

Chiropractic Academy for Research Leadership (CARL) Program: Overview, Eligibility Criteria and Application Process

Background and aims of the CARL Program

The Chiropractic Academy for Research Leadership (CARL) Program has been made possible via generous financial support from the *World Federation of Chiropractic (WFC)* and the *European Centre for Chiropractic Research Excellence (ECCRE)* and will provide essential mentoring/career development and research capacity building for international chiropractic.

The CARL Program is modelled on the experience of Professor Jon Adams, University of Technology Sydney as a Senior Fellow and Senior Mentor on the Oxford International Research Leadership Programme run via the Department of Primary Health Care, University of Oxford. The Oxford Program now in its seventh year, is the world leader in health research capacity building providing an excellent vehicle for primary health care to establish and develop the next generation of research leaders. Based on this program's success, Professor Adams [as Director of the Australian Research Centre in Complementary and Integrative Medicine (ARCCIM), University of Technology Sydney] has founded both the world-first International Complementary Medicine Research Leadership Program in 2014 – an ongoing Program which has recruited an initial cohort of 12 international Fellows and in the first 24 months has produced over 55 peer-reviewed publications – and the world-first International Naturopathy Research Leadership Program (in 2016). Now, key features from all three of these leadership programs are being drawn upon to inform the CARL Program and help develop the next generation of international chiropractic research leaders.

The CARL Program will provide essential research mentoring/career development and capacity building within the international chiropractic community. While there are a number of pockets of excellence in chiropractic research worldwide and the field has made a number of advances in recent years, there remains a lack of co-ordinated, international collaboration and mentorship infrastructure for those seeking to enter or further develop a research career in or relevant to chiropractic. In order to ensure chiropractic research can build upon current successes and further grow its ranks, initiatives and profile, the CARL Program moves beyond funding/support for any one particular research project to instead develop a 'critical mass' of talented early career researchers (in close collaboration with senior researchers) able to undertake high quality and internationally regarded chiropractic research which examines clinically and professionally relevant research questions now and for years into the future.

The CARL Program provides emerging researchers and researcher-practitioners a unique opportunity to mix with others committed to the scientific examination of areas relevant for chiropractic, to reflect and strategize in the context of not only their own career but the bigger picture of chiropractic and musculoskeletal health care research and the challenges/opportunities facing the national and international field.

The ultimate goal of the CARL Program is to identify, nurture and support future emerging researchers (including researchers with methodological/disciplinary backgrounds or clinical backgrounds) focused upon investigation of chiropractic and issues relevant to chiropractic with a view to helping develop and lead a sustainable international chiropractic research culture able to meet the evidence needs of patients, practitioners and policymakers. The CARL Program provides a unique opportunity for the field to instil mentorship at the highest level necessary for planning and developing the broad evidence-base for chiropractic practice and use on the international stage. The CARL Program will draw upon rigorous, established methods and multi-disciplinary perspectives from across public health, health services research and clinical science to promote and conduct collaborations across and beyond the profession in order to help strengthen and further grow the integration and standing of chiropractic within wider health care teamwork and systems.

Who is facilitating and conducting the CARL Program?

The Program is a core collaborative initiative of three senior research academics at three Universities (Professor Greg Kawchuk, University of Alberta, Canada, Professor Jan Hartvigsen, University of Southern Denmark and Professor Jon Adams, University of Technology Sydney, Australia). All three Professors have extensive experience and track records in health sciences research and mentoring/leadership and all three Universities have developed extensive programs and track records in chiropractic research.

Professor Jon Adams is Professor of Public Health and Director of the Australian Research Centre in Complementary and Integrative Medicine (ARCCIM), University of Technology Sydney, Australia. Professor Adams also currently holds a prestigious Australian Research Council (ARC) Professorial Future Fellowship (2015-2019, \$1.3M), is National Convenor of the Public Health Association of Australia Special Interest Group in 'Evidence, Research and Policy in Complementary Medicine' and is both a Senior Fellow and Senior Mentor on the Oxford International Primary Health Care Research Leadership Program, Department of Primary Care Sciences, University of Oxford. Professor Adams is the Founder and Principal Investigator of the ongoing Australian Chiropractic Research Network (ACORN) Project and his wider research program has attracted **>\$12.5M** in external competitive grant funding to date including 16 NHMRC/ARC Government grants. Professor Adams is also supervising over 20 PhD students and has successfully mentored over 50 early career researchers to date. Professor Adams has authored **>330** peer-reviewed publications since 2000 including **8** edited international research books (Routledge [4], Imperial College Press [2], Ashgate, Palgrave). Professor Adams currently has an **H-Index=34**, **i-10 index=125** and **total citations=3886**.

Professor Greg Kawchuk is Professor of Rehabilitation Medicine in the Department of Physical Therapy, University of Alberta, Canada and is presently the Chair of the Research Council of the

World Federation of Chiropractic. Professor Kawchuk is a former Canada Research Chair in Spinal Function and to date, his research program has attracted over **>\$8M** in external funding from competitive agencies locally, nationally and globally. With respect to graduate training, he is the recipient of the Graduate Students Association Supervisor of the Year (CIHR Area, 2014), the Inaugural winner of the Faculty of Rehabilitation Medicine Excellence in Mentoring Research Students Award and the Faculty's nominee for the Killam Award in Mentoring. Since PhD award (2000) Professor Kawchuk has authored **>80** peer-reviewed publications with an **H-Index=18** and **total citations=1141**.

Professor Jan Hartvigsen is Professor and Research Leader at the Department of Sports Science and Clinical Biomechanics at the Faculty of Health, University of Southern Denmark. Jan is also head of the Graduate Program for Physical Activity and Musculoskeletal Health that currently has 63 PhD students and Senior Researcher at the Nordic Institute of Chiropractic and Clinical Biomechanics. Since his appointment as Professor and Research Leader in 2006, Jan has built the largest and most productive research group in Denmark within the area of musculoskeletal pain and disability and his group collaborates with leading researchers in Denmark and worldwide. Jan places particular emphasis on bringing academics and clinicians with diverse backgrounds together in productive collaborations. Jan Hartvigsen has authored **>140** peer-reviewed papers and given **>100** invited talks at scientific meetings in many countries. He is co-founder of the new Danish Centre for Muscle and Joint Health and has 200+ appearances in Danish written and electronic media. Jan has attracted **>\$10 million** in external funding, his **H-index =28** and **total citations=2625**.

The Australian Research Centre in Complementary and Integrative Medicine (ARCCIM), Faculty of Health, University of Technology Sydney is the world-leading research centre focused specifically upon the public health and health services research of complementary and integrative medicine (with a strong focus upon chiropractic amongst other practices/modalities) and houses the Executive Membership of the Public Health Association of Australia (PHAA) Special Interest Group in 'Evidence, Research and Policy in Complementary Medicine'. ARCCIM currently houses 10 full-time, research-only academics as well as 25 PhD students. ARCCIM is currently leading and collaborating on over 40 national and international externally-funded research projects including the Australian Chiropractic Research Network (ACORN) Project as well as facilitating and leading the world-first International CM Research Leadership and Capacity Building Program and the International Naturopathy Research Leadership Program.

The Faculty of Rehabilitation Medicine, University of Alberta has an ultimate goal of conducting research to improve the lives of individuals living with disabilities through prevention and evidence-based treatment strategies. Their world-class researchers work collaboratively in a variety of vibrant research initiatives to translate their findings into solutions for the health, education and social policy sectors. Associated with the FRM is the Rehabilitation Robotics Sandbox and the Integrative Health Institute (IHI) which is made up of more than 100 dedicated scholars who specialize in complementary medicine.

The Department of Sports Science and Clinical Biomechanics, Faculty of Health Sciences, University of Southern Denmark houses 7 research units focussing their research efforts on physical activity and musculoskeletal health. Most recently, three of those units have joined forces to create The Center for Muscle and Joint Health. It also houses the Nordic Institute of Chiropractic and Clinical

Biomechanics. The department and the Nordic Institute form the platform of chiropractic undergraduate and postgraduate education in Denmark and constitute the world's largest and most productive chiropractic research environment, with 60+ PhD students and an annual output of 300+ international peer-reviewed papers. As such, the Faculty provides a unique, multidisciplinary environment for the mentoring of early career academics.

What is involved?

It is envisaged the CARL Program will run over a number of years (with an intention of becoming a sustainable resource for the field internationally) and initially include a cohort of around 10 early to mid-career chiropractic researchers (see definition below). Those chosen for the CARL Program via competitive application will be known as the 'Fellows' of the Program. CARL Program Fellows will be required to participate in an annual residential (4-day visit) to be held at one of the three Universities on a rotational basis. The CARL Program will cover the cost of accommodation (4 nights), an invited Program dinner as well as up to US\$2,000 reimbursement for direct economy flights and other transportation for each Fellow. All other expenses will be the responsibility of the Fellow.

Upon each 4-day visit, Fellows will be joined by guest speakers and senior academics from both the hosting University and the wider chiropractic/health care research community and engage in sessions on specific expert topics such as but not confined to: research skills training; networking; the art of getting published and cited; writing a successful grant for external competitive funding; successfully collaborating in multi-disciplinary research teams and other research development and career advancement issues. In addition, the cohort will also be encouraged to run self-sufficient sessions where they support and help work through challenges/opportunities they face/identify as well as develop collaborative projects with appropriate design guidance and facilitation. Importantly, Fellows will also be introduced to leading chiropractic resources and active databases (e.g. ACORN in Australia, SafetyNET and AHS in Alberta, primary care cohorts and databases in Denmark) and will be encouraged to collaborate on secondary data analyses, developing new sub-studies and producing extensive publications and output. Drawing upon these established datasets and networks provides a 'value-add' for the Program and other leading chiropractic-focused research initiatives, guaranteeing excellent capacity building and collaborative infrastructure as well as ensuring timely output and successes (peer reviewed journal articles).

Throughout the rest of each Program year the Fellows will be provided with distance mentoring and support from senior researchers facilitating the Program when and as necessary. Active research collaboration across the cohort and Program academics will be strongly encouraged. **Each Fellow will be expected to co-author and submit a minimum of 1 peer-reviewed journal article with at least one other Program Fellow and/or Associated Program academic while in the program.** Active research collaboration across the cohort and CARL Program academics will be facilitated and strongly encouraged.

Eligibility for the program

To be eligible for the program, applicants must be either a) enrolled in a PhD relevant to chiropractic OR b) within seven (7) years of PhD award (at date of application deadline) in a topic relevant to chiropractic and hold a position at a research institution/university or equivalent research-appropriate organisation.

Candidates must also show:

- a) an emerging track record in rigorous critical scholarship, research output and development/facilitation relevant to chiropractic and relative to stage of career;
- b) a potential and commitment to further develop and contribute to the national and international field of critical chiropractic research as well as broader multidisciplinary research collaborations.

A selection committee of researchers/academics chaired by one of the three founding academics will identify around 10 successful Fellows from all submissions in accordance with selection criteria above. Please also note: selection will also take into account an ability to identify a good spread of Fellows across different countries in order to facilitate and promote international networks and collaborations. All short-listed candidates will be interviewed via Skype/teleconference prior to final selection.

How to apply

Candidates who meet the eligibility criteria above and wish to apply must complete and return an official CARL Program Application Form (see attached) – also available on the ARCCIM website and accompanying brief CV (max. 2 pages) to forskning@nikkb.dk by **midnight January 1st 2017**.

All successful candidates will be required to gain necessary visa/travel approval for attendance for each annual CARL Program residential both from appropriate customs and current employer/supervisor (as relevant). Any appointed CARL Fellow who does not attend all of the residential in a particular year will be ineligible to claim the flight reimbursement and other financial support from the Program for that year.

Enquiries

For program and related enquiries, please contact: Forskning@nikkb.dk