

#### Sydney residential

Our second residential was incredible, and quite impossible to summarise in a few short sentences! The first day was about catching up and reconnecting, with huge achievements since last year. We had wonderful guest speakers sharing their insights, including academic leadership and creativity in problem solving. The dedicated project time was productive and we have exciting work on the way!





#### **WFC Gold Coast**

News from the Gold Coast!

CARL I & II Fellows were well represented at the WFC Conference, with 20% of all scientific presentations given by CARL Fellows past and present. Prizes were awarded to Martha Funabashi (CARL-I), Luana Nyiro (CARL-II), and Amy Miller (CARL-II).

#### **Group successes**

Our achievements during the CARL-II program so far:

- Ten Fellows have now been awarded their PhDs
- Twelve Fellows have been promoted or started new roles
- Thirteen research grants have been awarded
- We have published 25 papers in international peer-reviewed journals





#### A note from the Mentors

The countdown has begun. In August 2024, approximately 8 months from now, the second CARL cohort will finish their time in the program. It's been quite a journey for this group. On December 10th, 2019, invitations were sent to 14 promising early career researchers and each one answered the call. The iconic mosiac of headshots was created, introduction videos were circulated and flights were booked for the upcoming meeting in Sydney. And then, with only 3 months under their belts, COVID happened. What at first appeared to be a delay of a few weeks, turned into months and then into seasons. With no end in sight, the Fellows jumped on the opportunity to rally the chiropractic academy through CARLoquium, a virtual meeting of avatars hosted on the spectacular Virbela platform. A massive success in 2021 and 2022, CARLoquium helped academia recapture that feeling of attending a keynote lecture and then bumping into colleagues in the poster hall.

As the world came back to in-person meetings, so did CARL with our first residential in **Denmark** 2022 and then this year in **Sydney** 2023. Now with the final CARL residential approaching **Edmonton** 2024, our group of 14 is thriving with each Fellow having attained their PhD and/or advancing their rank and as a group and ramping up their publications and conference presentations (details in this newsletter).

So what comes next? For this group of 14 Fellows, there are many highlights ahead, but perhaps none as big as passing the baton to CARL 3. Soon, we will be reaching out to current and future sponsors of CARL and invite financial contributions to continue this unique academic capacity-building program in chiropractic. We are aiming to kick off CARL 3 in Denmark in 2025 with CARLOQUIUM LIVE in '25 attended by all three cohorts (CARL 1, 2, and 3) – an in-person version of the famous online experience for everyone in the chiropractic academy including early, mid and senior researchers.

We look forward to continuing working with the international chiropractic community to continue the legacy of the Chiropractic Academy for Research Leadership.

#### <u>Visit to Macquarie University</u>

We were generously hosted by Macquarie University during our Sydney residential, and had a great morning with the Department of Chiropractic, Spinal Pain Research Group, Graduate Research Academy, and several CARL-I Fellows who joined us for the day.

We are grateful to all at Macquarie for welcoming us and for such a fantastic program. Special thanks to CARL-I Fellow Mike Swain for organising the day.



#### Return of the CARL I Fellows

Some of the CARL I Fellows joined us at Macquarie University and later at WFC. It was great to see Mike Swain, Martha Funabashi, Arnold Wong, Katie de Luca, Andreas Eklund, and Katie Pohlman while we were down under. Friendships and research are developing wonderfully across our two cohorts!

#### <u>CARF meeting</u>

CARL-I and II Fellows attended the Chiropractic Australia Research Foundation meeting, hosted by Central Queensland University.

#### Chiropractic Education Day

CARL-I & II Fellows presented their areas of chiropractic education leadership at an education day hosted at Macquarie University.

A huge warm thank you, as always, to our generous funders. You make CARL possible! We hope this newsletter summarises the impact you continue to have for us as individuals, as a team, and for the chiropractic profession.

#### Selection of 2020-2023 CARL II peer-reviewed publications

Nim CG, Vach W, Downie A, Kongsted A. Do visual pain trajectories reflect the actual course of low back pain? A longitudinal cohort study. J Pain. 2023;24(8):1506-1521.

Nim CG, Aspinall SL, Cook CE, Corrêa LA, Donaldson M, Downie AS, Harsted S, Hartvigsen J, Jenkins HJ, McNaughton D, Nyirö L, Perle SM, Roseen EJ, Young JJ, Young A, Zhao G, Juhl CB. The effectiveness of spinal manipulative therapy procedures for spine pain: protocol for a systematic review and network meta-analysis. Chiropr Man Ther. 2023;31(1):14.

Aspinall SL, Nim CG, Harsted S, Miller A, Øverås CK, Roseen EJ, Young JJ, Søgaard K, Kawchuk G, Hartvigsen J. Presenters at chiropractic research conferences 2010–2019: is there a gender equity problem? Chiropr Man Ther. 2023;31(1):28.

Kawchuk GN, Harsted S, Hartvigsen J, Nyirö L, Nim CG. A two-year follow-up: Twitter activity regarding misinformation about spinal manipulation, chiropractic care and boosting immunity during the COVID-19 pandemic. Chiropr Man Ther. 2023;31(1):1-2.

McNaughton DT, Roseen EJ, Downie A, Jenkins H, Øverås CK, Young JJ, Fink HA, Stone KL, Cawthon P, Hartvigsen J. Stressful life events and low back pain in older men: A cross-sectional and prospective analysis using data from the MrOS study. Eur J Pain. 2023 Aug 25.

Jenkins HJ, Downie A, Wong JJ, Young JJ, Roseen EJ, Nim CG, McNaughton D, Øveras CK, Hartvigsen J, Mior S, French SD. Patient and provider characteristics associated with therapeutic intervention selection in a chiropractic clinical encounter: a cross-sectional analysis of the COAST and O-COAST study data. Chiropr Man Ther. 2023;31(1):39.

Vella SP, Swain M, Downie A, Howarth SJ, Funabashi M, Engel RM. Induced leg length inequality affects pelvis orientation during upright standing immediately following a sit-to-stand transfer: a pre-post measurement study. BMC Musculoskelet Disord. 2023;24(1):203.

Yu H, Wang D, Verville L, Southerst D, Bussières A, Gross DP, Pereira P, Mior S, Tricco AC, Cedraschi C, Brunton G, Nordin M, Shearer HM, Wong JJ, Connell G, Myrtos D, da Silva-Oolup S, Young JJ, Funabashi M, Romanelli A, Lee J, Stuber K, Guist B, Muñoz Laguna J, Hofstetter L, Murnaghan K, Hincapié CA, Cancelliere C. Systematic review to inform a World Health Organization (WHO) clinical practice guideline: Benefits and harms of needling therapies for chronic primary low back pain in adults. J Occup Rehabil 2023 Nov 22.

Southerst D, Hincapié CA, Yu H, Verville L, Bussières A, Gross DP, Pereira P, Mior S, Tricco AC, Cedraschi C, Brunton G, Nordin M, Wong JJ, Connell G, Shearer HM, DeSouza A, Muñoz Laguna J, Lee J, To D, Lalji R, Stuber K, Funabashi M, Hofstetter L, Myrtos D, Romanelli A, Guist BP, Young JJ, da Silva-Oolup S, Stupar M, Wang D, Murnaghan K, Cancelliere C. Systematic review to inform a World Health Organization (WHO) clinical practice guideline: Benefits and harms of structured and standardized education or advice for chronic primary low back pain in adults. J Occup Rehabil 2023 Nov 22.

Fernandez M, Young A, Kongsted A, Hartvigsen J, Barton C, Wallis J, Kent P, Kawchuk G, Jenkins H, Hancock M, French SD. GLA:D® Back Australia: a mixed methods feasibility study for implementation. Chiropr Man Ther. 2022;30(1):1-12.

Jenkins HJ, Kongsted A, French SD, Jensen TS, Doktor K, Hartvigsen J, Hancock M. Patients with low back pain presenting for chiropractic care who want diagnostic imaging are more likely to receive referral for imaging: a cross-sectional study. Chiropr Man Ther. 2022;30(1):16.

Jenkins HJ, Ferreira G, Downie A, Maher C, Buchbinder R, Hancock MJ. The available evidence on the effectiveness of 10 common approaches to the management of non-specific low back pain: An evidence map. Eur J Pain. 2022;26(7):1399-411.

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Jenkins HJ, Kongsted A, French SD, Jensen TS, Doktor K, Hartvigsen J, Hancock M. Reply to the letter to the editor: "What are the effects of diagnostic imaging on clinical outcomes in patients with low back pain presenting for chiropractic care? A matched observational study." Jenkins et al., Chiropractic & Manual Therapies 2021; 29: 46. Chiropr Man Ther. 2022;30(1):12.

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De Luca K, McDonald M, Montgomery L, Sharp S, Young A, Vella S, Holmes MM, Aspinall S, Brousseau D, Burrell C, Byfield D, Dane D, Dewhurst P, Downie A, Engel R, Gleberzon B, Hollandsworth D, Molgaard Nielsen A, O'Connor L, Starmer D, Tunning M, Wanlass P, French SD. COVID-19: how has a global pandemic changed manual therapy technique education in chiropractic programs around the world? Chiropr Man Ther. 2021;29:1-1.

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Harsted S, Nyirö L, Downie A, Kawchuk GN, O'Neill S, Holm L, Nim CG. Posterior to anterior spinal stiffness measured in a sample of 127 secondary care low back pain patients. Clin Biomech (Bristol, Avon) 2021;87:105408.

Nim CG, Weber KA, Kawchuk GN, O'Neill S. Spinal manipulation and modulation of pain sensitivity in persistent low back pain: a secondary cluster analysis of a randomized trial. Chiropr Man Ther. 2021;29:1-4.

Nim CG, Kawchuk GN, Schiøttz-Christensen B, O'Neill S. Changes in pain sensitivity and spinal stiffness in relation to responder status following spinal manipulative therapy in chronic low Back pain: a secondary explorative analysis of a randomized trial. BMC Musculoskelet Disord. 2021;22:1-2.

Kawchuk G, Hartvigsen J, Harsted S, Nim CG, Nyirö L. Misinformation about spinal manipulation and boosting immunity: an analysis of Twitter activity during the COVID-19 crisis. Chiropr Man Ther. 2020 Dec;28(1):1-3.

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Nim CG, Kawchuk GN, Schiøttz-Christensen B, O'Neill S. The effect on clinical outcomes when targeting spinal manipulation at stiffness or pain sensitivity: a randomized trial. Sci Rep. 2020;10(1):14615.

### Updates from CARL II Fellows



Amy: The Sydney residential was a transformative experience! Since I have been back, we have launched an exciting new project launch, setting up a Young Persons Advisory Group for young people with MSK pain. They will become experts on youth-proofing research projects, helping researchers in the adolescent pain space.



Casper: The CARL residential in Sydney has profoundly transformed my life. It has developed and strengthened friendships, collaborations, and networks. Notably, I am visiting CMCC in January to work with Martha Funabashi (CARL I) on the potential of utilizing force-sensing tables in research. Numerous CARL projects are slated to follow shortly—stay tuned! Thank you to all the sponsors of CARL, your support is life- and career-changing.



Andrée-Anne: The Sydney residential was a most welcomed pause in time that allowed me to reflect, set goals, and be inspired by genuinely authentic people. I returned home with renewed energy to take on new challenges.



Steen: My experience at the Sydney Residential was truly a once-in-a-lifetime experience. It has been immensely beneficial to me, both personally and professionally. During this residential, I was able to kick-start several research projects that I am eagerly looking forward to working on in the near future. I am profoundly grateful for the support from the chiropractic institutions that back CARL. This entire experience has been a significant highlight in my career journey.



Aron: Highlight of my year!.. the chance to participate in the CARLII Sydney residential. Advancing Chiropractic research with like-minded friends from around the world under the mentorship of Greg, Jan and Jon has brought a valuable perspective to my life as a Chiropractor. Thank you to all CARL sponsors for making this possible.



Hazel: Loved seeing everyone here in Australia for the CARL residential. Such an inspirational week with great friends and work on many exciting projects. I am very thankful for being involved in the CARL program and the opportunities it has led to. Can't wait for our upcoming 2024 residential in Canada..



Sasha: It was incredible to be able to share a snippet of Australia with all the CARL II fellows. The Sydney residential was a fantastic week, deepening our friendships and, of course, dreaming up many new projects. I'm very excited in particular to continue exploring the important topic of diversity within the chiropractic profession.



Cecilie: I am truly grateful to be part of the CARL II Fellow cohort and its inspiring, productive, and supportive environment. The opportunity to enjoy Australia was a fantastic experience, but re-connecting with my CARL Fellows and getting to know CARL I Fellows better made this trip particularly valuable. I have recently been reminded that our research can impact policymakers, which motivates me to keep working for better research-based knowledge about MSK health.



Luana: Reuniting with the CARL Fellows and Mentors in Sydney made me realize that not only did I get to spend time with fantastic researchers and collaborators, but I also got to meet my friends again. For me, this time means support, purpose, and the motivation to further my career.



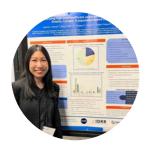
Eric: It was wonderful to catch-up with everyone from CARL at the residential. Coming from an institution without other chiropractors this is an amazing opportunity for me to connect and grow. In the last year I've started as an Assistant Professor in the Section of General Internal Medicine at Boston University and have begun three new federally-funded research projects.



James: I had a great time at the CARL Sydney residential in October. This group has grown quite close and has produced some great projects. I am looking forward to the next residential in Edmonton in 2024!



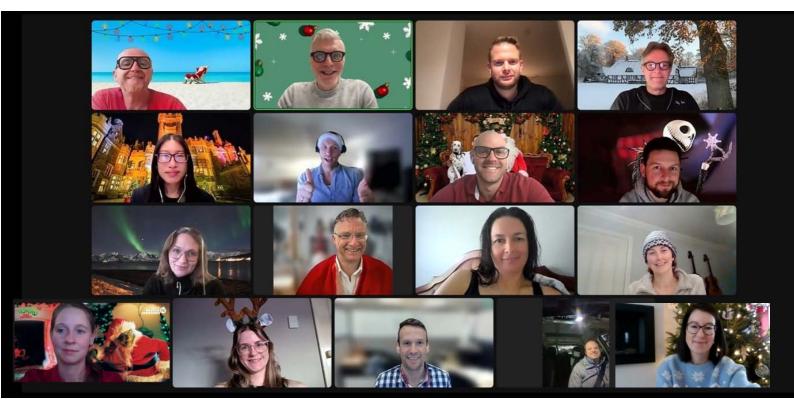
David: The Sydney residential was an amazing experience, and it was great to see all my very close CARL friends. At present I am investigating quality and safety standards in healthcare at MQU. This is in addition to my continuing teaching and clinical roles.



Jessica: The Sydney residential was a meaningful and productive time to reconnect in person as a cohort. It is inspiring to be with mentors and fellows who support each other and bring forth innovative research and leadership. Thank you to the sponsors of CARL for their generous support towards this invaluable experience!



Ken: The CARL II residential was inspiring, and the opportunity to connect with such a talented group of chiropractic researchers was truly invaluable. I am so excited to meet again in Edmonton in 2024. I have had a great year. I was awarded my first independent research grant, and I was promoted to Senior Research Scientist.







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