Daniel J Green, BSc(Hons), PhD FAHMS FECSS

Career Summary and Research Vision. Danny, a Winthrop Professor in the School of Human Sciences (Sport and Exercise Science) at The University of Western Australia, is a cardiovascular and exercise physiologist specializing in chronic disease prevention. His contributions include 1) creating, establishing and managing a world-first clinical services in heart failure (HF) and cardiac transplantation, 2) funding and leading evidence-based studies of interventions that optimise HF prevention and management, 3) inventing novel imaging techniques to quantify the impacts of these interventions, and 4) establishing a new allied health profession to translate and implement the program outcomes. His programs have been globally recognised and emulated. He currently leads UWA's Cardiovascular Research Group which develops early disease detection and personalized prevention strategies through transdisciplinary collaborations in science, engineering, and medicine and he was recently appointed Foundation Director of the Healthspan Institute at UWA.

Contribution to Field and Research Impact. After establishing a world-first clinical exercise physiology service in the 1990s, he quantified the mechanisms and benefits of novel exercise interventions in 35 successive Cat1 funded trials ($9.9M; CIA on 29/35; career funding $15.3M). In the last 10yrs, he has been awarded 17 Cat1 grants ($7M; 11 as CIA) and was also led on 23 other grants ($3.8M) including 13 industry grants (Nestle, Research England, US military). The research-to-practice culture he employs to harness knowledge gain for health benefit has resulted in 392 papers (333Q1), 21817cites, H=75 (GS H=100), including Lancet, Circulation, JACC, JCI, Physiol Rev. In the last 10yrs his program generated 199 papers (163Q1, 5583cites), with a FWCI of 14 (cited 1300%>average) for the top 10. As a consequence of his translational research, he is ranked in the top 0.3% of CV scientists globally, was the leading researcher in Australia in Physiology in 2022. He was elected Fellow of the Australian Academy of Health and Medical Sciences in 2024.

Building and Maintaining Networks Green's contributions to health, include the development of clinical and higher education pathways to implement effective allied health services. His blueprint for research-informed cardiac rehabilitation was adopted across the WA Health Department, and his achievements have been emulated globally. He established Australia's first research intensive exercise physiology service in a teaching hospital and leveraged this to develop an evidence-base that directly informed clinical practice. To translate his program benefits, he developed Australia's first Masters degree to train clinical exercise physiologists. There are now >7000 Medicare qualified AEPs and the accreditation standards he helped to develop are used in 29 universities. In WA alone, there have been 1500 HF patients exercise tested and 180000 gym attendances at the services he established, which were subsequently emulated nationally. Green recently replicated this successful program translation in the UK, where he was awarded funding to introduce Clinical Exercise Physiology (CEP) as an allied health profession. Since 2021, CEP-UK has implemented a national regulatory framework, a practitioner registry, gained formal recognition as a healthcare profession, and introduced curriculum standards for Master's degrees. These paradigm shifting contributions to health services and policy directly resulted from the evidence-base he built in his research programs.

Supervision, Mentorship and Training

Supervised and mentored 29 PhDs and 9 postdocs in the past 10 years (career: 46 PhDs, 21 postdocs) across the research labs established and led at Royal Perth Hospital (Cardiac Transplant Unit and Advanced Heart Failure Service), the Research Institute for Sport and Exercise Science UK, and at UWA (Cardiovascular and Exercise Research Group). Seven of his PhD students were awarded Dean's listing (top 5% of theses), an unparalleled number at UWA, and recent PhD grads earned the Robert Street prize (most outstanding PhD at UWA) and the prize for best publication by a UWA student. He also supervised 13 Hons students in the past 10 yrs (career: 35); 2/3rds were awarded 1st Class. He has been nominated for UWA postgrad supervision awards. Career trajectories of his mentees have been exceptional: 9 are now profs, 11 snr/lecturers and 5 have held esteemed postdocs (Harvard, Copenhagen, Dallas, Oxford). His grad students have been awarded 40 conference prizes, including ECSS, Sports Med Australia, American College Sports Med, World Congress Cardiology, Cardiac Society ANZ, IOC Pre-Olympic Congress, AHA (incl Special Press Conference). Green

actively builds diversity/equity into his research programs: of the 51 thesis students he has supervised in last 10 yrs (career=101), 54% were female and his students are from diverse backgrounds: Indonesia, China, Netherlands, Brazil, Italy, UK, US, Singapore, NZ, Finland, Cyprus, India.

Community and Consumer Engagement

- Developed and patented software for arterial imaging (125 licences; used in 12 countries)
- Established the International Summer School for Ultrasound in CV Science and Medicine. Green has conducted 18 workshops worldwide (UK 8, Australia 5, Canada 4, Brazil 1), upskilling laboratory leaders from 12 countries
- 2020-21 Awarded WAHTN grant for *Community based education & exercise in heart failure*

Leadership and Standing

- Chair, Scientific Board, International Olympic Committee Scientific Conference, Glasgow, 2012.
- Chair, ESSA National Congress 2014: secured ~$60K prize money for ECRs, and to fund travel for ECRs from SE Asia to attend the meeting. This legacy fundamentally changed the conference.
- Scientific Committee, European College Sport Sciences (ECSS), of which he is a Fellow.
- Scientific Committee, NHF Australia Physical Activity Committee (2011–2020).
- Distinguished International Professor UBC, 2013; Visiting Professor Deakin, 2011; Distinguished Global Chair - Manchester Metropolitan University 2026.

Grants, Fellowships and Awards

80 grants - $15.3million; 35 Cat 1 Grants (CIA on 29): 11 NHMRC, 3 ARC, 21 NHF. Examples:

- 2023 NHF: *Testing feasibility of using heat therapy for advanced Heart Failure,* $74,836
- 2023 Australia's Economic Accelerator: *Improving diabetes with point-of-care device,* $445,000
- 2022-23 Research Excellence Award, *WA Future Health Research & Innovation Fund,* $160,000
- 2021-23 NHMRC: *Identifying optimal age for physical activity to improve heart health*, $852,804
- 2020-21 US Department of Defence: *Heat tolerance in humans* $313,000
- 2019-24 Research England: *International Collaboration Assessing novel health models*, $897,441
- 2019-22 NHMRC: *Exercise as medicine for Heart Failure* $665,585
- 2018-21 NHMRC: *Can reducing sitting influence glycaemic control in T2D?* $1,367,212
- 2017-21 NHMRC: *Developmental origins of adult vascular health*, $1,087,427
- 2017-19 Industry Linkage-Nestle: *Effect of coffee polyphenol on vascular health*, $1,245,738
- 2016-18 ARC DP: *Visualising vascular adaptation at the microscale in humans*, $481,200
- 2015-21 NHMRC: *Principal Research Fellowship (+1 year extension awarded),* $739,980
- 2014-16 NHMRC: *Does breaking up sitting time with activity improve cognition?* $569,000
- 2013-15 NHMRC 1045204: *Optimising health of the ageing brain*, $683,000

Peer Review

Professorial promotion panels: Johns Hopkins, Kings, Birmingham, UBC, Oregon, Brunel, Otago, U Miss, U Colorado, UQ. *Editorial appointments:* Physiol Soc, Exper Physiol; Clin Sci; MSSE. *Reviewer:* NHMRC, ARC, NHF, BHF, MRC, BBSRC. *Examined PhDs:* Brunel, Liverpool John Moores, Radboud, Birmingham, Wits (SA), Monash, UQ, USyd, VU, Otago. *Grant reviews:* ARC, NHMRC, Diabetes Aust, NHF, BHF, MRC, BBSRC, NHMRC, NHF, EU agencies. *Journal reviews:* J Appl Physiol, EJAP, JACC, J Physiol, Circ, MSSE, Clin Sci, Ex Sports Sci Review

Professional Activities:

- Papers cited in 22 health policy documents of 15 countries in the last 10yr (SciVal): ACSM(US), NICE(UK), Publications Office (EU), Brazilian Cardiol Soc, NZ Ministry of Health, ANSES (France), Finland, Sweden