

New projects funded or co-funded by the Australian Spinal Research Foundation (ASRF)

Editorial team

Abstract: A descriptive report of the three research projects funded or co-funded in 2024 for 2025 by the Australian Spinal Research Foundation.

These three projects are from the Australian Chiropractic College, the New Zealand College of Chiropractic, and Chiropractic BioPhysics® NonProfit.

Indexing Terms: Chiropractic; subluxation; ASRF; research; funding.

Introduction

Spinal Research facilitates Chiropractic research that investigates the hypothesis that *'Chiropractic care leads to better nervous system function, thereby enhancing health, quality of life and human performance'*.

The purpose of funding such research is to build an evidence base in support of Chiropractic, and to grow certainty within the profession and community, resulting in chiropractic becoming a first choice in health care.

All projects funded by Spinal Research from 1991 are gathered on-line at <https://spinalresearch.com.au/funded-research-projects/?search=>

Spinal Research is a volunteer membership organisation where members' funds are used to support research projects submitted through an exhaustive annual cycle which begins with *Expressions of Interest* and through diligent review processes are whittled down to several projects which are judged most likely to contribute to the both the mission of the ASRF and the benefit of the global Chiropractic profession. All grant values given here are in Australian Dollars.

A global body with impact

Spinal Research is now the world's largest funder and facilitator of Chiropractic research. Since our inception in 1977, they have:

- ▶ contributed greatly to chiropractic research
- ▶ funded 251 research projects at a cost in excess of AUD\$2.9M

... Spinal Research has held annual rounds of grant funding since 1977. This year, 2024, three projects have been funded for this coming research year. We give them in detail ...'



- ▶ developed a unique and robust research review process to assess grant applications before funding is granted
- ▶ created a panel of international experts from both academic and field practice to provide peer review
- ▶ become an approved Deductible Gift Recipient for tax deductible donations made by Australian residents, and
- ▶ gained recognition in the CAF America system, enabling US residents to make tax deductible donations.

The ASRF Mission

To fund & facilitate research, and educate chiropractors, communities & peak bodies on the effectiveness of chiropractic care

The 2024 approved projects, commencing in 2025

The three projects funded in this cycle are presented here by the *Journal* in no particular order.

The effects of chiropractic adjustments on sleep quality in chronic snorers: A pilot study

Chief Investigator: Dr Beau Woods. Australian Chiropractic College.

Co-Investigators: Dr Nitika Kumari (NZCC), Dr Imran Niazi (NZCC), Dr Heidi Havaak (NZCC), Associate Professor David White (AUT & BioDesign Research Hub).

Abstract

Nasal congestion is a major risk factor for sleep-disordered breathing, ranging from snoring to Obstructive Sleep Apnoea (OSA). Around 30% of the population experience chronic snoring, the earliest and most common symptom of OSA.

Resultant poor sleep quality is strongly associated with poor mood control and many serious health conditions, such as obesity, type-2 diabetes, cardiovascular disease, and premature death.

To date, there are only two case studies that have demonstrated chiropractic care is associated with improved OSA and sleeping problems. Thus, it might be possible that subluxation-based Chiropractic care can impact the nasal cycle and sleep quality.

This pilot trial will enable us to calculate effect sizes and understand the logistics required to inform a future Randomised Controlled Trial, particularly around recruitment, data collection and analysis.

Reproducibility of Sagittal Cervical Spine Alignment on Serial Radiographs: A Systematic Review of the Literature

Chief Investigators: Dr Joe Betz and Dr Deed Harrison. Chiropractic BioPhysics® NonProfit.

Abstract

Adequate reliability of spinal displacement analysis on sagittal cervical radiographs is essential for chiropractors to use Xray for the detection and quantification of the biomechanical component of subluxation in clinical practice.

Sufficient reproducibility of radiographic imaging (patient positioning, equipment positioning, etc.) of the spine is necessary to have scientific validity of the biomechanical component of subluxation.

Non-reproducible methods of obtaining X-rays for this analysis could lead to unreliable measurements, incorrect care, and invalid measures of clinical outcomes.

This project is a systematic review of the literature that will methodically explore the state of literature and collate the literature on the repeatability of obtaining sagittal spine radiographs.

Investigating the Predictive Relationship Between Level and severity of Vertebral Subluxation and balance Using AI Techniques.

Chief Investigator: Imran Amjad and **Co-Investigator:** Imran Khan Niazi. New Zealand College of Chiropractic.

Abstract

This research aims to investigate the impact of Vertebral Subluxation, or dysfunction, on static and dynamic balance.

The study will utilise machine-learning models and time series analysis to predict static and dynamic balance parameters based on subluxation severity and to analyse its evolution over time.

Participants will undergo chiropractic sessions, with static and dynamic balance parameters gauged using the Gait & Balance Mobile App. Key outcomes will determine whether chiropractic care influences balance and elucidate the relationship between subluxation and balance.

The integration of Artificial Intelligence into Chiropractic research aims to provide personalised interventions and deepen the understanding of patient care.

Conclusion

We have reported the 47th annual round of Spinal Research Grants for three funded projects now in progress. Now, all research activity aimed at developing a clear understanding of vertebral subluxation and its effects.

The funded projects represent scientifically testable research drawing on the philosophical tenets of Chiropractic.

Spinal Research leads our profession by facilitating global research in the areas of vertebral subluxation science and the clinical benefits of chiropractic care for the human population.

You can become a member here, and support this magnificent activity.

Cite: Editorial team. New projects funded or co-funded by the Australian Spinal Research Foundation (ASRF). Asia-Pac Chiropr J. 2025;5.2. www.apcj.net/papers-issue-5-3/#ASRF2024grants