCH SUPPORT

Research funding: Prof Neubeck has successfully obtained in excess of £8m in research grants.

Scholarships and fellowships: During her PhD, Prof Neubeck was supported by a National Heart Foundation of Australia Postgraduate Scholarship. She subsequently completed an NHMRC Early Career Fellowship.

CONTRIBUTIONS TO FIELD OF RESEARCH

Prof Neubeck has developed and led numerous research projects related to improved access to secondary prevention, identification and management of atrial fibrillation, and to enhancing the use of new technologies in preventive care. She currently leads a project to identify previously undiagnosed atrial fibrillation in the community using an iPhone based single-lead ECG. In addition, she is leading an RCT of a mobile app enabled atrial fibrillation management program. Prof Neubeck is actively involved in leading clinician research projects in secondary prevention, and has supported clinicians to develop research trials, present and publish their work. She has presented her work in national and international forums, and is regularly invited to present. She has published more than 200 papers, many in leading journals, including JACC, BMJ, Int J Cardiol and Nat Rev Cardiol.

PROFESSOR LIS NEUBECK

COMMUNITY ENGAGEMENT AND PARTICIPATION: Prof Neubeck has participated in and led numerous community events in relation to secondary prevention, and atrial fibrillation screening, and is the lead of the ESC patient forum. She has participated in awareness-raising on TV, radio, and in print.

NATIONAL/INTERNATIONAL STANDING: Prof Neubeck is the immediate-past president of the Association of Cardiovascular Nursing and Allied Professions of the European Society of Cardiology (2022-24) and leads the European Society of Cardiology Patient Forum. Prof Neubeck served on the board of the Cardiovascular Nurses Council of the Cardiac Society of Australia and New Zealand (CSANZ), and was the elected representative of that Council on the Secondary Prevention Alliance of Australia; an alliance of 20 national stakeholder organisations (2013-2016). She has convened national and international meetings and was the scientific chair of the 2015 ACRA meeting. She was the Australian representative on the Global Alliance of Secondary Prevention (2015-2017).

AWARDS: Prof Neubeck has won prizes and awards for her work including the RACGP/MDA National Best General Practice Research Article in Australian Family Physician (AFP) Award (2015) and the Cardiac Society of Australia and New Zealand Nursing Prize (2013). She is a Fellow of the ESC and an Honorary Fellow of the National Institute of Preventive Cardiology. Prof Neubeck was a finalist in the Scottish Knowledge Exchange Awards (2021) as Knowledge Exchange Champion. She was also a finalist in the Times Higher Education Awards (2021) for Knowledge Exchange/Transfer Initiative of the Year. She was highly commended in the Scottish Women's Health Awards for Services to Medicine (2023). In 2023, she was elected to fellowship of the Royal Society of Edinburgh, Scotland's national academy of science and letters- the only practicing nurse ever to be appointed.

SUPERVISION AND MENTORING: Prof Neubeck has supervised to completion 11 PhD students and 3 Honours students (all achieved Upper Class Honours). She is currently supervising 4 PhD students. Her students have won notable awards and prizes for their work and have been supported through competitive scholarships. Prof Neubeck co-chaired the Cardiovascular Nursing Higher Degree Research Group and leads regular journal clubs and research methods clubs for students.

PEER REVIEW CONTRIBUTION: Prof Neubeck is a member of the Chief Science Office of Scotland Health Improvement, Protection and Services Research Committee (2018-pres) She reviews regularly for many journals including the Eur J Prev Cardiol, Heart Lung Circ, and JMIR. She is Consultant Editor of the British Journal of Cardiac Nursing and serves on the editorial board of the European Journal of Cardiovascular Nursing and European Heart Journal- Digital Health

EXAMPLES OF THE IMPACT OF PREVIOUS RESEARCH IN THE LAST 5 YEARS: Prof Neubeck's work on the clinical management and care of atrial fibrillation (AF) has had global impact on guidelines, policy, and practice: The ESC, released guidelines on management of AF include recommendations on AF Screening and cited her work as Class 1 Level B evidence for the detection of AF. The release of a new class of OAC presented global challenge, as the new drugs were more widely available in high-income countries, creating further inequalities in stroke prevention. Prof Neubeck worked with a team of World Heart Federation Emerging Leaders to review available evidence for use of the drugs and summarised this in an application to the World Health Organisation Essential Medicines Committee. The Essential Medicines List forms the basis for drug policy in 155 countries. The application was successful and the new class of OAC was added to the Essential Medicines Lists in April 2019. Prof Neubeck provided academic and clinical advice to the 'Focus on Atrial Fibrillation in Scotland: a report of the Cross-Party Group on Heart Disease and Stroke' national inquiry into current AF management in Scotland. She continues this work and serves on the National Heart Disease Task Force charged with implementing the National Heart Disease Action Plan.