THE LANDSCAPE OF SPINAL CORD INJURY RESEARCH IN AUSTRALIA 2018 - 2023

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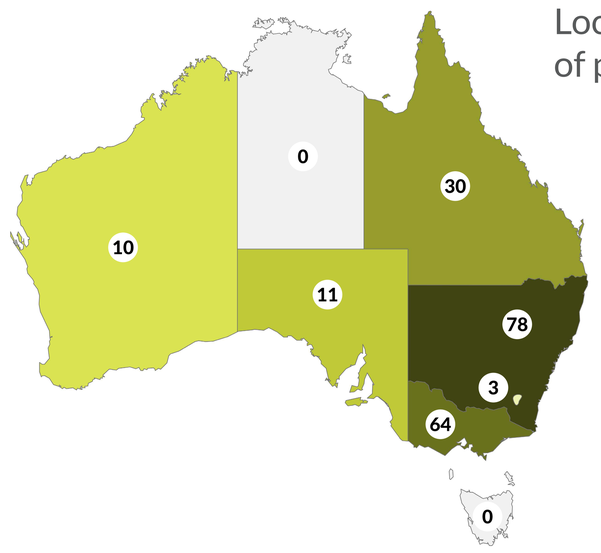
INTRODUCTION

The Spinal Research Institute (SRI) sponsored a mapping project to obtain a comprehensive understanding of the SCI research landscape in Australia (Jan 2018-May 2023) using two methods:

1. A web-based search of recent **funding** (right), and
2. A scoping review of recently **published literature** (below).

PUBLISHED LITERATURE



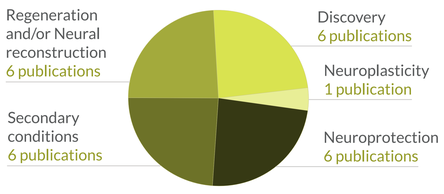
Location of lead author of publication by state

- New South Wales: 78
- Victoria: 64
- Queensland: 30
- South Australia: 11
- Western Australia: 10
- Australian Capital Territory: 3
- Northern Territory & Tasmania: 0

196 total publications
25 pre-clinical research
171 clinical research

Pre-clinical research
25 publications

Categories of pre-clinical research



Pre-clinical research laboratory location

State or territory	Number of publications (n=25)	Percentage (%)
Queensland	9	36
New South Wales	6	24
Western Australia	4	16
South Australia	3	12
Victoria	2	8
Australian Capital Territory	1	4

The above figures are based on the lead and/or senior author(s).

Most pre-clinical studies (19 of 25; 76%) were conducted in rodent models of SCI, with an approximate 60/40 split between the use of mice and rats, respectively.

Clinical research
171 publications

Categories of clinical research

Category of research	Number of publications (n=171)	Percentage (%)
Rehabilitation	51	29.8
Secondary conditions	45	26.3
Acute management	29	16.9
Psychosocial	21	12.3
Participation	16	9.4
General health maintenance	5	2.9
Paediatric	3	1.8
Aging	1	0.6

Study design used for clinical publications

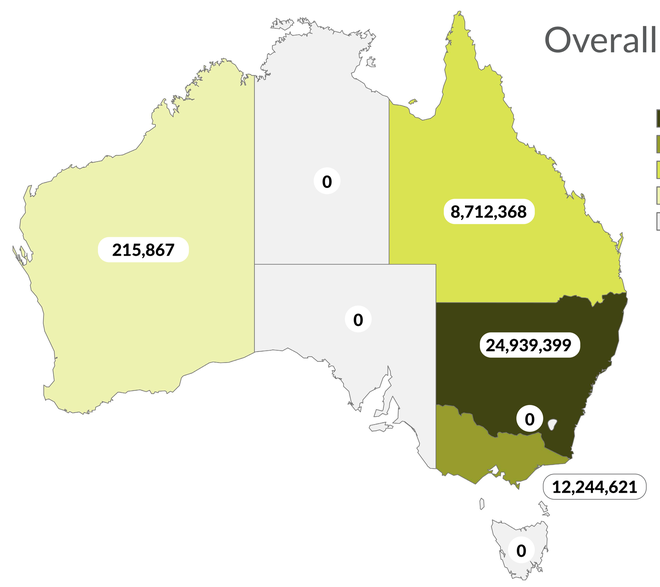
Study design	Number of publications (n=171)	Percentage (%)
Cross-sectional	40	23.4
Qualitative inquiry	32	18.7
Retrospective audit	26	15.2
Cohort study	19	11.1
Controlled clinical trial	16	9.4
Randomised controlled trial	15	8.8
Mixed methods	11	6.4
Case series	7	4.1
Case control study	5	2.9

69% of the clinical studies did not recruit participants from outside their institution, state, or country.

196 articles relating to SCI research in Australia were published between 2018 & 2023, however, only **9** included people with lived experience other than as research participants.

FUNDING

The total publicly identifiable funding for SCI-related research was $48,662,255. Rehabilitation followed by Secondary Conditions, received the most funding for clinical research. The largest category of pre-clinical research funded was Neuroprotection/ Secondary Damage, followed by Discovery and Regeneration and/or Reconstruction-related projects.



Overall funding by state ($)

- New South Wales: 24,939,399
- Victoria: 12,244,621
- Queensland: 8,712,368
- Western Australia: 215,867
- Northern Territory, Tasmania, Australian Capital Territory, South Australia: 0

Overall funding provided by government totalled $33,733,150.

14,830,401	12,500,000	5,729,282	457,600	215,867
MRFF	NSW Med Fund	NHMRC	ARC	WA Neurotrauma

CONCLUSION

Multidisciplinary research centres with strong connections between universities and clinical services received the most funding. Research models that promote greater links between laboratory-based researchers and clinical researchers could more adequately address pressing healthcare needs, reduce duplication, maximise recruitment participation, and more efficiently engage consumer advisory panels. SCI research that has either a primary care or community care perspective is also extremely limited. Consumers as the beneficiaries of SCI research could be more actively involved in all stages of the research process. Overall, significant opportunities exist for new approaches to advance the reach and impact of SCI research in Australia.

The Spinal Research Institute's report, The Landscape of Spinal Cord Injury Research in Australia 2018 - 2023, is available online.

Read or download at the **link below** or scan the **QR code**.

https://tinyurl.com/sci-research-au-2018-2023

The Spinal Research Institute is an Australian registered charity building research collaboration and consumer engagement to improve the lives of people with spinal cord injury.

thesri.org

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