



2019-20

Annual Report



Australian Government
Department of Industry, Science,
Energy and Resources

Business
Cooperative Research
Centres Program

Our Essential Participants



A full list of Participants in the Autism CRC is given in [Appendix 1](#).

*All Essential Participants are Members of the Company, Autism CRC Ltd, except for the Queensland Department of Education.

Contents

About Autism CRC	1
Strategic imperatives	1
Our current work program	2
Knowledge translation framework	5
A framework to fulfil our vision	6
Report from the Chair and CEO	11
1.0 Key achievements	13
National Guideline's impact grows	13
Whole genome sequencing of the Australian Autism Biobank	14
<i>inclusionED</i> - a national approach to supporting diverse learners in inclusive classrooms	14
Autism HealthPathways launched	15
Two new research Co-production Partners	16
Pictures giving people a voice in planning their futures	16
Helping teenagers on the spectrum combat anxiety and depression	17
Video intervention for babies improves early language development	18
Helping young people plan and prepare for their working life	18
Autism@Work	19
Autism Month Webinar Series 2020	19
Awards celebrate three diverse projects.....	20
Australian Autism Research Council	21
The Sylvia Rodger Academy	22
Longitudinal data helping us to understand loneliness in autistic adults	22
2.0 Our end-users	23
3.0 Our people and structure	25
3.1 Structure.....	25
3.2 Autism CRC Board.....	26
3.3 Autism CRC Management Team.....	26
4.0 Report on activities	27
4.1 Research and development.....	27
4.2 Research collaboration	42
4.3 Education and training	44
4.4 Engagement.....	59
4.5 Communication	54
4.6 Intellectual property.....	56
4.7 Utilisation and commercialisation	56
5.0 Governance	61
5.1 Autism CRC Board and Committees	61
6.0 Appendices	65
Appendix 1: List of Autism CRC Participants.....	65
Appendix 2: Annual Financial Report	67
Appendix 3: Publications 2019-20	69
Appendix 4: Resources developed 2019-20.....	70
Appendix 5: Conference presentations 2019-20.....	71
Appendix 6: Intellectual property	73
Appendix 7: Glossary.....	80

Statement of purpose: Together, we learn more



Vision

Autistic people empowered to use their diverse strengths and interests



Mission

Motivate, facilitate and translate collaborative autism research across the lifespan and the spectrum, underpinned by inclusive practices



Objectives

Autism CRC provides the independent, national capacity to develop and deliver evidence-based outcomes through our unique collaboration with the autism community, research organisations, education and health professionals, industry and government

About Autism CRC

Autism CRC is the world's first national, cooperative research effort focused on autism across the lifespan.

Our programs take a whole-of-life view from diagnosis and the early years through the school years and into adult life.

At the end of the 2019-20 reporting period, we had 56 Participant organisations, as well as other partners, based around Australia and internationally, working in collaboration. Together, we seek to build capacity and support for neurodiverse environments in our communities, so every individual has the opportunity to reach their full potential.

Autism CRC is committed to inclusive research practices and co-production of outcomes with people on the spectrum, their families and supporters. This ensures our research provides practical and tangible outputs that benefit the community.

Strategic imperatives

In order to realise our vision, Autism CRC is committed to:

- ▶ **Program delivery:** delivering our current programs to the expectation of our stakeholders.
- ▶ **Autistic empowerment:** developing the diverse strengths and interests of autistic people.
- ▶ **Capacity building:** investing in education, training, and development of neurodiverse communities.
- ▶ **Sustainability:** providing a focus for autism research globally, a diverse resource base of expertise and funding, and a strong brand and reputation.
- ▶ **Strategic partnering:** developing new strategic partnerships with key organisations and adding value to existing relationships.
- ▶ **Independence:** providing an objective and transparent evidence-based research platform.
- ▶ **Outcome-focused research:** enabling nimble needs analysis, timely collaboration and efficient translation and dissemination.
- ▶ **Co-production:** being the world leader in development and implementation of inclusive research practices.

Our current work program

‡ Making a positive difference to the lives of people on the autism spectrum.

Autism CRC's program of work aims to deliver positive outcomes for people on the autism spectrum in two ways – by developing and fostering enablers that support an individual's ability to reach their full potential and by making large-scale investments to develop more inclusive community settings, such as schools, universities and workplaces, with an understanding and appreciation of neurodiversity.



Program 1 – Early Years

Our Early Years Program harnesses existing knowledge of autism to ensure earlier identification and more accurate needs assessment and diagnosis, using behavioural analysis together with breakthroughs in biological research. This identifies an individual's strengths and challenges, as well as pathways to the most effective supports and interventions.

Where have we come from?

- ▶ Parents' concerns from 12 months of age dismissed.
- ▶ General Practitioner (GP) reluctantly refers child to paediatrician at three to four years of age.
- ▶ Autism undiagnosed before four to five years of age.
- ▶ Trial and error of costly interventions, and loss of opportunity for individuals on the spectrum and their families.

Where are we now?

- ▶ Developed Australia's first National Guideline for the Assessment and Diagnosis of Autism Spectrum Disorders in Australia. All 70 National Guideline recommendations have been endorsed by the full Council of the National Health and Medical Research Council (NHMRC) and more than 15,400 people have registered to access the National Guideline since its release, including approximately 10,000 professionals such as paediatricians, psychologists, speech pathologists and occupational therapists.
- ▶ Working with the Commonwealth Government, led by the Department of Social Services (DSS), to support greater implementation of the National Guideline recommendations by diagnosticians across Australia. Resources, including a video series, will be made available and widely promoted in the last quarter of 2020.

- ▶ Successfully trialled early childhood surveillance tools developed at La Trobe University in two states with maternal and child healthcare nursing systems. Initiated a multi-state trial of protocols for national early childhood surveillance in GP clinics.
- ▶ Completed the first rigorous trial of a pre-emptive behavioural intervention for babies showing early signs of autism. Findings show therapy can improve early language development.
- ▶ Established the Australian Autism Biobank. Sixteen research projects are already underway using a combination of the biological, behavioural and clinical information and materials available from a depository of almost 3,000 participants.





Program 2 – School Years

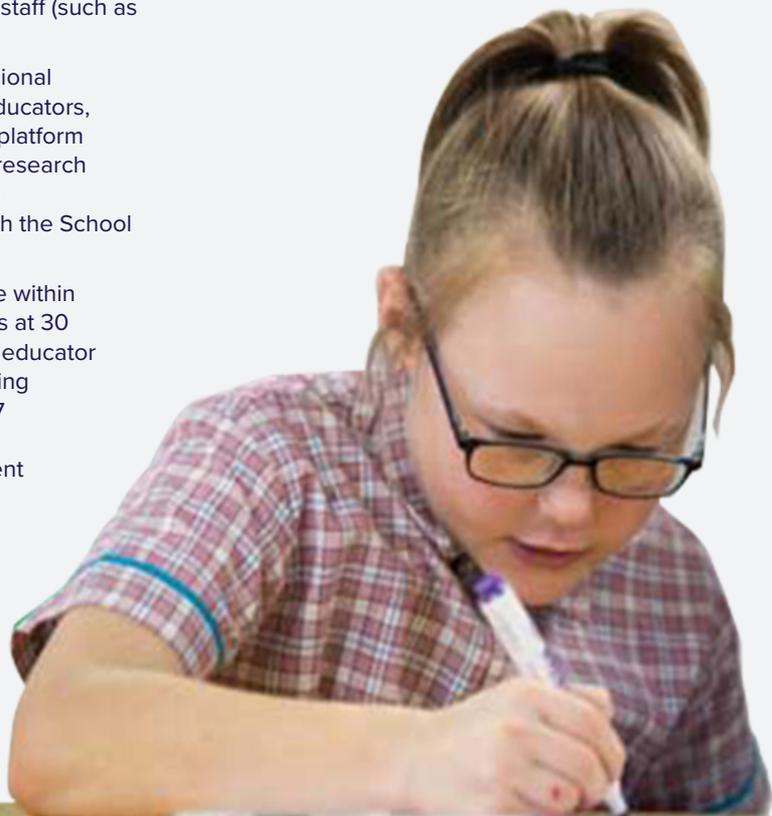
Our School Years Program supports appropriate educational environments and programs, founded on the principles of Universal Design for Learning, that work together to optimise students' social, behavioural and academic development and success. Our program equips teachers to enhance performance and support all students at school and beyond.

Where have we come from?

- ▶ Lack of trained educators.
- ▶ Social isolation and vulnerability.
- ▶ Poor academic outcomes limiting post-school opportunities.
- ▶ Absenteeism and suspension.
- ▶ Escalation of mental health issues.
- ▶ Worked through the Commonwealth Positive Partnerships Program to extend reach and support effective delivery of outputs in remote, Aboriginal and Torres Strait Islander, and culturally and linguistically diverse (CALD) communities.
- ▶ Launched the Autism Teen Wellbeing website - a multi-layered approach for supporting the mental health of autistic teenagers with videos and resources designed for parents, teachers, schools and communities (autismteenwellbeing.com.au).

Where are we now?

- ▶ Completed Australia's first nationwide educational needs analysis of students on the autism spectrum (aged 5-16 years). This study gathered inputs from almost 1,500 school administrators, teachers and specialist support staff, ancillary support staff (such as teacher aides), parents and students.
- ▶ Launched *inclusionED*, an online professional learning community, co-designed with educators, for educators (inclusioned.edu.au). The platform represents the translation to practice of research outputs from more than 25 research and development projects carried out through the School Years Program over the past six years.
- ▶ Created a national community of practice within *inclusionED* (more than 1,100 members as at 30 June 2020), enabling social sharing and educator reviews on the experience of implementing specific practices. Presently, there are 27 teaching practices available through the platform, with more to be added as current projects are completed.





Program 3 – Adulthood

Our Adulthood Program enhances opportunities to successfully transition to post-school life, participate in higher education, further training and employment, and improve the health and wellbeing of people on the autism spectrum. Our program delivers tools and national protocols giving clear guidance to autistic adults and their supporters, as well as the employers, and health and education professionals who work with them.

Where have we come from?

- ▶ Little support post-school.
- ▶ Lack of life skills and vocational options.
- ▶ Escalating isolation and mental health problems.
- ▶ Limited community participation and access.
- ▶ Very low employment rate.

Where are we now?

- ▶ Launched Autism HealthPathways Initiative in 2019, informing healthcare pathways which better support people on the autism spectrum. Already 1,250 health professionals have accessed HealthPathways which facilitates access to up-to-date and evidence-based information to aid clinical decision-making around the health and wellbeing of autistic people.

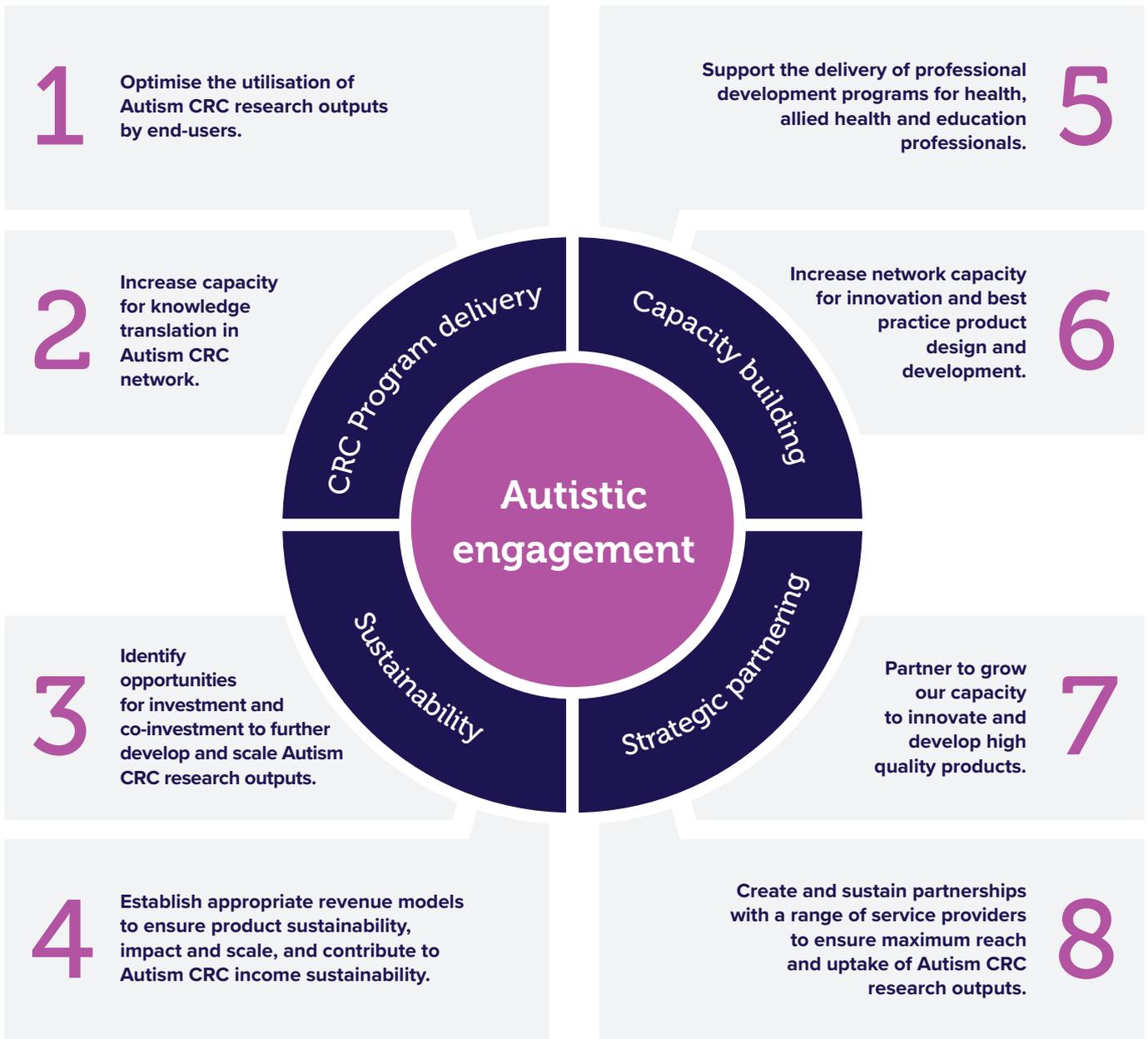
- ▶ Delivered empowering tools such the Adolescent/ Adult Goal Setting Tool (AAGST) to facilitate conversations about people's goals and aspirations for National Disability Insurance Scheme (NDIS) pre-planning and other decision making.
- ▶ Developed a range of resources and tools to facilitate transition from school to further education, foster independence, support driving and use of public transport, and enable economic participation.
- ▶ Created initiatives for employers to establish neurodiverse workplaces and implement effective organisational adaptations best suited to the needs of autistic employees.
- ▶ Identified clear needs in health service delivery and care for autistic young people and adults through the examination of big data.



Knowledge translation framework

By translating the outputs of Autism CRC’s three research programs, we aim to positively influence policy, practice and community understanding. The knowledge translation framework aims to optimise research outcomes and ensure a consistent approach across all programs.

The framework provides a priority action plan for implementation by Autism CRC and supports a number of Strategic Imperatives in the Autism CRC Strategic Plan.



A framework to fulfil our vision

The first Australian autism research papers were published in the mid-1970s and, until recently, research was heavily focused on early childhood deficits and genetic studies. Despite autism being a lifelong condition, very little research was undertaken on adolescent and adult life.

Since 2013, Autism CRC has been at the forefront of a renewed research focus, addressing the whole lifespan and recognising both the strengths of, and challenges faced by, people on the autism spectrum. Our programs seek to provide the supports and environments that allow individuals to thrive and contribute more fully to the economy and society. While there is more to be done, our achievements include key pieces of coordinated, collaborative research infrastructure with the capacity to make meaningful change for generations to come: a framework to fulfil our vision to see autistic people empowered to use their diverse strengths and interests.



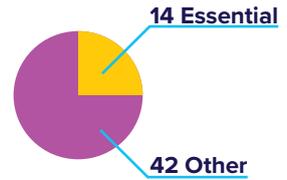
Autism research disparate and under-resourced | **World's first national research collaboration**

Established world's first national cooperative research effort focused on autism across the lifespan



3 Research Programs addressing each life stage
Early Years, School Years, Adulthood

56 Participants



89 Projects



\$115m Investment
in research and its translation

Developed practice and protocols for consistent national outcomes



Australia's first National Guideline for Assessment and Diagnosis of Autism

15,400+ Individuals
registered to access the National Guideline

Developed a range of assets for national and international autism research

Trained the next generation of autism researchers and diagnosticians

4 Longitudinal Studies across the lifespan, 3,675 participants 

66 Scholars 
25 Active, 41 Completed
8 Early Years Program, 26 School Years Program, 32 Adulthood Program

~3000 Australian Autism Biobank participants with 4,500 biological samples collected + behavioural questionnaire data

46  Autism diagnosticians completed Graduate Certificate in Autism Diagnosis

No coordinated research agenda

Research priorities agreed and reviewed with autism community, industry and government

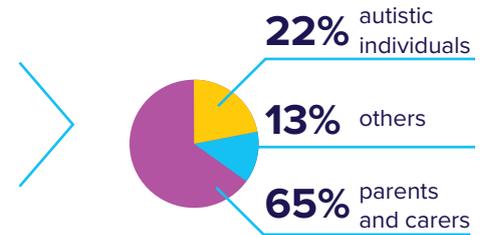


Delivered Autism CRC Program in consultation with key stakeholder communities

Australian Autism Research Council (AARC)

10 
Research priorities defined

Stakeholder engagement and
1,100
Responses
 to community consultation



Little evidence on autistic adolescent or adult life

Coordinated, substantive program addressing the whole lifespan

Program specifically aimed at adolescent and adult life



Created tools and resources
 for adolescents to transition to further education and employment



Developed programs and initiatives
 to promote inclusive workplaces and educational environments



Established pathways
 to improve health service delivery and adult wellbeing

- ▶ **1,250** GPs accessed Autism HealthPathways in first year
- ▶ Data analysed from **36,000** autistic people in one study alone
- ▶ **5,020** health professionals upskilled in autism-specific wellbeing

Initiated longitudinal studies focused on autistic adolescent and adult life

15-25 years

Australian School Leavers Study
 360 participants

25+ years

Australian Adults Study
 670 participants

Research not inclusive of autistic community as peers

Working to embed inclusive research practices and co-production throughout the autism research community

Launched Co-production Program Partner Initiative

6

Co-production Partners



Autism Spectrum Australia (Aspect), Macquarie University, Curtin University, University of Southern Queensland, University of New South Wales, University of Wollongong

Established the Sylvia Rodger Academy to empower autistic adults

3



Programs

Research, Future Leaders, Governance

47



Research Program participants

44



Future Leaders participants

14



Governance Program participants

Little collaborative research with autism service providers and professionals

Autism professionals, service providers and end-users engaged in research and its translation to practice

Ensured high levels of end-user/industry engagement in research and initiatives



68%

CRC Participants are end-users



55%

CRC Participants from industry and /or private sector

300+



Schools

involved in our work

53,000+

Professionals

involved in research programs or used our outputs

1,500

Registrations

to attend launch of *inclusionED*

Co-designed *inclusionED*, an online learning community, with educators, for educators

1,100+



Educators joined community of practice

200



Teachers engaged in development of *inclusionED*

Few opportunities that cater for both the strengths and needs of a neurodiverse community

A range of tools, resources and opportunities designed with and for the autistic and autism communities

Created Knowledge Centre as a single online gateway to Autism CRC publications and resources

270+ 

Items in Knowledge Centre and continuing to grow

63,500 

Downloads publications, reports and resources

Developed employment initiatives to help promote neurodiversity in the workplace

12 **Continuing employees** 

Through Autism & Agriculture project

3 completed Certificate 3, **1** gone on to University study, **1** moved on to other employment

500+ 

Attendees at Autism@Work Summits

Created tools to facilitate transitioning from school, learning to drive and catching public transport

150+ **Copies of Adolescent/Adult Goal Setting Tool sold** facilitating transition planning and goal setting

5,500+ **Users autismteenwellbeing.com.au** resources and strategies to build protective factors against anxiety and depression in young people on the spectrum

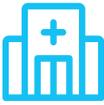
250+ **People** including autistic young people and their supporters involved in co-design of *myWAY Employability* smart web application

100 **People** including autistic young adults, parents and professionals have undertaken web-based transition planning program, BOOST-A

550+ **Downloads** autism-specific public transport app (research version)

72 **Learner drivers** trialled the autism-specific driving instructor online resource

Provided GPs with autism-specific professional development

5,020 **Completions** 

of autism-specific suite of professional development for GPs

 **Created Autism HealthPathways Initiative**

4 new content pathways developed, **5** existing revised to reflect autism-specific needs, **1,250** GPs have accessed to date

Report from the Chair and CEO

... We approached the 2019-2020 year, the second last of the CRC Program term, with a focus on two overarching objectives: completing our current program with an emphasis on the translation and utilisation of our project outputs for impact in our user community; and the transition of our assets and activities to a legacy operation beyond the CRC term.

The COVID-19 pandemic has obviously had a significant impact on all our lives and plans since March 2020. The world continues to face significant health, economic and social challenges and uncertainty. We know that these challenges have been substantial for individuals and families in our community – only highlighting the need for flexible, person-centred approaches to education, employment, health and social engagement, central to much of our work.

Despite the challenges, the efforts of all our research and end-user Participants in our national collaboration can only be lauded as we continue to deliver quality project outputs resulting in significant impact upon autism-related practice and policy. These are building the capacity of individuals, the service sector and the community across Australia and across the lifespan – from early childhood through the school years and into adult life.

As always, it is difficult and perhaps unfair to highlight just a few of the major activities from our more than 80 investment projects, but here are just a few from the past 12 months.

- ▶ Following the launch of the National Guideline for the Assessment and Diagnosis of Autism in Australia in the previous year, we are delighted to be working with the Commonwealth Department of Social Services who are now leading an approach to national implementation, involving clinical, consumer and other government sector stakeholders, and seeing resources developed to assist on-ground implementation.
- ▶ National and international studies are making use of information from the Australian Autism Biobank. The early results from some of these have delivered further insight on co-occurring health conditions. The data generated from studies will add value to this major research asset, as will the current whole genome sequencing work made possible by significant additional Participant contributions.

- ▶ In May, the Federal Minister for Education, The Hon. Dan Tehan MP, launched the *inclusionED* platform - a major dissemination vehicle for the School Years Program - founded on research and evidence from more than 25 projects over six years in 300+ schools across Australia. In less than two months to end June, more than 11,000 users had engaged with *inclusionED* and 1,100 had become registered members of the practice community.
- ▶ The development and user-testing of the *MyWAY Employability* smart web app platform was completed – it being launched subsequent to the reporting period in August. A critical platform for planning and managing transition from school to post-school education, training and employment, it will provide an important link for an integrated pathway from the education system to the employment market.
- ▶ We continued to build capacity amongst our national primary healthcare providers, with the completion of Autism Pathways on the HealthPathways online manual platform used by clinicians. More than 5,000 clinicians have also completed our online autism-related continuing professional development modules.

We continue to provide great emphasis on user-driven and co-produced autism research and policy.

- ▶ The Sylvia Rodger Academy introduced a Governance program during the year, delivered a leadership program in partnership with Aspect and commenced a second. In all, 105 autistic participants have undertaken the Academy's research, leadership and governance programs, so that autistic individuals might play a greater role in the development and implementation of programs that impact upon their lives.
- ▶ We welcomed two new research co-production partners to the fold, being the University of Wollongong and the University of New South Wales. They join our existing partners Aspect, Curtin University, Macquarie University and the University of Southern Queensland.

As you read through this report, you will learn of many more highlights and impacts from our work. These are only achievable through a co-ordinated national approach to defining and addressing needs, involving all stakeholders. That collaborative capacity is of itself an important national asset. Combined with the other assets generated through the course of the past seven years – major research assets and evidence-based frameworks and resources for research, policy and practice – we have collectively formed the national independent reference body for autism-related best practice.

During the year, we saw the establishment of the Senate Select Committee on Autism. Its broad terms of reference and the evidence of the many submissions made to the inquiry show the substantial unmet need for the rapidly growing number of autistic Australians, their families and those who seek to support them in life participation, health and wellbeing. Many of the submissions also highlight the importance of a co-ordinated national approach to research and a base of evidence for practice and policy throughout the life journey.

In June, in recognition of the impact of the pandemic upon a few of our program milestones, the Commonwealth granted a protracted wind-up period for our current CRC Program to June 2022, with no further program funding.

While this thankfully allows for the completion of these important projects, the vast majority of our project activities will come to a close by June 2021, per the original program schedule, as will our CRC program funding. Our priority focus has been on securing resources to support the transition of our assets and operations to a legacy operation, in order that the momentum of the national collaboration might continue unabated beyond June 2021. We are greatly appreciative of

the support of government and our participants in seeking those resources, despite the challenging economic times and uncertainty.

The resources have not yet been secured. The need for a national co-ordinated source of autism-related evidence and research is agreed by all stakeholders. The investment by many over the last seven years has established this platform.

As always, on behalf of the Board and team, we thank all those who have contributed to our activities and outcomes. It is only through the collaborative efforts of all that so much has been achieved and value created in order that autistic people might be empowered to use their diverse strengths and interests.

Finally, a note of thanks to Professor Torbjorn Falkmer, who retired in June. Torbjorn led Program 3, our Adulthood Program, from the outset. It is never easy establishing any ambitious venture, especially in an area with historically limited research focus and evidence-based practice. We thank Torbjorn for steering that important program with care to the impact we are now seeing. We wish Marita and Torbjorn all the best for their retirement.



We thank all those who have contributed to our activities and outcomes. It is only through the collaborative efforts of all that so much has been achieved and value created in order that autistic people might be empowered to use their diverse strengths and interests.

1.0 Key achievements

Six new projects were approved in the 2019-20 Investment Rounds, bringing the total number of approved CRC Program projects to 66. Autism CRC has also undertaken a further nine core projects in addition to 14 research projects with other agencies, including the Federal Department of Social Services, Positive Partnerships, National Disability Insurance Agency (NDIA) and Telstra Foundation Tech4Good.

During the reporting period, of the Participants engaged in our research programs 38 were end-user organisations and 26 were Small and Medium-sized Enterprises (SMEs) – with several organisations falling under both categories.



National Guideline's impact grows

Autism CRC's development of the National Guideline for the Assessment and Diagnosis of Autism Spectrum Disorders in Australia (National Guideline) was a major international research exercise followed by extensive consultation across Australia with the clinical, allied health, service provider, autistic and autism communities.

Interest in the National Guideline continues to increase in Australia and overseas, with over 15,400 people now registered to access the resource; 10,000 of them professionals. More than a dozen organisations referenced the National Guideline in submissions to the Senate Select Committee on Autism made in mid-2020. Most called for increased uptake and implementation of the National Guideline nationwide.

Some additional National Guideline achievements of note this year:

- ▶ Work began on a National Guideline implementation resources project for DSS, which is developing a number of resources, including a Baseline Evaluation and Audit Tool, a series of fact sheets that summarise the National Guideline recommendations, and six videos for clinicians. The resources will be available by the end of 2020.
- ▶ A best-practice case study has been written by the National Health and Medical Research Council (NHMRC) on development of the National Guideline and will be available in the fourth quarter of 2020.
- ▶ A summary of the National Guideline was posted on the American Speech-Language-Hearing Association (ASHA) website and linked through to the Autism CRC site (111 direct referrals to-date).
- ▶ The National Guideline received international recognition in the opening keynote address of the annual meeting of the International Society for Autism Research (INSAR).

Development and NHMRC approval of the 70 recommendations of the National Guideline was a major achievement, only enabled by the collaborative CRC structure. As work on an Australia-wide implementation of the National Guideline proceeds, we will similarly work in collaboration with stakeholders to ensure that the benefits of a high-quality national approach to assessment and diagnosis are realised.



Whole genome sequencing of the Australian Autism Biobank

This year we were very pleased to receive significant additional Participant contributions for the purpose of whole genome sequencing of more than 1,500 participant DNA samples in the Australian Autism Biobank. The addition of sequencing data will add significant value to the Australian Autism Biobank dataset and allow further research into early diagnosis and personalised healthcare for autistic individuals.

It is anticipated that the sequencing activities will be completed by the first quarter of 2021. Research access to the data will be governed through the same Access Committee and processes that govern access to the broader Australian Autism Biobank samples and data.



inclusionED - a national approach to supporting diverse learners in inclusive classrooms

In the average Australian classroom, at least three children have a learning difficulty or neurodevelopmental disability. The support these children receive during school can set the trajectory for the rest of their lives, but many teachers do not feel equipped to effectively support the learning of all students in their classrooms.



In May 2020, the Commonwealth Minister for Education launched *inclusionED*, Autism CRC's major new online professional learning community, co-designed with educators, for educators (inclusioned.edu.au). *inclusionED* provides evidence-based and research-informed teaching practices and resources for educators to use in supporting all learners, including those with learning difficulties or neurodevelopmental disabilities such as autism.

The School Years Program has seen more than 25 research projects conducted on-ground in more than 300 state, Catholic and Independent schools across Australia, aimed at developing:

- ▶ tools and practices to enhance teaching and the learning experience (classrooms of excellence)
- ▶ evidence-based tools and programs for supporting social, emotional and behavioural needs of children and adolescents
- ▶ a better understanding of the developmental and behavioural trajectories of Australian students on the autism spectrum
- ▶ the skills and confidence of teachers and support personnel.

With support through the Positive Partnerships Program, this research was extended to support the effective delivery of outputs in remote, Aboriginal and Torres Strait Islander and CALD communities.

inclusionED represents the translation to practice of these research outputs. Presently, there are 27 teaching practices available through the platform, with more to be added in the coming 12 months.

inclusionED also provides a national community of practice (currently more than 1,100 members), enabling social sharing and educator reviews on the experience of implementing specific teaching practices. Detailed information supporting practice implementation aligned with the Australian Institute for Teaching and School Leadership's High-Quality Professional Learning Cycle is provided, supporting educator professional development.



Autism HealthPathways launched

With the launch of the Autism HealthPathways Initiative in Mackay in August 2019, a new platform for health professionals is now available, informing healthcare pathways which better support people on the autism spectrum.

Over 1,250 health professionals have already engaged with the platform, which facilitates access to up-to-date, evidence-based information to aid clinical decision-making around the health and wellbeing of people on the spectrum.

Autistic people can experience unique health-related needs and may exhibit poorer physical and mental health outcomes in comparison to the general population. This initiative has equipped Mackay GPs with the tools to help personalise treatment and management to improve the health care journey of people on the spectrum. Importantly, the initiative creates accessible local pathways.

The Autism HealthPathways content has been informed by extensive consultation with GPs. To date the team has developed content for four new pathways and a further five have been revised to include autism-specific supports and information.

More than 70 GPs, allied health professionals and educators attended the professional development event and launch where it received positive coverage in the local media.



Two new Research Co-production Partners

In June 2020 we welcomed two more organisations to Autism CRC's Research Co-production Partner Initiative:

- ▶ University of New South Wales (UNSW)
- ▶ University of Wollongong (UOW)



AutismCRC

Research Co-production Partner

These organisations have demonstrated a commitment to research co-production on a sustained basis, and join existing Autism CRC Co-production Partners, Autism Spectrum Australia (Aspect), Macquarie University, Curtin University and University of Southern Queensland.

Evidence demonstrates that engaging individuals on the spectrum and their families and carers as peers in research – from the definition of need to the conduct of research and its application – promotes quality, translatable research relevant to the community's needs.

To highlight those organisations who are committed to sustained research co-production, we established the Autism CRC Research Co-production Partner Initiative in 2018. Our co-production partners have demonstrated:

- ▶ **Commitment to co-production:** through research, completed, continuing, or yet to commence
- ▶ **Appropriate engagement and recognition:** co-producers on the spectrum and/or their families/carers have been, and will continue to be, engaged, recognised and rewarded appropriately
- ▶ **Sustainability of co-production:** the organisation takes a sustained approach to research co-production, including promotion of co-production internal or external to their organisation.

The Co-production Partner Initiative builds on previous work undertaken by Autism CRC to promote and facilitate co-production practices, including the development of Inclusive Research Practice Guides and the establishment of the Sylvia Rodger Academy.

We commend our Co-production Partners for the valuable work they are doing to genuinely engage and work with the autistic and autism communities. It is very pleasing to see growing recognition of the value of co-produced research with and for the community.



Pictures giving people a voice in planning their futures

Autism CRC and Autism Queensland teamed up with students from the Studio G creative design program for young people on the autism spectrum to create a new illustrated goal-setting tool for adolescents and adults.

The tool was launched in Brisbane in October 2019, at an event attended by more than 70 allied health practitioners, parents, carers, service providers and researchers.

The Adolescent/Adult Goal Setting Tool (AAGST) provides a means of facilitating conversations about people's goals and aspirations. It uses a card-sort process to circumvent the challenges that many people on the spectrum experience in articulating their wishes.

The illustrated goal cards are divided into nine categories: social relationships; self-care and home living; study and training; employment; health and fitness; community access and participation; communication; finances; and emotional wellbeing.

The cards can be personalised and prioritised according to a person's goals, and a planning sheet allows the user to create a plan to achieve them and track progress. The tool is ideal for National Disability Insurance Scheme (NDIS) planning, post-school transition planning for students, employment agencies, families, disability service providers and therapists supporting adolescents and adults on the autism spectrum.

More than 150 copies of the tool have been sold to date through Autism Queensland.



Helping teenagers on the spectrum combat anxiety and depression

We were delighted to launch the Autism Teen Wellbeing website (autismteenwellbeing.com.au) on 2 April 2020 to mark World Autism Day.

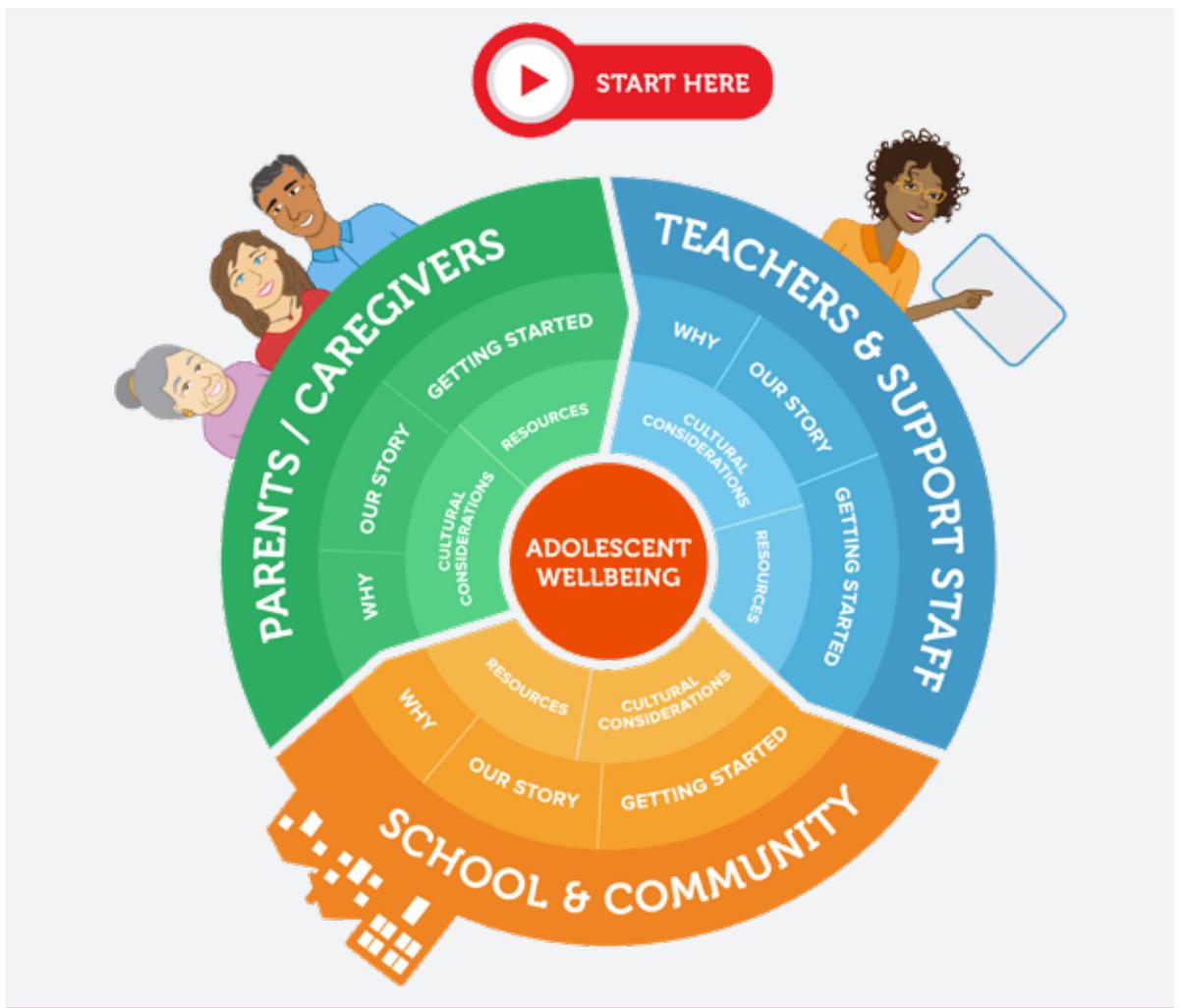
One in two young Australians on the spectrum experiences anxiety and one in three experiences depression, rates up to twice as high as those for non-autistic young Australians.

The Autism Teen Wellbeing website provides resources and strategies to help build protective factors against depression and anxiety for these vulnerable young people by cultivating a sense of belonging and the ability to regulate emotions in the face of stress.

Designed for parents, teachers, schools and communities to support wellbeing in teenagers on the autism spectrum, the website is the culmination of three years of collaborative research.

The project team has harnessed two protective factors – a sense of belonging and the ability to manage emotions in the face of stress – to develop a multi-layered approach for improving the mental health of autistic teenagers. This includes giving parents and caregivers ideas for managing their own stress, improving relationships and helping adolescents manage their emotions.

The resources available on the Autism Teen Wellbeing website were developed by building on the successful Commonwealth-endorsed Resourceful Adolescent Program (RAP).





Video intervention for babies improves early language development

The first rigorous trial of a pre-emptive behavioural intervention for babies showing early signs of autism has found that the therapy can improve early language development. The study showed that babies who received the intervention – which helps parents better identify and respond to their baby’s communication cues – were able to say and understand significantly more words than a control group when followed up six months later.

The results of the study have been published in leading journal *The Lancet Child & Adolescent Health*.

The intervention – known as iBASIS-VIPP – did not reduce early autism behaviours after the six-month period, however, the language progress was an exciting finding that reinforced the importance of early intervention.

Parents reported that their toddlers improved in understanding an average of 37 more words and saying an average of 15 more words than the control group.

This is the closest we have come yet to demonstrating the long-held theory that early intervention for babies on a suspected pathway to autism diagnosis will be more beneficial than waiting until after diagnosis, which typically doesn’t happen until around three years of age. This study indicates that we should identify children as early as we can and provide intervention at that point.



Helping young people plan and prepare for their working life

Everything is in place for the August 2020 launch of *myWAY Employability*, a smart web platform that aims to support young people to take control of their future and career planning (mywayemployability.com.au).

According to ABS 2018 data, more than one third of people on the autism spectrum are unemployed. This is more than three times the rate for people with disability and almost eight times the rate for people without disability. The situation is likely to have worsened in today’s COVID-affected employment market.

The online platform has been designed specifically to help autistic young people, ideally aged 14-30 years old.

myWAY Employability supports young people to take control of their future and career planning, improving the likelihood of a successful shift to work or further education.

The platform guides young people through a series of questions to help them identify their strengths, interests, learning and environmental preferences, and then matches this information to relevant potential careers and employment pathways.

Unlike other career planning and information services designed for the general population, *myWAY Employability* provides a personalised profile matched to relevant career information and pathways. Scaffolded goal-setting and action planning allows users to break goals into smaller action lists to track progress.

myWAY Employability is based on six years of research, trials and evaluation related to transition planning for young people on the autism spectrum. More than 300 autistic young people, parents, allied health professionals, educators, disability service providers and employers from around Australia were involved in the co-design and development of *myWAY Employability*.

myWAY Employability is proudly supported by the Telstra Foundation, funded under the Tech4Good Challenge initiative.



MY WAY
EMPLOYABILITY



Autism@Work

Almost 200 people attended the 2019 Autism@Work Summit in August to learn about and share the benefits of transitioning to a neurodiverse workplace. Guest speakers John Marble, International Neurodiversity and Innovation Consultant, and Lawrence Fung, Clinical Assistant Professor and Director of the Stanford Neurodiversity Project at Stanford University, along with a range of panellists presented to a capacity crowd in Melbourne.

Three quarters of attendees were new to the event, now in its third year. This event's attendees represented an even broader field of prospective employers, including the Department of Defence, Australian Federal Police, small business owners, start-ups, local councils, state government departments and large corporations, demonstrating the increasing interest in the business benefits of neurodiverse workplaces.

Sessions on a range of topics included mental health support, options for neurodiverse employment programs outside IT, transitioning from school to employment, and neurodiverse 'placemaking'.

A highlight of the day was a panel discussion featuring six autistic employees, working in a range of industries including agriculture, technology, finance and graphic design. All were great examples of the lasting and positive change that meaningful employment can have on people's lives.

An executive breakfast the morning of the event also provided an opportunity for executives to speak with company directors and senior managers who are leading the way. The breakfast was also at capacity, demonstrating the strong interest at the executive level for transitioning to a neurodiverse workforce.

Thank you to our event partners DXC Technology and NAB, sponsors ANZ, SAP and Untapped, and to all those who worked so hard to bring together an event that is helping to change the attitudes and practices of Australian workplaces. As keynote speaker John Marble deftly pointed out:

⋮ ***"The practices you develop to help autistic people thrive actually help everybody thrive."***
 ⋮ John Marble



Autism Month Webinar Series 2020

Autism CRC's Webinar Series is held in Autism Month (April) each year to highlight the outcomes and progress of selected projects across our three research programs. An additional webinar is dedicated to hosting autistic panellists, focusing on a topic of particular interest to an autistic audience. The webinars support the effective delivery of our current programs, projects and initiatives, focusing on translation.

Four webinars held in April 2020 covered:

- ▶ Diagnosis, Early Intervention and Sleep
- ▶ Building Resilience for Children and Teenagers
- ▶ Connection and Quality of Life
- ▶ Autistic Voices - Influencing Cchange



Interest and engagement in Autism CRC research and outputs continues to strengthen. This is reflected in the year on year increase in attendance of our Autism Month Webinar Series, with almost 1,300 registrations across the four webinars this year (a 113% increase from 2019). In addition, recordings of the webinars have been viewed on YouTube more than 600 times.

Feedback surveys show end-users appreciate the evidence-based, practical outcomes of many projects.

“As a speech pathologist working in mental health this webinar gave me information on resources for both the young people I work with and their families. The presenters were all great.” 2020 webinar survey respondent.



Awards celebrate three diverse projects

Three projects received recognition for their outstanding commitment to inclusive research practices and translation of autism research with the 2019 Autism CRC Awards for Achievement in Autism Spectrum Research, delivered at the Autism CRC 2019 Annual General Meeting.

The project **Co-designing digital technologies with minimally-verbal children on the autism spectrum**, led by Queensland University of Technology, had significant involvement from autistic individuals and the autism community across all aspects of the research. Notably, it included minimally verbal children on the spectrum. This has led to the development of novel technologies and prototypes that children are keen to use as vehicles for social interaction, self-expression and engagement.

There were two winners in the category of autism research translation. **Community attitudes towards autism in Australia** was developed in collaboration with autistic people, the autism community and Amaze’s management and staff. It is the first research of its kind in Australia and provides a broad understanding of public perceptions of autism and experiences by individuals. The Autism Public Education Campaign Strategy and three television commercials aim to improve community attitudes and behaviours towards autistic people.



2019 recipients Cara Wilson (Queensland University of Technology), Fiona Sharkie on behalf of Professor Sandra Jones (Amaze), and Vicki Gibbs (Autism Spectrum Australia).

The joint award in this area went to **Co-production approach to the development of an Australian-first online autism training module for police**, delivered by Autism Spectrum Australia (Aspect). The team developed a 30 minute interactive online learning module and webpage in collaboration with autistic people and members of the Australian Federal Police.

We congratulate the teams involved in these projects for their outstanding work to enhance the lives of people on the spectrum.



Australian Autism Research Council

Operating under the auspices of Autism CRC, the Australian Autism Research Council (AARC) was established in April 2018 to review and define national priorities for autism research and identify areas of research need for the autistic and autism communities.

AARC includes representatives of the autistic and broader autism communities, as well as service providers, health and education professionals, government program managers and policy makers, and researchers.

In 2019, the AARC identified broad research priority areas and later tested and refined these through a community consultation process and stakeholder feedback, which received 1,100 contributions. The result is a list of 10 priority areas which will guide autism research into the future. These are (in alphabetical order):

 Built environment	 Choice in living and housing
 Communication	 Education
 Employment	 Family and carer support
 Gender, diversity and inclusion	 Health and disability services delivery
 Health and wellbeing	 Justice

In late 2020, the AARC will hold focus groups for five of the 10 research priority areas (Communication, Education, Employment, Health and Wellbeing, and Justice). The focus groups will bring a range of community members together (including autistic people, family members and relevant professionals) and involve a combination of online discussion groups and short surveys.

We thank the community for their generous contribution to this process.



The Sylvia Rodger Academy

It was a big year for the Sylvia Rodger Academy, with three programs now established: Future Leaders; Research; and Governance. To date there have been 75 graduates from across Australia and overseas, with a further 30 participating in current programs, consisting of:



Preparation has also begun for the 2020 Research Program, which will upskill 15 autistic participants and 10 autism researchers in research co-production.

An initiative of Autism CRC, the Sylvia Rodger Academy delivers nationwide programs aimed at empowering autistic adults. The Academy's vision is to see autistic people thriving through discovering and using their strengths. See page 51 for more information about the Academy's recent achievements.



Longitudinal data helping us to understand loneliness in autistic adults

Loneliness is related to depression, anxiety and even cardiovascular risk among other negative impacts. This year, an Autism CRC study investigated what was associated with loneliness in autistic adults compared with non-autistic adults. Researchers also wanted to understand the experience of loneliness for autistic adults.

Using data from the Australian Longitudinal Study of Autistic Adults (ALSAA), the study gathered questionnaires from 252 autistic and 146 non-autistic adults aged 25+ years from across Australia. It found that autistic adults are often lonelier than non-autistic adults. Loneliness for both autistic and non-autistic adults was related to social skills and dissatisfaction with social support.

However, autistic adults told the research team that there is a difference between loneliness and being alone. Autistic adults also told us there are many barriers to socialising, for example, noisy environments or a culture of drinking alcohol. Some autistic adults said that a quiet setting, sport, or recreation activities can support them to socialise more.

These findings show that loneliness is more frequent for autistic adults and suggest that maybe strategies to help with loneliness for non-autistic adults could help some autistic adults. As we start to understand loneliness and aloneness in autistic adults better, we can do a better job designing strategies to help people feel less lonely.

2.0 Our end-users

As a core tenet of our philosophy, Autism CRC engages with end-users at all levels to ensure that our research priorities and findings are grounded in user needs and have the greatest chance of being translated and used.



The end-user environment is comprised of four major groups:



Individuals on the autism spectrum and their families and carers – the ultimate beneficiaries of our research outcomes.



Professionals who provide advice, assessment and intervention for individuals on the autism spectrum (paediatricians, general practitioners, psychiatrists, community nurses, early childhood educators, teachers, psychologists, occupational therapists and speech pathologists). These professionals work across the public, not-for-profit and private sectors.



Service providers that employ professionals to provide services to individuals on the autism spectrum and their families. These include state associations and service providers; private providers; Commonwealth and state government agencies focused on education, health and disability; children’s hospitals; and health service districts and practices.



Organisations providing employment and associated education and training.

In addition to participation and co-production in our research projects, Autism CRC seeks to involve end-users in all aspects of our operations, such as governance, program advisory groups, and Autism CRC policy and program development. In the Early Years Program, GPs, allied health professionals and educators have been involved in the development, design and testing of outputs such as the National Guideline and the Graduate Certificate in Autism Diagnosis. The School Years Program has directly involved more than 3,000 educators, 7,000 students and 1,300 parents and carers along with allied health workers, psychologists and support people in research co-design, user-testing and content development. In the Adulthood Program, 89 employers have been involved in the trial of the Integrated Employment Success Tool (IEST). The Autism HealthPathways content has been informed by extensive consultation with GPs, and the AAGST development included consultation with the Australian and New Zealand Autism Self-Advocacy Network, surveys and interviews with people on the spectrum and their family members, with the final cards' images being created by a skilled autistic illustrator.

To help ensure our research provides practical and tangible outputs that benefit autistic individuals and their families, Autism CRC seeks to build research capacity within neurodiverse communities through inclusive research

practices. Autism CRC's Sylvia Rodger Academy (Research Program) upskills autistic adults and autism researchers in research co-production. This ensures that what is being researched, and the way it is being researched is relevant to, and appropriate for, the autistic community.

Our research findings are made available to end-user organisations to enhance their impact, utility and translation into policy, programs and practice. Along with regular newsletters to 13,000 subscribers, Knowledge Centre now has over 270 publications, resources and reports made freely available on the Autism CRC website. Our annual webinar series supports the effective delivery of our current programs, projects and initiatives, focusing on translation. Surveys show end-users appreciate the evidence-based, practical outcomes of many projects.

• **“Well organised and co-ordinated, good summaries of research, delivered in easy-to-understand language, very clear.”** 2020 webinar survey respondent.



Individuals on the autism spectrum and their families and carers - the ultimate beneficiaries of our research outcomes.

3.0 Our people and structure

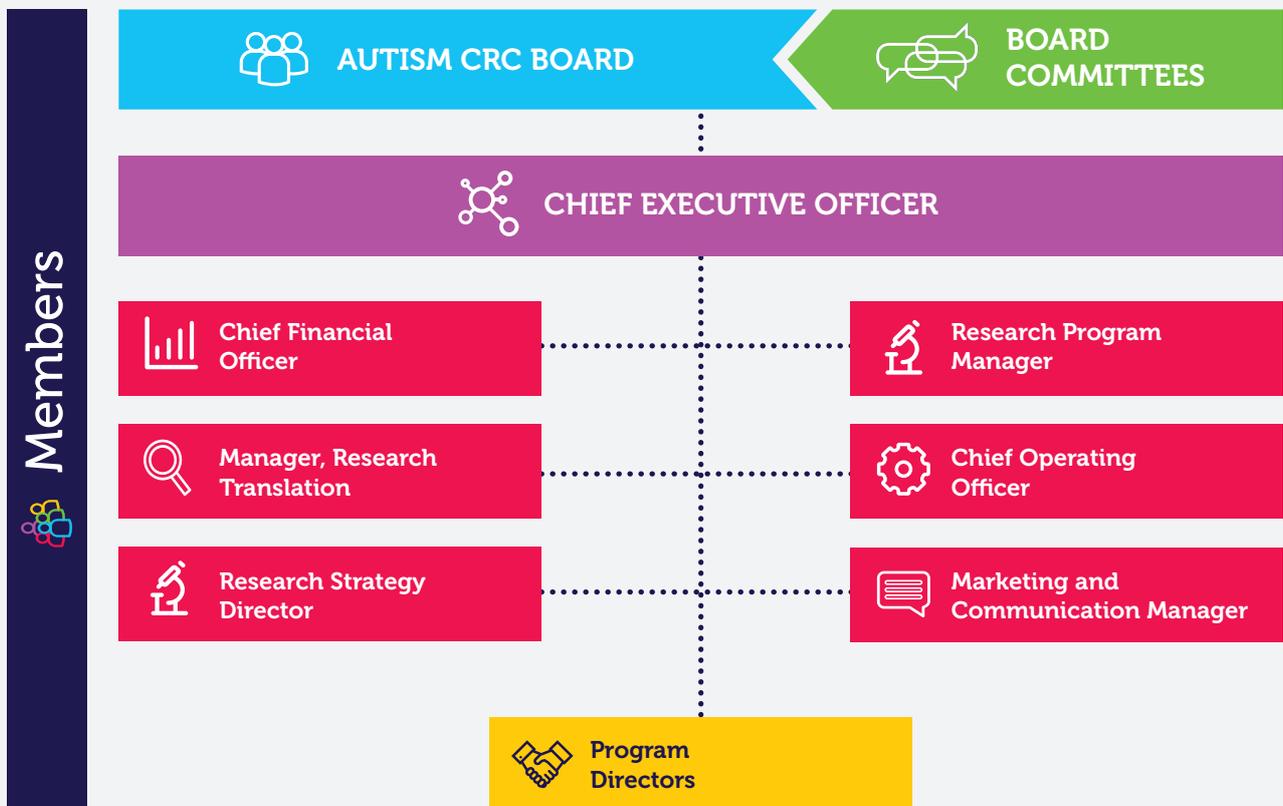
3.1 Structure

Autism CRC Ltd was established in March 2013 as a company limited by guarantee. The governance and management structure promote effective cooperation between Research and End-user Participants, ensuring translation-focused research and development.

Autism CRC ensures this by:

- ▶ involving members of the autistic community throughout the research process
- ▶ including significant industry and end-user representation on our Board and various committees, along with representatives of Research Participants
- ▶ involving end-users directly in Autism CRC research and development, enhancing project design and the applicability and uptake of outcomes
- ▶ engaging our three Program Directors with end-users and in the management of Autism CRC activities.

AUTISM CRC ORGANISATIONAL CHART





Above: Autism CRC Board, CEO and CFO. More detailed information about each Board Member can be found on pages 61-63

3.2 Autism CRC Board

The Autism CRC Board is accountable to the Members of Autism CRC Ltd (the Company), Participants of the Cooperative Research Centre for Living with Autism, and the Australian Government for the operations and affairs of Autism CRC. The Board is responsible for decisions relating to Autism CRC strategy, our investment of funds, our research program, the translation of our research outcomes, and our overall management.

The present Board consists of an Independent Chairperson, six Independent Directors, and two Nominee Directors. One of the Directors has an autism diagnosis and a number of Board members are parents of children on the autism

spectrum. The Board met 10 times during the reporting period, and members bring skills and experience across a range of disciplines of direct relevance to the goals and operations of Autism CRC Ltd, including:

- ▶ service provision to the autism community
- ▶ research management and disability research
- ▶ intellectual property commercialisation
- ▶ advocacy and policy development in the disability sector
- ▶ governance and management of commercial ventures, CRCs and not-for-profits.

3.3 Autism CRC Management Team

Name	Role	Organisation
Andrew Davis	Chief Executive Officer	Autism CRC
Andrew Borneman	Chief Financial Officer and Company Secretary	Autism CRC
Wojciech Nadachowski	Chief Operating Officer	Autism CRC
Professor Andrew Whitehouse	Research Strategy Director	University of Western Australia
Professor Valsamma Eapen	Program 1 Director	University of New South Wales
Professor Suzanne Carrington	Program 2 Director	Queensland University of Technology
Professor Torbjörn Falkmer (retired June 2020)	Program 3 Director	Curtin University
Professor Sonya Girdler (from June 2020)	Program 3 Director	Curtin University
Cally Jackson	Marketing and Communication Manager	Autism CRC
Cheryl Mangan	Manager, Research Translation	Autism CRC
Therese Conway	Research Program Manager	Autism CRC

4.0 Report on activities

4.1 Research and development

As we enter the latter part of Autism CRC’s Commonwealth funding agreement, the balance of Autism CRC’s work has swung from research to utilisation project activities and knowledge translation. This is evident in the number of activities highlighted in this report relating to launch of new product and service outcomes. Project work continues to be undertaken within the framework of Strategic, Innovation and Utilisation research projects (described below), with each investment project having at least one End-user Participant involved.

We engage our end-users in the autistic and autism communities so that research is founded in end-user need and has the greatest probability for successful translation and impact for the community.

Strategic, Innovation and Utilisation research proposals and subsequent projects are reviewed by the Research and Development Committee. Proposals are subject to independent scientific review as well as review by autistic individuals. Project investment decisions are the responsibility of the Board.

Under the authority of the Board, project progress, including assessment of project milestone performance, schedule, expenditure and risks, is monitored via a number of mechanisms:

- ▶ six-monthly project milestone and project cash reporting and quarterly in-kind reporting
- ▶ Research and Development Committee oversight of project investments and progress
- ▶ Research and Translation Executive review of progress and investment priorities and opportunities

- ▶ regular research program reporting to the Autism CRC Board on research project execution status, progress and exceptions
- ▶ ongoing engagement between Research Program Manager; Manager, Research Translation, Marketing and Communication Manager and Program Directors.

It would be impossible to write a 2019-20 report on activities without recognising the impact of the COVID-19 pandemic on both our program and the lives of those in our Autism CRC network. As mentioned in the report by the Chair and CEO, the continuing health and economic circumstances have presented major challenges. In part due to where we are in our program, and very much due to the commitment of our participants, the majority of our project activities have been able to progress towards completion with relatively mild impact.

In the case of a small number of projects, significantly reliant on access to community settings, the impact of COVID-19 restrictions has been substantial. With support of the Commonwealth, the protracted wind-up period to June 2022, provides the opportunity to continue work towards delivery of the program objectives.

We are grateful for the efforts of all participants and partners in continuing to work together on our program activities in the most challenging of times.

Autism CRC invests in four types of research projects:



Commissioned projects

Commissioned by the Board of Autism CRC Ltd to meet specific Commonwealth milestones, where the investment is large and feedback from the Project team occurs at Board level, rather than through the Research and Development Committee.



Innovation projects

Provide seed funding for innovation consistent with Autism CRC’s overall objectives, with a maximum investment of \$50,000 and a term of one year. These projects seek creative and novel ideas that will assist in meeting CRC research objectives.



Strategic projects

Relate to specific Autism CRC Milestones and must involve at least two, preferably more, CRC Participants, including end-users.



Utilisation projects

Provide funding for translation and utilisation of existing Autism CRC research outputs for impact as either products and services that may be embedded into practice, or further disseminated to inform policy and practice.



Program 1 – A better start through better diagnosis

Program 1 focuses on improving the validity, precision, timeliness and reliability associated with the diagnosis of autism and targeted pathways to early intervention.

Program goals

To use existing knowledge of the early behaviours associated with autism to:

- ▶ facilitate the accurate diagnosis of 50 per cent of children on the autism spectrum prior to their second birthday, and more than 70 per cent by their third birthday by developing tools and improving training.

To integrate biological, behavioural and clinical research and observations to:

- ▶ identify subtypes of autism
- ▶ improve understanding of the most efficient interventions that match these subtype profiles.

Program 1, Early Years, has now invested in 20 projects, with nine of these since completed. Three new projects were approved in the 2019-20 Investment Round:

- ▶ **Inflammation and neuromodulation in autism: defining an immune-mediated subgroup.** This project will use biological samples and participant data from the Australian Autism Biobank to develop an understanding of the biological and immunological mechanisms underpinning autism with a view to identifying immune-mediated subgroups.
- ▶ **Understanding the biological and behavioural attributes leading to sleep difficulties in children on the autism spectrum.** Sleep disturbances affect between 50-80% of children on the spectrum. This project will explore the biological basis for sleep disturbances using basic science and comprehensive phenotypic data from the Australian Autism Biobank to characterise sleep disorders in autism.
- ▶ **Sensory subtypes in children on the autism spectrum.** Research has identified distinct sensory subtypes relating to behaviours associated with sensory reactivity and multisensory integration. The current study is an extension of this work, using two large datasets of the Autism CRC (Australian Autism Biobank and Longitudinal Study of Australian Students with Autism (LASA)), to provide key information about the nature of sensory differences in autism across early and middle childhood.

The following new project was commissioned and funded by NDIA:

Synthesis of evidence for autism early intervention approaches. This project will deliver a summary of evidence regarding the characteristics (underlying theoretical principles, key elements) and outcomes (overall efficacy, characteristics of efficacy, adverse effects) of the range of autism early intervention approaches.

The following new project was commissioned and funded by DDS:

- ▶ **National Guideline implementation resources.** This project is developing a suite of online resources to help clinicians implement and understand the National Guideline for the Assessment and Diagnosis of Autism Spectrum Disorders.

2019-20 snapshot

- ▶ Uptake and implementation of the National Guideline continues with 15,400 people now registered for access. The National Guideline is now being used by major diagnostic services providers across Australia.
- ▶ Data collection for the 2019 cohort of children attending the Autism Specific Early Learning and Care Centres (ASELCCs) was completed, bringing the total number to 1,500 and supporting the autism subtyping project.
- ▶ Continuing work to improve diagnosis, a multi-state trial of the National Guideline incorporating developmental surveillance was initiated.
- ▶ 16 separate applications for access to materials and/or data from the Australian Autism Biobank have been approved to date, with several others in the pipeline.
- ▶ 46 autism diagnosticians have now completed the Graduate Certificate in Autism Diagnosis.
- ▶ In addition to 5 Postdoctoral Fellows, Program 1 now has 8 PhD students (4 active, 4 complete).



Professor Valsamma Eapen

Program Director

MBBS (India), DPM (India), DFT (UK), PhD (IK),
FRCPsych (UK), FRANZCP (Aust)

Output 1.1

A behavioural surveillance tool to enable correct diagnosis of at least 50 per cent of children with Autism Spectrum Disorder (ASD) before two years and at least 70 per cent by three years.

Research and development

- ▶ Evaluation of Social, Attention and Communication Scale (SACS-R)*
- ▶ Multi-state GP trial of developmental surveillance
- ▶ Development and evaluation of post-diagnosis family support package (FSP)

Outputs and outcomes

- ▶ 42,000+ children monitored with further roll-out planned in Victoria
- ▶ Over 1,000 community health nurses trained
- ▶ Trial of developmental surveillance commenced in two states
- ▶ Pathways Beyond Diagnosis family support website developed and trialled. Now investigating opportunities for utilisation of this resource in Australia and New Zealand

**The Social, Attention and Communication Surveillance-Revised (SACS-R) tool is used by community-based, primary care professionals to identify children in need of further assessment for autism during their early years. The tool was developed by researchers at Olga Tennison Autism Research Centre (OTARC) at La Trobe University.*

Output 1.2

Integrated diagnostic protocol (IDPA) and ASD software analysis tool to enable better diagnosis of ASD and prediction of developing ASD.

Research and development

- ▶ Diagnostic practices in Australia and New Zealand
- ▶ Development of national assessment and diagnostic protocol for Australia
- ▶ Establishment of Australian Autism Biobank
- ▶ Systems genomics study
- ▶ Australian Autism Biobank follow-up pilot cohort study

Outputs and outcomes

- ▶ National Guideline for Assessment and Diagnosis of Autism - NHMRC endorsed Guideline recommendations [15,400 registered to access]
- ▶ Australian Autism Biobank established - ~3,000 donors – biological samples + detailed phenotypic data
- ▶ Australian Autism Biobank access function operating with 16 research projects now approved for use of resource
- ▶ Report on follow-up assessments of 63 children, and recommendations for follow-up studies, published on Autism CRC Knowledge Centre

Output 1.3

Identification of biological subtypes of ASD

The ability to identify and validate accurate subtypes of autism will expedite decision-making around early intervention strategies to improve long-term outcomes for children on the autism spectrum.

Research and development

- ▶ Subtyping research with neurocognitive data from pre-school children in ASELCCs around Australia
- ▶ Integration of phenotypic and biological data to identify subtypes

Outputs and outcomes

- ▶ Detailed phenotypic / intervention data from 1,500 children across 6 ASELCCs
- ▶ Current research referencing phenotypic data and biological outputs from analysis of Australian Autism Biobank

Output 1.4

Implementation of a Graduate Certificate for Autism Diagnosticians. Education of 12 PhDs, five postdoctoral fellows and generation of 72 scholarly publications.

The Graduate Certificate in Autism Diagnosis (GCAD) was developed at the University of Western Australia (UWA).

Research and development

- ▶ Development and evaluation of Graduate Certificate in Autism Diagnosis

Outputs and outcomes

- ▶ Online course resource and content aiding implementation of National Guideline
- ▶ 46 autism diagnosticians graduated since the course first ran in 2015. Developing plans to scale via roll-out to other universities and education providers
- ▶ 8 scholars have been involved in Program 1 to date, including:
 - 8 PhD students (4 active, 4 complete)
- ▶ 5 Postdoctoral Fellows
- ▶ Published a further 4 journal articles and delivered 1 conference presentation/ poster during the 2019-2020 reporting period

Program 1 Projects

To date, including the 2013-2020 Investment Rounds approved by the Board.

Project	Short title	Year	Lead Participant institution	Project funds	In-kind value
Strategic:					
1.001RC*	Program 1 base resources #	2013	UWA / LTU / UNSW / MMRI	\$2,057,500	\$4,095,500
1.002RC*	Creation of Australian Autism Biobank	2013	UWA	\$1,139,527	\$2,195,257
1.004RC*	Graduate Certificate	2013	UWA	\$120,000	\$556,458
1.005RC	Developmental Surveillance SACS-R	2013	LTU	\$419,106	\$2,644,721
1.021RS*	Diagnostic practices and reliability in Australia	2014	UWA	\$47,889	\$490,600
1.022RS*	Family Support Program	2014	LTU	\$54,141	\$172,935
1.023RS	Autism subtyping	2014	UNSW	\$1,226,130	\$6,161,202
1.042RC	System genomics	2015	UQ	\$1,706,736	\$3,009,145
1.043RS	Therapy for infants showing early signs of autism	2015	LTU	\$125,000	\$2,522,554
1.059RS*	Australian Autism Biobank pilot project	2018	UNSW	\$57,856	\$37,500
1.064RS	A multistate trial of an early surveillance program for autism within General Practices in Australia	2019	UNSW / LTU	\$880,000	\$4,092,000
Total Program 1 Strategic				\$7,833,884	\$25,977,872
Innovation:					
1.019RI*	ASD post mortem brain	2014	UNSW	\$50,000	\$383,000
1.020RI*	BrainsTorm study	2014	MMRI	\$40,150	\$174,000
1.033RI*	Brain connectivity	2015	UQ	\$49,990	\$129,641
1.065RI	Brain connectivity in autistic adults at clinical imaging strengths	2019	UQ	\$17,680	\$95,822
Total Program 1 Innovation				\$157,820	\$792,800
Utilisation:					
1.058RU	Diagnostic Inconsistencies in New Zealand	2018	Autism NZ	\$58,000	\$366,000
1.073RU	Inflammation and neuromodulation in autism	2019	UNSW	\$44,214	\$234,000
1.074RU	Sleep difficulties in children with Autism	2019	UNSW	\$49,991	\$178,500
1.075RU	Sensory subtypes	2019	UNSW	\$50,000	\$310,600
Total Program 1 Utilisation				\$229,205	\$1,089,100
Total Program 1 projects				\$8,220,909	\$27,849,435

*Project Completed, # Base resources refers to postdoctoral fellows, research assistants in each of four sites who are working together on projects 1.002RC, 1.003RC, 1.005RC.



Program 2 – Enhancing learning and teaching

Research in Program 2 is enabling educators, therapists, carers, families & the general community to effectively respond to the diverse learning needs of students on the autism spectrum.

Program goals

Identifying appropriate educational environments, programs and support strategies will:

- ▶ optimise students' social, behavioural and academic development
- ▶ equip teachers to enhance performance and manage complex behaviours.

Program 2 researchers are developing and testing evidence-based teaching strategies, techniques, tools and programs in inclusive classrooms to optimise the learning and educational environments for students on the spectrum.

Program 2, School Years, has now invested in 24 projects, with 16 of these since completed.

2019-20 Snapshot

- ▶ The *inclusionED* platform was launched by the Hon. Dan Tehan MP, Minister for Education, via an online event in May 2020. The *inclusionED* teaching practices and resources are underpinned by the outputs of 25+ research and development carried out over the past six years involving many researchers and organisations.

- ▶ 27 teaching practices including 60+ *inclusionED* videos and 11 core research projects were available at launch.
- ▶ World Autism Day was marked with the launch of the Autism Teen Wellbeing website, which provides resources and strategies to help build protective factors against depression and anxiety.
- ▶ In addition to 3 Postdoctoral Fellows, Program 2 currently has 5 active PhD scholars, 1 active Masters and one active Honours student. 4 other PhDs, 13 Masters and 2 Honours scholars have completed their studies.



Professor Suzanne Carrington

Program Director

DipTeach, BEd, MEd, PhD



The *inclusionED* platform was launched by the Hon. Dan Tehan MP, Minister for Education

Output and utilisation 2.1

2.1 Evidence-based programs to optimise the learning environment ensuring successful social, behavioural and academic outcomes for students on the autism spectrum.

U2.1 Utilisation of programs and training resources by educational and health professional end-users.

Autism CRC’s research and development in the School Years Program has involved work in 300+ schools across Australia. The Classrooms of Excellence Program (CoEP), involved 36 primary schools, 10 secondary schools and a total of 350 students.

Research and development

- ▶ 20 research projects to develop and trial programs and practices in inclusive classrooms all over Australia spanning: school connectedness and collaborative partnerships in action – enacting educational change, structured teaching, assistive technology for writing, robotic pedagogy, classroom acoustics, and classroom models of practice

Outputs and outcomes

- ▶ 27+ teaching practices in *inclusionED*, including 60+ *inclusionED* videos and 11 core research projects. 1,100+ registered to join the community of practice, 30% of whom are from regional Australia
- ▶ StepWrite iOs assistive writing app to support persuasive writing in students 8-12 years old. App in the final stage of development for planned release via Apple store in late 2020
- ▶ Shared book reading intervention resources and StoryTime emergent literacy program for librarians
- ▶ Support under the Positive Partnerships Collaborative Agreement has seen 6 projects extend delivery to schools in Aboriginal and Torres Strait Islander, CALD & remote communities

Discover diverse learning

This site is for all diverse learners. Discover more about our founding principles.



Diverse learning



Our evidence base



Vision and values



Learning community

inclusionED founding principles

Output 2.2

Evidence-based tools and protocols for supporting students on the autism spectrum with high-impact social, emotional and behavioural needs.

Research and development under this output is being conducted via the following projects: Early Years Behavioural Support Project (EYBSP), School connectedness, Autism anxiety and school functioning, Secret Agent Society- Whole of Classroom (SAS-WOC), Classroom acoustics, Helping students stay on task and transition between tasks, Emergent literacy, Literacy predictors, Shared book reading interventions and Transition Models of Practice (MoP).

Research and development

- ▶ Early and Middle Years Behaviour Support programs
- ▶ Multi-level school connectedness program – research trial
- ▶ Secret Agent Society (SAS) social-emotional wellbeing intervention: whole-of-class evaluation

Outputs and outcomes

- ▶ Development and evaluation of a tele-classroom consultation approach to supporting students on the spectrum involving 5 rural and remote schools
- ▶ Autism Teen Wellbeing website launched in April 2020 with 5,500+ unique visitors and 20,000+ page views
- ▶ Tools and protocols developed for behavioural support using tele-classroom consultation approaches
- ▶ Delivered Secret Agent Society to 20,000+ families, across 7 countries, \$1m revenue

Output 2.3

Three training packages to increase skilled, confident teachers and support personnel capable of educating a spectrum of autistic students. An online portal associated with the Autism Connect Hub will be a repository for training materials and resources developed from Program 2 research for a wide range of end-users.

Research and development

- ▶ National survey of almost 1,500 educators, parents and students on the educational needs of students on the spectrum
- ▶ Co-design, development and evaluation of *inclusionED*, involving educators, parents and professionals

Outputs and outcomes

- ▶ Australia's first educational needs analysis for students on the spectrum
- ▶ *inclusionED* launched (see 2.1 for more detail)
- ▶ Partnered with national education providers AITSL, Social Ventures Australia Evidence for Learning, and Positive Partnerships to promote *inclusionED* and where appropriate create reciprocal pathways between *inclusionED* and other educator-focused online services
- ▶ Design and prototype validation of Relate-ABLE online platform to connect parents and speech pathologists for minimally verbal children

Output 2.4

Validation of autism subtypes (Output 1.3) and their predictive value for long-term outcomes for children on the spectrum through a longitudinal study.

Through the Longitudinal Study of Australian Students with Autism (LASA), the experiences and outcomes of two cohorts of students (4 to 5 years and 9 to 10 years), are being followed up annually for 6 years.

Research and development

- ▶ Longitudinal Study of Australian Students with Autism involving 1,145 participants
 - 270 students on the spectrum
 - 455 teachers
 - 270 parents
 - 150 schools
- ▶ Neurocognitive and genetic data has been collected from 50 students to evaluate the predictive value for long-term outcomes

Outputs and outcomes

- ▶ 17 publications and 19 conference presentations/posters as a result of LASA to date
- ▶ 8 peer reviewed publications in the reporting period, investigating areas such as anxiety in children, participation across home, school, and community, how teachers support their students on the autism spectrum and early predictors of family outcomes with early intervention

Output 2.5

Train 18 PhD students, employ six postdoctoral fellows and generate 60 scholarly publications.

Research and development

- ▶ PhD study completed in the reporting period undertaken as part of the Early Years Behaviour Support project

Outputs and outcomes

- ▶ 26 scholars have been involved in Program 2 to date including:
 - 9 PhDs (5 active, 4 conferred)
 - 14 Masters (1 active, 13 conferred)
 - 3 Honours (1 active, 2 conferred)
- ▶ 3 Postdoctoral Fellows
- ▶ Published a further 18 journal articles, 1 book chapter and delivered 10 conference presentations/posters during 2019-2020 reporting period

Program 2 projects

To date, including the 2013-2020 Investment Rounds approved by the Board.

Project	Short title	Year	Lead Participant institution	Project funds	In-kind value
Strategic:					
2.006RC	Program 2 base resources #	2013	QUT	\$902,500	\$1,694,000
2.007RC*	Trajectory study	2013	GU	\$1,049,040	\$5,182,411
2.008RC*	Secret Agent Society Classroom	2013	UQ	\$149,924	\$1,378,143
2.009RC*	Educational Needs Analysis	2013	QUT	\$40,000	\$295,000
2.010RC*	Overcoming difficulties in written expression	2013	AQ	\$176,684	\$1,485,866
2.011RC*	Helping students stay on task and move between tasks	2013	AQ	\$164,684	\$1,570,866
2.027RS*	Early Years Behaviour Support	2014	QUT	\$522,758	\$2,396,941
2.028RS*	Improving classroom acoustics	2014	AQ	\$273,000	\$1,319,900
2.029RS*	School connectedness	2014	QUT	\$504,384	\$2,077,500
2.037RS*	Primary school transition MoP	2015	Aspect	\$554,170	\$1,906,685
2.057RS	Middle Years Behaviour Support Program	2018	QUT	\$484,100	\$1,216,150
Total Program 2 Strategic				\$4,821,244	\$20,523,462
Innovation:					
2.024RI*	Emergent literacy	2014	GU	\$49,746	\$108,282
2.025RI*	ASD, anxiety and school functioning	2014	UWA	\$49,920	\$293,685
2.026RI*	Robotics social clubs in mainstream schools	2014	BCE	\$48,880	\$350,000
2.034RI*	Shared book reading intervention	2015	GU	\$49,900	\$194,160
2.035RI*	Literacy predictors	2015	GU	\$50,000	\$117,300
2.036RI	How was your Day?	2015	UMelb	\$49,986	\$151,804
2.060RI	Evaluating the effects of humanoid robots on narrative role-taking abilities of children	2018	QUT/QDETE	\$50,000	\$231,900
Total Program 2 Innovation				\$348,432	\$1,447,131
Utilisation:					
2.045RU	Living portal	2016	QUT	\$60,000	\$451,500
2.052RU*	StoryTime	2017	GU	\$77,250	\$286,300
2.053RU	Assistive writing program	2017	AQ	\$52,420	\$98,000
2.063RU	Diverse Learners Hub: Education knowledge translation project Stage 2	2019	QUT	\$50,340	\$259,268
2.066RU	Collaborative Partnerships in Action – Proactively enacting educational change	2019	QUT	\$48,400	\$217,970
2.067RU	An educator's guide to <i>myWAY Employability</i> : Enabling support with transition-planning for students on the spectrum	2019	QUT/Curtin	\$57,100	\$212,123
Total Program 2 Utilisation				\$345,510	\$1,525,161
Total Program 2 projects				\$5,515,186	\$23,495,754

*Project Completed, # Base resources refers to the School Coordinator who is working across all Program 2 projects.



Program 3 – Finding a place in society

Research Program 3 focuses on the transition from school to further education, employment, and health and wellbeing in adult life, with the ultimate goal of assisting people on the autism spectrum to find a valued place in society.

Program goals

- ▶ To directly facilitate paths towards fulfilling lives for people on the autism spectrum after school.
- ▶ To inform government policy regarding employment, education, and health.
- ▶ To gather information on profiles of Australian adolescents and adults on the autism spectrum through two longitudinal studies.
- ▶ To support employment opportunities for adults on the spectrum.

Program 3, Adulthood, has now invested in 22 projects, with 9 of these since completed. One new project was approved in the 2019-2020 Investment Rounds:

- ▶ **Investigating autistic burnout.** Autistic and non-autistic researchers will co-produce an initial study to understand autistic experiences of burnout and develop a working definition. This will be followed up using ALSAA data gathering to explore risk factors.

The following new project was funded by the Telstra Foundation through the Tech4Good Challenge:

- ▶ **myWAY Employability content development and pilot evaluation.** The project will develop, pilot and evaluate *myWAY Employability* digital service in partnership with young people.

2019-20 snapshot

- ▶ The HealthPathways Autism Initiative was launched in Mackay in August 2019, allowing GPs and health professionals to access up-to-date information and creating the first steps towards a complete health pathway specifically for people on the autism spectrum. To date 4 new pathways have been developed with a further 5 revised to reflect the needs of people on the spectrum.
- ▶ Findings from the Better Outcomes and Successful Transitions for Autism (BOOST-A) research were further developed into *myWAY Employability*, a smart web application designed specifically to help young people on the spectrum plan and prepare for their working life.
- ▶ In addition to 6 Postdoctoral Fellows, Program 3 currently has 11 active PhD scholars and 1 active Honours student. 6 other PhDs, 1 Masters and 11 Honours scholars have completed their studies.



Professor Torbjorn Falkmer*

Program Director
BSc (Occupational Therapy), MSc (Teaching),
PhD (Medicine)

**Professor Falkmer retired from his position with Autism CRC and Curtin University in June 2020. Professor Sonya Girdler, also of Curtin University, assumed responsibility for managing Program 3.*

Output 3.1

3.1 Comprehensive and unique profile of Australian autistic adults, through two longitudinal studies, to provide them with the capacity to find a meaningful place in society.

U3.1 Utilisation of resources from Autism Connect Hub (now titled Knowledge Centre).

ALSAA and SASLA aim to better understand post-school outcomes, quality of life, mental and physical health, employment, social inclusion, ageing and overall wellbeing of adolescents and adults on the autism spectrum.

Research and development

- ▶ Two large scale longitudinal studies (School Leavers and Adults) involving
 - 360 school leavers
 - 670 adults
- ▶ Study using big data to better understand health and wellbeing

Outputs and outcomes

- ▶ 39 publications (ALSAA 10; SASLA 29)
- ▶ 53 conference presentations and posters (ALSAA 22; SASLA 31)
- ▶ SASLA has now produced a Baseline data snapshot (2018), Longitudinal profile snapshot (2019) and Parent/Carer profile snapshot (2019)
- ▶ Resources freely disseminated through Knowledge Centre

Output and utilisation 3.2

3.2 Conducting empirically-based interventions for autistic adults to assist them to confidently engage in social relationships, tertiary education, employment, and community activities.

U3.2 Utilisation of tools and resources by end-users.

Enhancing social relationships of autistic adults is supported through a unique package of projects.

Research and development

- ▶ Design, development and evaluation of Peer Mentoring and MindChip Program for autistic university students
- ▶ Design, development and evaluation of Public Transport app and Driving Program
- ▶ Co-design, development and evaluation of Adolescent/Adult Goal Setting Tool (AAGST)

Outputs and outcomes

- ▶ Peer mentoring program resources and modules accessible via Autism CRC Knowledge Centre
- ▶ 56 mentees and 46 mentors at Curtin University
- ▶ MindChip social-emotional skills-based program developed
- ▶ DriverReady Program and OrientTrip public transport app for research purposes (550 downloads/700 sessions)
- ▶ AAGST sold 150+ copies. Licence agreement in place with Autism Queensland since 2018

Output and utilisation 3.3

3.3 Tools, strategies and techniques developed to improve health and wellbeing for autistic adults.

U3.3 Use of longitudinal data (from Output 3.1).

Research and development

- ▶ Research and development of Autism Comprehensive Health Assessment Protocol (Autism CHAP)
- ▶ Co-design and development of Autism HealthPathways
- ▶ Development and trial of autism specific Quality of Life assessment tool

Outputs and outcomes

- ▶ Autism CHAP planned release via UniQuest eShop in late 2020
- ▶ Autism HealthPathways for GPs and health professionals launched in Mackay August 2019
- ▶ The Autism HealthPathways initiative has developed 9 new pathways in consultation with 50+ GPs on the best ways to care for the physical and mental health of people on the spectrum
- ▶ GP resources and professional development modules logged 5,020 completions by GPs all over Australia

Output 3.4

Developing tools to assist autistic adolescents/adults and their advisors in making informed choices regarding higher education and employment and ultimately creating more opportunities for people on the autism spectrum to gain successful long-term employment.

Research and development

- ▶ Better Outcomes and Successful Transitions for Autism (BOOST-A) research and program evaluation
- ▶ BOOST-A training development and evaluation involving 83 educators, parents and professionals
- ▶ Co-design and development of *myWAY Employability* engaging 300+ young people, parents and professionals
- ▶ Development and evaluation of Integrated Employment Success Tool (IEST)
- ▶ Establishment of Autism@Work Australia in partnership with industry

Outputs and outcomes

- ▶ BOOST-A quasi-randomised control trial involving 96 adolescents, parents and professionals
- ▶ Transition and career planning training and educator resources accessible via *inclusionED*
- ▶ *myWAY Employability* transition and career planning smart web platform, to launch in August 2020, developed with support from Telstra Foundation under the Tech4Good Challenge initiative
- ▶ IEST trialled with 100+ employers in Australia, planned release in late 2020
- ▶ Autism & Agriculture Program employed 12 autistic adults for almost 3 years
- ▶ Autism@Work initiatives attracting 500+ attendees to date

Output and utilisation 3.5

Development of the web portal 'Connect Hub'.

Research and development

- ▶ Two separate entities have been established and are in use

Outputs and outcomes

- ▶ Connect Hub is an authenticated collaboration space and provides open thematic and closed project groups for collaboration; progress reporting by project leaders; resources and wiki-styled help articles; and a facility for project teams to upload key dissemination activity
- ▶ Knowledge Centre is hosted on the corporate website and facilitates access to more than 270 items and growing. This resource enables the public to find evidence-based resources, publications and reports
- ▶ Functionality added in 2020 to allow poster content to be added, further expanding the range and number of available resources

Output 3.6

This output will train 12 PhD students, employ 6 postdoctoral fellows and generate 60 scholarly and additional lay publications.

Research and development

- ▶ PhD areas of study completed in the reporting period included strategies to support the social-emotional skills of autistic adults; impact of certain interventions and factors affecting intervention outcomes

Outputs and outcomes

- ▶ 31 scholars have been involved in Program 3 to date including:
 - 17 PhDs (11 active, 6 completed)
 - 1 Masters (completed)
 - 13 Honours (2 active, 11 completed)
- ▶ 6 Postdoctoral Fellows
- ▶ A total of 102 published journal articles, including 12 published during the reporting period. In addition, there were 12 conference presentations and posters in this financial year

Program 3 projects

To date, including the 2013-2020 Investment Rounds approved by the Board.

Project	Short title	Year	Lead Participant institution	Project funds	In-kind value
Strategic:					
3.012RC	Program 3 base resources #	2013	Curtin / LTU / UQ / UNSW	\$3,520,000	\$4,453,012
3.013RC	Longitudinal Study of Adults with ASD (AALSA)	2013	UNSW	\$370,324	\$1,835,676
3.014RC	EVAP and IEST	2013	Curtin	\$254,765	\$3,807,035
3.015RC	Health and wellbeing for adults	2013	UQ	\$292,096	\$1,801,051
3.016RC	Unique ASD profile school leavers	2013	LTU	\$325,836	\$2,358,764
3.017RC*	Optimisation of recruitment	2013	Aspect	\$97,023	\$332,305
3.032RS	Enhancing social relationships of young adults	2014	Curtin	\$416,000	\$2,146,104
3.040RS*	Driving project	2015	Curtin	\$568,891	\$3,298,879
3.041RS	Public transportation mobility	2015	Curtin	\$329,546	\$1,436,599
Total Program 3 Strategic				\$6,174,481	\$21,469,425
Innovation:					
3.030RI*	Studio G: Multimedia Program for young adults	2014	AQ	\$50,000	\$153,800
3.031RI*	Career pathway recommender system	2014	Curtin	\$48,000	\$149,212
3.038RI*	Big data, important questions, health & wellbeing	2015	UNSW	\$50,000	\$179,481
3.039RI*	Supporting staff and students with HFA in STEM programs	2015	QUT	\$50,000	\$210,239
3.046RI	Health Pathways Autism Initiative	2016	UQ	\$50,000	\$215,640
3.047RI*	Goal-setting tool for adolescents and adults	2016	AQ	\$49,885	\$315,332
3.054RI	Autism@Work	2017	Macquarie	\$100,000	\$279,533
3.062RI*	'Hear' to help	2018	Curtin	\$63,000	\$394,120
3.068RI	Development of an autism specific quality of life assessment for use with autistic adults	2019	Curtin	\$50,000	\$204,050
3.076RI	Autistic burnout	2019	UNSW	\$37,880	\$78,605
Total Program 3 Innovation				\$548,765	\$2,180,012
Utilisation:					
3.048RU*	BOOST-A From research to practice	2016	Curtin	\$51,500	\$131,160
3.049RU	Utilising Autism CRC Health Hub tools and resources	2016	UQ	\$50,000	\$96,780
3.061RU	Development of an Assessment of Functioning Tool Based on ICF Core Sets	2018	Curtin	\$50,000	\$390,000
Total Program 3 Utilisation				\$151,500	\$617,940
Total Program 3 projects				\$6,874,746	\$24,267,377

*Project completed, # Base resources refers to postdoctoral fellows in each of four sites who are working together on projects 3.013, 3.014, 3.015, 3.016RC + Education and Vocational Assessment Protocol (EVAP) and Integrated Employment Success Tool.

4.2 Research collaboration

Collaboration between Research Participants and End-user Participants is an essential element of our work. Autism CRC requires that each project funded involves at least one End-user/Industry Participant, the only exception being base resources (personnel only) funding projects – with those personnel then engaged across a number of projects involving end-users.

The initiative builds on previous work undertaken by Autism CRC to promote and facilitate co-production practices,

including the development of Inclusive Research Practice Guides and the establishment of the Sylvia Rodger Academy.

The following table provides a breakdown of collaborations between Research Participants and End-user/Industry Participants on all Autism CRC projects between 2013-2020 (including completed projects). This includes collaborations between parties to Autism CRC Project Agreements, Memoranda of Understanding and Third Party Agreements.

Investment rounds 2013-2020

Project numbers	Project name	Research Participants	End-user / Industry participants	Total
1.001RC	Program 1 base resources	4	1	5
1.002RC	Creation of Australian Autism Biobank	5	9	14
1.003RC	Genetic screening of autism (Phase 1)	3	3	6
1.004RC	Graduate Certificate	3	6	9
1.005RC	Developmental Surveillance SACS-R	4	3	7
1.019RI	Post mortem brain	2	0	2
1.020RI	BrainsTorm study	2	0	2
1.021RS	Diagnostic practices and reliability in Australia	2	6	8
1.022RS	Family Support Program	3	5	8
1.023RS	Autism subtyping	6	10	16
1.033RI	Brain connectivity	2	2	4
1.042RC	System genomics	1	0	1
1.043RS	Therapy for infants showing early signs of autism	4	1	5
1.058RU	Diagnostic inconsistencies in New Zealand	5	2	7
1.059RS	Australian Autism Biobank pilot project	1	0	1
1.064RS	A multistate trial of an early surveillance program for autism within General Practices in Australia	6	3	9
1.065RI	Brain connectivity in autistic adults at clinical imaging strengths	1	0	1
1.073RU	Inflammation and neuromodulation in autism	2	2	4
1.074RU	Sleep difficulties in children with autism	3	1	4
1.075RU	Sensory subtypes	4	2	6
2.006RC	Program 2 base resources	1	N/A	1
2.007RC	Trajectory study	5	6	11
2.008RC	Secret Agent Society Classroom	2	14	16
2.008RC_PP	Secret Agent Society - Whole of Classroom – Positive Partnerships	2	7	9
2.009RC	Educational Needs Analysis	4	11	15
2.010RC	Overcoming difficulties in written expression	2	5	7
2.011RC	Helping students stay on task and move between tasks	3	5	8
2.011RC_PP	Helping students stay on task and move between tasks – Positive Partnerships	0	2	2
2.024RI	Emergent literacy	1	3	4
2.025RI	Anxiety and school functioning	2	1	3
2.026RI	Robotics social clubs in mainstream schools	1	1	2

Section 4 Report on activities

Project numbers	Project name	Research participants	End-user / industry participants	Total
2.027RS	Early Years Behaviour Support	3	8	11
2.027RS_PP	Early Years Behaviour Support – Positive Partnerships	1	3	4
2.028RS	Improving classroom acoustics	1	5	6
2.029RS	School participants	2	12	14
2.029RS_PP	School connectedness – Positive Partnerships	1	2	3
2.034RI	Shared book reading intervention	1	1	2
2.035RI	Literacy predictors	1	1	2
2.036RI	How was your day?	4	1	5
2.037RS	Primary school transition MoP	2	13	15
2.037RS_PP	Primary school transition MoP – Positive Partnerships	2	13	15
2.045RU	Living portal	2	6	8
2.051RS_PP	Aboriginal and Torres Strait Islander Community Liaison	1	0	1
2.052RU	Storytime	1	2	3
2.053RU	Assistive writing Program	1	1	2
2.057RS	Middle Years Behaviour Support	1	3	4
2.060RI	Evaluating the effects of humanoid robots on the narrative role-taking abilities of children	2	1	3
2.063RU	Diverse Learners Hub: Education knowledge translation project Stage 2	2	2	4
2.066RU	Collaborative Partnerships in Action – Proactively enacting educational change loading	2	2	4
2.067RU	An educator's guide to <i>myWAY Employability</i> : Enabling support with transition-planning for students on the spectrum	3	3	6
3.012RC	Program 3 base resources	4	N/A	1
3.013RC	Longitudinal Study of Adults (AALSA)	4	9	13
3.014RC	EVAP and IEST	6	8	14
3.015RC	Health and wellbeing for adults	4	8	12
3.016RC	Unique profile of school leavers	5	10	15
3.017RC	Optimisation of recruitment	3	2	5
3.030RI	Studio G: Multimedia Program for young adults	1	2	3
3.031RI	Career pathway recommender system	1	1	2
3.032RS	Enhancing social relationships of young adults	2	1	3
3.038RI	Big data, important questions, health and wellbeing	2	0	2
3.039RI	Supporting staff and students in STEM programs	3	3	6
3.040RS	Driving project	1	10	11
3.041RS	Public transportation mobility	2	4	6
3.046RI	Health Pathways Initiative	2	1	3
3.047RI	Goal-setting Tool for Adolescents and Adults	1	2	3
3.048RU	BOOST-A: From research to practice	1	5	6
3.049RU	Utilising Autism CRC Health Hub tools and resources	2	3	5
3.054RI	Autism@Work	4	2	6
3.061RU	Development of an Assessment of Functioning Tool Based on ICF Core Sets	3	7	10
3.062RI	'Hear' to Help: Striving for greater participation and wellbeing through tailored chat-bot technology	2	2	4
3.068RI	Development of an autism-specific quality of life assessment for use with autistic adults	6	2	8
3.076RI	Autistic burnout	2	1	3

4.3 Education and training

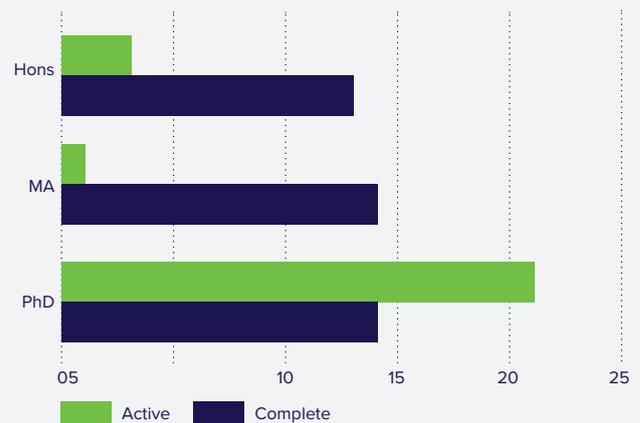
Within the Autism CRC we aim to provide a range of activities and educational experiences for PhD Scholars and Postdoctoral Fellows that will enable them to contribute significantly to the autism community in Australia through research, its dissemination and the continuing development of professionals and community education.

Of our 66 active or completed scholars:

- ▶ 8 are in the Early Years Program
- ▶ 26 are in the School Years Program
- ▶ 32 are in the Adulthood Program.

During the reporting period, three PhD scholars, one Masters by Research and one Honours student completed their studies bringing our total number of completed students to 41. Four more commenced studies bringing our total number of active scholars to 25 (see Figure 1). Seven scholars have withdrawn over the lifetime of the Autism CRC.

Figure 1 Active and completed scholars by qualification



Many of our scholars have completed, or are in the final stages of completing, their studies. Here is a snapshot of what some of them are up to:



Amanda Mazzoni

During my PhD, I examined the impact of factors such as age, intensity and duration of intervention on intervention outcomes. The findings showed that younger age at enrolment and a longer duration of intervention were associated with improvements in specific outcomes in language and communication skills.

For the past year, I have been working with The Better Health Generation as a provisional psychologist, a regional manager of a multidisciplinary allied health team and a project/clinical lead for the roll-out of our national children's services. I would like to grow our children's services in a number of directions to assist and support families and their children from the beginning of their journey to adulthood!

I believe that the Autism CRC offered me a number of opportunities that extended far beyond academia. This included travelling and presenting at various conferences, exploring different projects and career options and meeting some fantastic people along the way. As a result of these amazing experiences, I have the confidence and skills to successfully complete a number of projects, design and present training and education modules for large audiences and give valuable input across multiple sections of the business (as a manager, as a clinical/project lead and as a clinician).



Melissa Black

My PhD research with the Autism CRC focused on exploring the nature of emotion perception in autism, combining behavioural, eye-tracking and electroencephalogram (EEG) paradigms and exploring how these can be used to measure the impact of interventions.

Since completing my PhD I have had the opportunity to work as a postdoctoral research associate with the Curtin Autism Research Group (CARG). As part of this role I work on various research projects which seek to improve participation and wellbeing in autistic individuals, including exploring strengths-based approaches in autism, improving employment outcomes and supporting mental health.

My goal is to bridge the gap between clinical practice and research, aiming to conduct research which makes a real contribution to improving the wellbeing of autistic individuals and their families. My research continues to be driven by the principles of the Autism CRC with a firm commitment to co-production and underpinned by the aim to add value to the lives of autistic individuals and their families and to assist in transforming the ways in which we work with autistic individuals.

Completing my PhD with the Autism CRC provided me with unique opportunities and experiences which have been invaluable in my first few years post-PhD. The cooperative, innovative and inclusive research environment, provided the opportunity to work alongside not only researchers, but autistic individuals, families and the broader autism community. Autism CRC 'opened my eyes' to the importance of co-production and continues to inspire and motivate me to conduct research which meets the needs of the autistic community.



Julia Tang

My PhD research focused on exploring strategies to support the social-emotional skills of autistic adults, with a focus on improving the generalisation of skills to everyday environments. In consultation with autistic young people, allied health professionals, and educators, my team worked together to develop a social-emotional online mentoring program called MindChip™.

I'm currently working as a Research Associate for the Curtin Autism Research Group. My current research predominantly focuses on supporting the transition of autistic individuals. I am also involved in several other projects including the evaluation of social skills and art programs for autistic children, and the development of an autism-specific advocacy and mental health online course.

My career is fundamentally underpinned by the value of empowerment. Autism CRC provided me with opportunities to broaden my research knowledge. I am grateful for the countless opportunities Autism CRC provided for me to network and learn from other researchers outside of my field of research. Most importantly, Autism CRC's vision instilled a passion within me to conduct inclusive research, focusing on projects that are meaningful and can make a genuine difference to the everyday lives of the autistic community.



Annalise Taylor

My research comprised the development and subsequent validation and evaluation of a tool – the Early Years Model of Practice (EY-MoP) – that translated knowledge regarding foundational educational practices for teaching students on the spectrum by providing access to essential knowledge and supporting decision-making for mainstream early-years teacher.

I'm now working with one of the Department of Education's Teacher Learning Centres providing professional learning for beginning, and early career teachers and their mentors as well as supporting schools to establish mentoring programs and build their mentoring culture.

The writing and analytical skills I developed through my research have been integral to my success in this role. Moving forward, I intend to leverage the knowledge and skills I developed through my research and previous employment to be an educational leader who has an impact on both policy and practice.

My involvement with Autism CRC provided the opportunity to engage in multi-disciplinary research, and I valued highly the opportunity to be part of a team comprising multiple, diverse stakeholders.

Showcasing our researchers

In 2020, the International Society for Autism Research (INSAR) Meeting was moved to a virtual event due to COVID-19. Twenty poster abstracts and six posters were approved.

Three Autism CRC researchers participated in the CRC Association's 2020 Early Career Researcher Showcase

competition. Dr Kiah Evans (National Guideline for Assessment and Diagnosis of Autism), Dr Lauren Lawson (Untangling Anxiety for Autistic Adults) and Dr Katie Brooker (HealthPathways - helping GPs to improve the outcomes of autistic people).

Autism CRC higher degree research students

Start date	Name	Degree	Uni	Project code	Research project	Term
------------	------	--------	-----	--------------	------------------	------

Program 1: Early years

Completed students						
Feb-14	Stacey Rabba	PhD	LTU	1.005RS	Developmental Surveillance for ASD (SACS-R)	4.5 years
Mar-15	Lidan Zheng	PhD	UNSW	1.023RS	ASD subtype project	4 years
May-15	Amanda Mazzoni	PhD	UNSW	1.023RS	ASD subtype project	4 years
Feb-16	Maryam Boutrus	PhD	UWA	1.043RS	Therapy for infants showing early signs of autism	3.5 years
Active students						
Jun-16	Lacey Chetcuti	PhD	LTU	1.043RS	Therapy for infants showing early signs of autism	4 years
Feb-17	Ali Morse	PhD	UTAS	1.005RS	Developmental Surveillance for ASD (SACS-R)	4 years
Jan-18	Chloe Yap	PhD	UQ	1.042RC	Genomics	3 years
Aug-18	Alicia Montgomery	PhD	UNSW	1.059RS	Australian Autism Biobank pilot project	8 years (part-time)

Program 2: School years

Completed students						
Jul-14	Elizabeth MacDonald	PhD	GU	2.011RC	Helping students stay on-task and move between tasks	3 years
Sep-14	Anne Ozdowska	PhD	QUT	2.010RC	Overcoming difficulties in written expression	4 years
Feb-15	Jac den Houting	PhD	GU	2.007RC	Trajectory study	3 years
Mar-15	Danica Warner	MA	QUT	2.009/ 2.029	School connectedness	18 months
Jul-15	Rebecca Poulsen	MA	GU	2.007RC	Trajectory study	18 months
Feb-16	Susanne Taylor	MA	GU	2.007RC	Trajectory study	2 years
Feb-16	Christopher Edwards	PhD	QUT	2.027RS	Early Years Behaviour Support Project (EYBSP)	4 years
Mar-16	Loretta Crawley	MA	GU	2.007RC	Trajectory study	18 months
Oct-16	Sally Ryan	MA	GU	2.007RC	Trajectory study	2 years
Jan-17	Kathryn Ambrose	MA	GU	2.007RC	Trajectory study	2 years
Jan-17	Kathryn Farr	MA	UQ	2.008RC	Secret Agent Society	1 year

Section 4 Report on activities

Start date	Name	Degree	Uni	Project code	Research project	Term
Mar-17	Rachelle Wicks	Hons	GU	2.007RC	Trajectory study	1 year
Mar-17	Donna-Marie Thompson	MA	GU	2.008RC	Secret Agent Society Whole of Class	2 years
Mar-17	Kate McLisky	MA	QUT	2.029RS	School Connectedness	6 months
Mar-17	Monica Sweeney	MA	UQ	2.008RC	Secret Agent Society Whole of Class	2 years
Aug-17	Mellissa Hooper	MA	QUT	2.029RC	School connectedness	2 years
Aug-17	Natasha Bobir	MA	QUT	2.029RC	School connectedness	2 years
Jan-18	Madeleine Stainsby	MA	GU	2.007RC	Trajectory study	1 year
Feb-19	Vedanta Swarna	Hons	GU	2.007RC	Trajectory study	1 year

Active students

Feb-16	Annalise Eyre Taylor	PhD	GU	2.035RS	Models of Practice	4 years - submitted
Jul-16	Yolanda van der Kruk	PhD	UQ	2.028RS	Classroom acoustics	4 years
Feb-17	Cara Wilson	PhD	QUT	2.027RS	Early Years Behaviour Support Project (EYBSP)	3.5 years
Feb-17	Sarah Hazell	PhD	GU	2.007RC	Trajectory study	6 years (part time)
Sept-18	Lauren Davis	MA	GU	2.007RC	Trajectory study	3 years (part time)
Feb-19	Kathryn Ambrose	PhD	GU	2.007RC	Trajectory study	3 years
Oct-19	Sophia Clarke	Hons	ACU	2.024RI	Emergent literacy	1 year

Program 3: Adulthood

Completed students

Dec-13	Megan Hatfield	PhD	CU	3.014RC	Finding a place in the workplace and in the community	3-5 years
May-14	Melissa Scott	PhD	CU	3.014RC	Finding a place in the workplace and in the community	3 years
Jul-14	Ru Ying Cai	PhD	LTU	3.016RC	Unique ASD profile school leavers	3 years
Feb-15	Melissa Black	PhD	CU	3.032RS	Enhancing the social relationships of young adults	3 years
Mar-15	Ye In (Jane) Hwang	PhD	UNSW	3.013RC	Australian Longitudinal Study of Autism in Adulthood	3 years
Feb-16	Carol Bryden*	MA	LTU	3.016RC	Unique ASD profile school leavers	4 years
Mar-16	Jessica Dreaver	Hons	CU	3.014RS	Finding a place in the workplace and in the community	2 years
Mar-16	Taylor Stacey	Hons	UNSW	3.013RC	Australian Longitudinal study of Autism in Adulthood	1 year
Jun-16	Mortaza Rezae	PhD	CU	3.041RS	Enhancing capacity to use public transport	3.5 years
Mar-17	Rachel Quinter	Hons	CU	3.032RS	Enhancing the social relationships of young adults	1 year

Start date	Name	Degree	Uni	Project code	Research project	Term
Mar-17	Matthew DeBroize	Hons	UQ	3.015RC	Health and wellbeing for adults	1 year
Mar-17	Premkumar Brahmhatt	Hons	UQ	3.015RC	Health and wellbeing for adults	1 year
Jun-17	Madeleine Harsanyi	Hons	ACU	3.013RC	Australian Longitudinal Study of Autism in Adulthood	18 months
Feb-17	Dawn Ee	Hons	UNSW	3.013RC	Australian Longitudinal Study of Autism in Adulthood	1 year
Jun-17	Mariesse Sonido	Hons	UNSW	3.013RC	Australian Longitudinal Study of Autism in Adulthood	18 months
Feb-18	Lisa Kang	Hons	UQ	3.015RC	Health and wellbeing for adults	1 year
Mar-18	Sanya Jovevska	Hons	LTU	3.016RC	Unique ASD profile school leavers	1 year
Mar-18	Ensu Sahin	Hons	LTU	3.016RC	Unique ASD profile school leavers	1 year
Active students						
Jun-13	Craig Thompson	PhD	CU	3.032RS	Enhancing the social relationships of young adults	6.5 years - submitted
Feb-15	Julia Tang	PhD	CU	3.032RS	Enhancing the social relationships of young adults	4.5 years - submitted
Mar-17	Priscilla Vindin	PhD	CU	3.040RS	Community mobility in Autism Spectrum Disorder	Upgraded from MA to PhD
Jun-17	Michelle Kersten	PhD	CU	3.040RS	Community mobility in Autism Spectrum Disorder	3.5 years
Jan-18	Rhonda Chapman	PhD	CU	3.014RS	Finding a place in the workplace and in the community	3 years
Feb-18	Jia White	PhD	CU	3.014RC	Finding a place in the workplace and in the community	3 years
Mar-18	Maya Hayden Evans	PhD	CU	3.061RU	Development of an assessment for functioning tool based on the ICF Core sets for ASD	3.5 years
Mar-18	Rebecca Kuzminski*	PhD	CU	3.068RI	Development of an autism-specific quality of life assessment for use with autistic adults	3 years
Mar-18	Emily D'Arcy	PhD	CU	3.061RU	Development of an assessment for functioning tool based on the ICF Core sets for ASD	3 years
Apr-18	Pia Bradshaw	PhD	UQ	3.015RC	Health and wellbeing for adults	3.5 years
Apr-18	Melanie Muniandy	PhD	LTU	3.016RC	Unique ASD profile school leavers	3 years
May-18	Yunhe Huang	PhD	UNSW	3.013RC	Australian Longitudinal Study of Autism in Adulthood	3 years
Jul-19	Nicola Coleman	Hons	ACU	3.013RC	Australian Longitudinal Study of Autism in Adulthood	1 year
Feb-20	Samantha Lewis	Hons	LTU	3.016RC	Unique ASD profile school leavers	1 year

*Student not previously recorded, commenced prior to July 2019

4.4 Engagement

Autism CRC has been able to bring together previously disparate research, clinical, service provider and government organisations to work collaboratively on research priorities of national importance. There are currently 56 organisations engaged as participants in the CRC, located across Australia and overseas. These organisations represent health and education professionals; major service providers across Australia and New Zealand; universities and a medical research institute; school systems; an international healthcare company and other technology companies; Commonwealth and state government departments and agencies; and, critically, those on the spectrum and their families.

Small and medium-sized enterprise engagement

Small and medium-sized enterprise (SME) engagement is fundamental to all of Autism CRC's work. Many of our End-user Participants are SMEs. Most SMEs engaged with Autism CRC are service providers or businesses supplying equipment or technology to individuals and families, schools, or service providers.

The SMEs within Autism CRC include:

- ▶ autistic advocacy and service organisations, such as Autistic Self Advocacy Network of Australia and New Zealand (ASAN AUNZ), Asperger Services Australia and The I CAN Network
- ▶ autism service providers and peak bodies such as Autism New Zealand, Autism Queensland, Amaze, Autism South Australia, Autism Awareness, Autism West and Autism Tasmania
- ▶ companies such as Renae Beaumont Enterprises, Social Skills Training Pty Ltd, and Assistiveware
- ▶ Autism Specific Early Learning and Care Centres (ASELCCs) across Australia
- ▶ professional groups (National Rural Health Alliance, Australian College of Rural and Remote Medicine)
- ▶ private autism clinics, which are small enterprises (Minds and Hearts; The Asperger's Syndrome Clinic).

As a guiding principle, Autism CRC and our researchers continue to prioritise the engagement of end-user SMEs. By engaging end-users early on, we can ensure our research is not only grounded in end-user needs but ensure that there are pathways for dissemination and utilisation of research findings.

Other industry engagement

Strategic partnerships are providing in-kind support to deliver outcomes across a range of projects and industries. State-based and national stakeholders include teachers, clinical staff, principals, guidance officers, therapists and policy makers as well as students on the spectrum and parents.

As with SME engagement, Autism CRC seeks the involvement of industry in the design and evaluation of projects, often through trials of project outcomes. A number of large entities and enterprises are engaged as Participants in current project activities, such as Aspect, Autism Association of Western Australia and F.Hoffman-La Roche Ltd.

In the 2019-20 reporting period the Future Leaders Program is being delivered through a collaboration with Essential Participant and end-user, Aspect. This collaboration facilitated 16 new participants to the 2019 Future Leaders Program under the joint banners of Aspect and the Sylvia Rodger Academy. Through shared values and a vision to see emerging autistic leaders empowered to achieve their goals, this project also reflects the strong engagement and relevance of Autism CRC's work to our end-user community.

Autism CRC's third Autism@Work Summit attracted almost 200 attendees from an even broader field of prospective employers than in previous years. These included the Department of Defence, Australian Federal Police, small business owners, start-ups, local councils, state government departments and large corporations, demonstrating the increasing interest in the business benefits of neurodiverse workplaces. Three quarters of attendees were new to the event, which was supported by industry partners DXC Technology and NAB, and attracted sponsorship from ANZ, SAP and Untapped.

Continued work on the implementation and dissemination of the National Guideline includes collaboration and engagement from health sector end-users, particularly clinicians. The original research and development itself included extensive national and international consultation with the clinical, allied health, service provider, autistic and autism communities. To date more than 15,400 people have registered to access the National Guideline from across Australia and overseas, including 10,000 professionals from both the private and public sectors.

The Autism HealthPathways are a product of the Mackay Hospital and Health Service integrated health team in partnership with the Autism CRC, Northern Queensland Primary Health Network and other partners. The Autism HealthPathways content has been informed by extensive consultation with GPs, with a further 1,250 health professionals engaging with the end-product since its launch in July 2019.

Autism CRC continues, for a third year, to participate in the Telstra Foundation Technology and Wellbeing Roundtable alongside Google, Twitter and Telstra as well as a number of youth mental health service providers and researchers. Primarily an information-sharing and networking group, the Technology Wellbeing Roundtable meets every quarter and provides opportunity to learn from technology industry leaders, showcase Autism CRC's work and initiate new collaborations.

turnKey CRC

turnKey CRC was developed on the back of finding a solution to Autism CRC's management system needs, and was built on Salesforce.com. It is a ready-to-use software solution developed especially for CRCs. It allows newly funded CRCs to hit the ground running on start-up, integrating CRC program governance and management, partner engagement, contracts, cash and in-kind commitments, backed by strong reporting and visualisation capabilities.

The last year has seen growth double for the turnKey CRC social enterprise at Autism CRC. This has enabled new employment opportunities for autistic individuals, building a diverse IT team and greater capacity for Autism CRC.

Collaboration with other CRCs is critical to turnKey CRC's success. We bring together our clients and partners to:

- ▶ ideate and collaborate on common CRC challenges and how they can be met
- ▶ create and sustain best practice operational processes
- ▶ develop the roadmap, allowing for community prioritisation.

Currently, Autism CRC has 11 CRCs as clients using turnkey CRC. These are:

- ▶ Innovative Manufacturing CRC
- ▶ CRC ORE
- ▶ Digital Health CRC
- ▶ CRC for Developing Northern Australia
- ▶ Future Food Systems CRC
- ▶ Blue Economy CRC
- ▶ Cyber Security CRC
- ▶ RACE for 2030 CRC
- ▶ Future Battery Industries CRC
- ▶ SmartCrete CRC
- ▶ CRC TIME.

Autism CRC is a recipient of donated licenses through Salesforce Foundation, associated with its Customer Relationship Management (CRM) and integrated information management systems including Analytics and Maps.

These systems are the backbone of Autism CRC's current digital transformation, managing key business operations alongside the development of our external portal, the Autism CRC Connect Hub, and communication with key stakeholders. Autism CRC has been able to tap into Salesforce's volunteer program enabling staff with technical skills to assist with system design and development.



Engagement with government

Autism CRC research outcomes cover a range of portfolios including employment and training, health, education, disability and social services. Our ongoing, meaningful engagement with government at state and federal levels across portfolios helps to ensure the delivery and uptake of resources, research outcomes and policy recommendations.

One of this year's highlights has been the delivery of *inclusionED*. The *inclusionED* practices and resources are underpinned by the outputs of more than 25 research and development projects carried out through Autism CRC's School Years Program over the past six years involving many researchers and organisations including: AEIOU Foundation, Aspergers Services Australia, Association of Independent Schools Queensland, Autism Queensland, Aspect, Brisbane Catholic Education, Catholic Education Commission of Victoria, Catholic Schools New South Wales, Curtin University, Department of Education Queensland, Department of Education Tasmania, Department of Education Victoria, Department of Education Western Australia, Griffith University, Positive Partnerships, Queensland University of Technology, University of Queensland, and many hundreds of schools across Australia, their students, teachers and other school personnel, and parent communities.

The *inclusionED* team worked with AITSL to ensure that teaching practices align with the High-Quality Professional Learning Cycle, allowing educators to download a certificate of completion in recognition of their professional learning using the platform.

The Positive Partnerships team and Autism CRC have also worked closely to extend reach of Autism CRC educational research outputs beyond that of the current program, with a focus on more disadvantaged communities including Aboriginal and Torres Strait Islander, regional and remote, and CALD communities. In this work, an Aboriginal and Torres Strait Islander Community Liaison Research Assistant supported engagement with Aboriginal and Torres Strait Islander communities in a number of education research projects.

Autism CRC is represented on the Autism Advisory Group to the NDIA, which was established to provide a strong voice on behalf of people on the autism spectrum who are participating in the NDIS. The group also includes service providers and autistic adults.

In the reporting period, the NDIA commissioned Autism CRC to undertake a synthesis of evidence for autism early intervention approaches. Given the importance of early intervention, it is critical that the safety and effect of intervention approaches are subject to testing using well-designed clinical trials. The aim of this project is to provide an authoritative report that can be used to inform decision-making around intervention choice, based on the match between the principles of an intervention and the desires of the child and family, as well as the evidence for positive effects. The report is due to be released later in 2020.

Autism CRC is also currently developing a suite of online resources to help clinicians implement and understand the National Guideline for the Assessment and Diagnosis Autism Spectrum Disorders. The development of these resources is being financially supported by the Department of Social Services. The resources, which include a video series, fact sheets and a Baseline Evaluation and Audit Tool, are due to be released in late 2020.

Engagement with the autistic and autism communities

Individuals on the autism spectrum and their families are the ultimate beneficiaries of our research, and their voices, perspectives and involvement are critical to each stage of our work.

Autism CRC's Sylvia Rodger Academy provides programs, pathways and networks that create communities where autistic people fully contribute and influence policy, practice and culture in partnership with their peers. The Academy's vision is to see autistic people thriving through discovering and using their strengths. The Academy delivers programs in leadership, corporate governance and research.

During the reporting period, Autism CRC's first intake of Governance Program participants completed the major components of the holistic program, comprising online learning modules, a residential program and experiential learning – features of all three Academy programs. In the case of the Governance Program, experiential learning is derived through formal Board observations. Autism CRC greatly appreciates the support of its partner organisations in this regard.

The second Future Leaders Program was also completed during the year. Both the Governance and Future Leaders Programs were co-designed and delivered with autistic adults.

Autism CRC researchers are committed to engaging with people on the spectrum and their families throughout the research process from the development of research ideas and priorities, through stages of planning, implementation, reflection, dissemination, and provision of feedback.

There are many ways Autism CRC is currently engaging with the autistic and broader autism communities in our research and operations. Each of our project advisory groups includes a person on the spectrum or family member. In addition, all project applications are reviewed by scientific and autistic reviewers. This ensures that research topics and methods are relevant and appropriate for people on the spectrum.

Incorporating the perspective of the lived experience of autism throughout the research process improves research practices and outcomes, and the opportunity to meaningfully benefit autistic individuals. As an example:

- ▶ the *myWAY Employability* Neurodiverse Youth Advisory Group (NYAG) set up to advise on the engagement elements of the website, content, and user expectations, met three times in 2019-20. The group was also engaged in user testing and feedback on the site in between advisory group meetings.
- ▶ ninety autistic young people have been involved in Stage 2 co-design and development of the *myWAY Employability* platform, taking part in co-design workshops, user testing and/or providing feedback on various elements of the site.



Trudy – a Future Leaders case study



Trudy Bartlett participated in the 2018 Future Leaders Program. Through the Future Leaders Program she gained the confidence and skills to effect change for the autistic students at a large Brisbane school with 2,600 students, where she is a teacher.

• *“Before Future Leaders I was selectively open about being autistic in the work environment. Because of the deficit-based understanding of autism, I was not seen as being capable of a leadership position. I learned about advocacy through the Future Leaders Program, which taught me that it is ok to ask for reasonable adjustments in the workspace. Since then I have been advocating for myself and the school’s autistic students, working with their class teachers to implement strategies that help create safe and supportive environments for the students.”*

Trudy presented to more than 800 staff and students about neurodiversity, strategies she uses for herself and her students, and what the school community can do to support other people who are neurodivergent.

• *“The school community was really responsive... with staff and students seeking guidance on how they can better support their neurodivergent friends and students during times of need. The school is actively looking at the ways in which assessment is conducted and how it could be differentiated for individual students. It is evident that there has been a significant change in the culture of the school for the better. There is more acceptance of students with disabilities and staff are looking at strengths-based approaches to teaching autistic students.”*

Trudy is now in a leadership position in the Special Education Department and runs a group for autistic students. She spoke at the launch of *inclusionED* and was later interviewed about the platform and inclusive education on ABC radio alongside Autism CRC School Years Program Leader Suzanne Carrington.

• *“Being part of Future Leaders changed my life by showing me it is ok to be exactly who I am, how I can embrace my autistic traits in my work life and now as a result I can positively change the lives of autistic students in the school environment.”*

Awards and honours 2019-20

Date	Personnel	Award	From	For
July-19	David Ireland	iAwards	Australian Information Industry Association	Merit recipient for research linked to Autism CRC project: Hear to Help
Aug-19	Dr Josie Barbaro	BHERT award for Outstanding Collaboration for National Benefit in Public Health.	BHERT Awards	The award recognised her leadership in early autism detection with ASDetect and the deep collaboration between La Trobe University, Autism CRC, Salesforce, Google and Municipal Association of Victoria
Oct-19	Lauren Lawson	2019 Fresh Science Finalist	Fresh Science	A national competition helping early-career researchers find, and then share, their stories of discovery. Presentation: Family matters in autism outcomes
Nov-19	Justin Wai Tai Ha	Brisbane Pain Research Symposium 2019 Best Poster Award	The Institute for Molecular Bioscience (IMB), The University of Queensland	Best poster (joint entry with Katie Brooker)
Nov-19	Katie Brooker	Brisbane Pain Research Symposium 2019 Best Poster Award	The Institute for Molecular Bioscience (IMB), The University of Queensland	Best poster (joint entry with Justin Wai Tai Ha)
Nov-19	Cara Wilson	Achievement in Autism Research – Inclusive research practice	Autism CRC	Co-designing digital technologies with minimally-verbal children on the autism spectrum
Nov-19	Pia Bradshaw	Best Poster Award	UQMed HDR	Best poster: How can we support the healthcare needs of autistic adults without intellectual disability?
Apr-20	Darren Hedley	Fellowship	Suicide Prevention Australia	
Jun-20	Jac den Houting	Researcher Travel Sponsorship	International Society for Autism Research Conference (INSAR)	To participate and present at INSAR [subsequently moved to online event given COVID-19 restrictions]
Jun-20	Rachel Wicks	Researcher Travel Sponsorship	International Society for Autism Research Conference (INSAR)	To participate and present at INSAR [subsequently moved to online event given COVID-19 restrictions]

4.5 Communication

The Australian autism community is large and diverse. Autism CRC has developed a stakeholder relations and communication strategy to ensure effective communication both within Autism CRC and with our external stakeholders.

Communications goals

- ▶ Support the effective delivery of our current programs, projects and initiatives to the expectation of our stakeholders, with an increased focus on translation
- ▶ Capitalise on the opportunities provided by our increased reach, while continuing to take advantage of opportunities to further expand our reach
- ▶ Strengthen our internal communication efforts and ensure our broader team are acting as CRC ambassadors
- ▶ Identify and capitalise on opportunities for high impact stories through mainstream, industry and social media
- ▶ Work with the Autism CRC executive to continuously evolve our organisational narrative
- ▶ Continuously improve our marketing and communication assets (corporate website, Knowledge Centre, Connect Hub, Salesforce CRM, Marketing Cloud).

The range of organisations and individuals collaborating within Autism CRC, including autistic people and others in the autism community, research organisations, service providers, and government, is a world first. A multi-faceted approach is taken to internal communication ensuring stakeholders are informed of developments and findings and are provided with the means to collaborate across programs and projects, ensuring all are working towards a common goal.



Media training, Project Leaders Day

Autism CRC's reputation as a trusted, independent, national provider of evidence-based practices, products and policy, delivering whole-of-life outcomes for people on the autism spectrum and their families, has grown significantly over the past seven years. Awareness and engagement from the autistic and autism communities, service providers, and health, education and employment sectors continues to grow. This is reflected in the significant increases in utilisation of our outputs and in our social media following, newsletter subscriber base and website users, particularly over the past three years.

Key outcomes

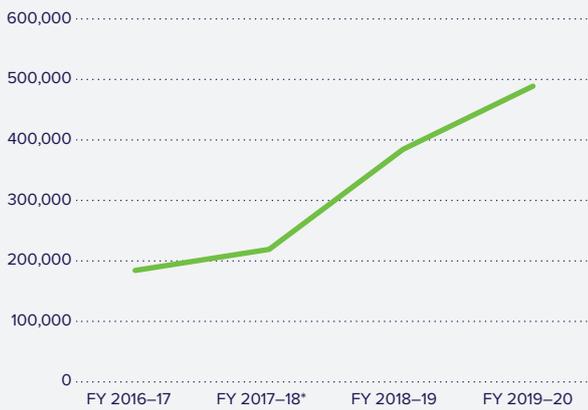
- ▶ The *inclusionED* platform was launched by the Hon. Dan Tehan MP, Minister for Education, via an online event in May 2020.
- ▶ 2020 Autism Month Webinar Series attracted almost 1,300 registrations across the four webinars (a 113% increase from 2019). Recordings of the webinars on YouTube have received a further 600+ viewings.
- ▶ By capitalising on opportunities to increase our reach – particularly around the launch of new products, major announcements and regular communications – Autism CRC's newsletter subscriber base has risen dramatically, increasing 827% in a two-year period between June 2018 and June 2020 (Figure 2)

Figure 2: Newsletter subscribers (eNews): June 2016 – June 2020



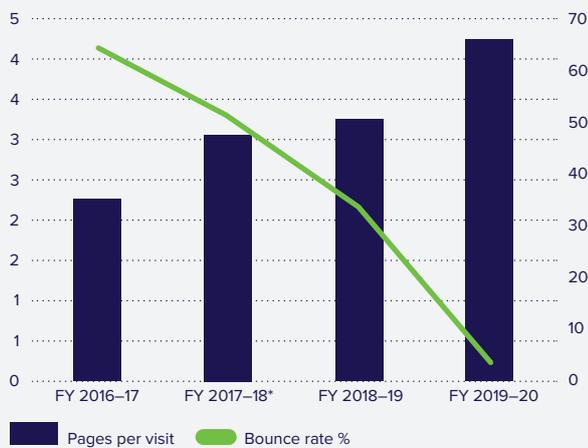
- ▶ Timely updates and continuous improvement to website content and user experience has seen engagement with the corporate website (autismcrc.com.au) grow. The website attracted a 31% increase in page views (up to 498,508 from 380,134) in the reporting period; a 169% growth over the last four years (see Figure 3).

Figure 3: Autism CRC website pageviews - June 2016 - June 2020



- ▶ Reflecting Autism CRC’s targeted communication strategy and strong user engagement, users now view an average of 4.24 pages per visit (an increase from 2 pages in 2017) and only 3.61% of sessions are closed directly without interaction (bounce rate), down from 63% in 2017 (see Figure 4).

Figure 4: Autism CRC website pages per visit vs bounce rate



- ▶ Autism CRC’s Knowledge Centre provides a single online gateway to autism resources, tools and publications available on our website. It continues to grow with our ever-increasing range of resources and publications, now hosting more than 270 journal publications and other resources, freely available to the public.
- ▶ Regular posts of engaging content have also seen Autism CRC’s social media following increase across the various channels, particularly Facebook up 17% on last year at 7,700+ (See Figure 5).

Figure 5: Facebook followers



- ▶ Media coverage was secured across print, radio, TV and online outlets at national, state and local levels, across the country. A range of health, education and other industry publications have also reported on CRC research outcomes, including Education Today, Education HQ, Australian Teacher, The Sector, Health Times, Scimex, Architecture and Design, Disability Support Guide and Autism Awareness Australia eUpdate.
- ▶ At Project Leaders Day in August 2019, our Marketing and Communication team delivered a presentation on how our contact database and marketing system can help Project Leaders achieve their milestones through promotion, recruitment and awareness-raising with our subscribers spread across Australia. Media training was delivered by award-winning journalist Michael Smith and cameraman Peter Tyrus. Attendees learned how to distill their research for different audiences, deal with controversial or difficult topics and harness media opportunities. Our Project Leaders were put in a number of interview situations and real-world scenarios while being filmed.

4.6 Intellectual property

Autism CRC recognises the value of intellectual property (IP) and its importance in enabling utilisation and commercialisation of research outcomes. We strive to develop a culture where this is recognised and respected.

A number of mechanisms are employed to identify, protect and manage IP

- ▶ The Research and Translation Executive, chaired by the Chair of the Research and Development Committee, has oversight of the IP development, protection and commercialisation activities of Autism CRC.
- ▶ Background IP is identified and recorded on the Autism CRC IP register, updated regularly as to the status of IP assets.
- ▶ New CRC Centre IP (CIP) - which is created through CRC programs - is identified and recorded on the Autism CRC IP register, updated regularly as to the status of IP assets.
- ▶ Publication approval processes for written and oral publications and posters and PhD theses are overseen by the Research Program Manager (on behalf of Autism CRC, the legal owner of CIP).
- ▶ All manuscripts submitted for publication and eventually published are registered in a Publications Register, along with PDF copies of the publication.
- ▶ Project Agreements and Project Plans include items on Background IP required for the conduct of the project and CIP likely to be developed/created by the project.
- ▶ IP identification, status and translation considerations are specifically required in Project Progress and Final Reports.
- ▶ CRC staff, researchers and scholars are upskilled through relevant education and training on IP matters relevant to Autism CRC.

These practices ensure that Autism CRC complies with the National Principles of Intellectual Property Management for Publicly Funded Research. The key items of intellectual property currently held by Autism CRC (or its subsidiary, Social Skills Training Pty Ltd) can be found in Appendix 6.

4.7 Utilisation and commercialisation

To date, more than 53,000 professionals have been involved in our research programs or have used our outputs and professional development resources.

During the reporting period, a number of Autism CRC outputs have generated significant utilisation and impact. The Knowledge Translation team continues to work with the project teams to optimise the utilisation of Autism CRC research outputs, grow our capacity to innovate, develop and promote high quality digital products and best practice digital design and delivery and develop partnerships to increase reach and uptake of outputs into real-world practice. More than 26,000 professionals have been involved in our research program or have used our outputs in the last year alone.

inclusionED

An online professional learning community for educators to support all learners

- ▶ The team worked with AITSL to ensure alignment with relevant national professional learning frameworks.
- ▶ Established a partnership with Social Ventures Australia to provide a review of the *inclusionED* platform practices and evidence.
- ▶ Site includes reciprocal pathways from *inclusionED* to both the AITSL resource hub and Social Ventures Australia Evidence4Learning toolkit.
- ▶ Worked with Positive Partnerships to equip the state team leaders to promote *inclusionED* in their networks and a number of forums including a Returning to School webinar in May 2020, attended by more than 450 parents and educators.
- ▶ The project team continues to engage with representatives from Australian Department of Education and Departments of Education Victoria, New South Wales, Tasmania and Queensland, to promote *inclusionED* widely. Key contacts within the Australian Department of Education, Departments of Education Tasmania and Queensland have been sharing promotional information and materials throughout their networks.



- ▶ Launched platform (18 May 20) **inclusioned.edu.au** - users to June 30:
 - 11,810 unique visitors
 - 1,170 registered users (well above the industry benchmark of 5% conversion to registration)
 - 17,155 sessions (an individual period of time a user is actively engaged, navigating, clicking, scrolling, etc)
 - 111,820 page views (including repeated views of a single page).

Autism Teen Wellbeing

A website that provides resources and strategies to help build protective factors against depression and anxiety in teenagers

- ▶ Evaluation of the Resilient Adolescent Program for Adolescents with Autism (RAP-A-ASD) delivered and evaluated with 86 participants in six schools in Queensland and 11 Indigenous community workers in Bourke, NSW.
- ▶ Results suggest RAP-A-ASD had a significant impact in reducing anxiety and improving self-efficacy and coping.
- ▶ Established a Licence Agreement with QUT with the option to commercialise the RAP-A-ASD.
- ▶ Launched a new website (4 April 20) **autismteenwellbeing.com.au** - users to June 30:
 - 5,594 unique visitors
 - 7,458 sessions (an individual period of time a user is actively engaged, navigating, clicking, scrolling, etc)
 - 20,677 page views (including repeated views of a single page).

Adolescent/Adult Goal Setting Tool (AAGST)

A card-sort process to facilitate conversations about people's goals and aspirations.

- ▶ Licence agreement established with Autism Queensland.
- ▶ Launched October 2019.
- ▶ 150+ copies sold to-date.
- ▶ Autism Queensland currently progressing development and trial of digitised AAGST, under existing licence agreement.

Autism HealthPathways Initiative

A platform for health professionals to inform healthcare pathways which better support people on the autism spectrum

- ▶ Launched the Autism HealthPathways Initiative, a web-based health information site that assists health practitioners, particularly GPs, to guide patients through the health system.
- ▶ Accessed by 1,250 health professionals to date.
- ▶ Developed nine new or revised pathways related to autism, disability, and developmental delays.
- ▶ Negotiating a licence agreement for distribution of the Autism HealthPathways to the 43 health jurisdictions caring for more than 28 million people across New Zealand (11 sites), Australia (31 sites), and the United Kingdom (3 sites).



Health and wellbeing for autism

A program of research to inform healthcare and wellbeing to better support autistic adults and their service providers

- ▶ Comprehensive health assessment program for adults and adolescents on the autism spectrum (Autism CHAP) in final stages of design. Due for commercial release on UniQuest website later in 2020.
- ▶ Developed a series of training resources and e-learning modules for health professionals.
- ▶ 5,020 GPs completed professional development training.

myWAY Employability

A smart web platform that aims to support young people to plan and prepare for their working life

- ▶ Launch of the *myWAY Employability* platform in August 2020 will mark the completion of Stage 2 of this project, funded by \$450K from Telstra Foundation Tech4Good Challenge.
- ▶ Working towards securing further funds from Telstra Foundation for Stage 3, which will focus on uptake of *myWAY Employability* in service delivery by disability and employment services, schools and allied health professionals.
- ▶ *myWAY Employability* project team continues to engage in the Telstra Foundation Tech4Good Challenge alongside youth service providers.
- ▶ Virtual collaborative workshops with EveryHow digital consultancy, and participation in online discussion via Slack collaboration platform.
- ▶ Participating in the Telstra Foundation Technology and Wellbeing Roundtable alongside Google, Twitter and Telstra, as well as a number of youth mental health service providers and researchers (for a third year).
- ▶ Quarterly Technology Wellbeing Roundtable meetings provide opportunity to learn from technology industry leaders, showcase Autism CRC's work and initiate new collaborations.



MY WAY
EMPLOYABILITY

Australian Autism Biobank

Biological, behavioural and clinical information and materials available from a depository of almost 3,000 donors

- ▶ Sixteen separate applications for access to materials and/or data have been approved to date from researchers with disciplines ranging from systems genomics to education.
- ▶ Completed feasibility study on a longitudinal follow-up of the Australian Autism Biobank participant return rates. Data useful for both the large-scale grant applications required for the continuation of the project outside Autism CRC funding and to attract industry investment.



AutismCRC
Biobank

Investment and co-investment to further develop and scale research outputs

Several products have been developed as minimum viable products (MVPs) and evaluated, noting the scope of the initial Autism CRC investment and project deliverables. The following are amongst the promising candidates for co-investment, pending further investigation and business case development:

- ▶ Family Support Package Pathways to Diagnosis – facilitator manual and information to guide families after diagnosis
- ▶ Relate-ABLE – communication and collaboration platform for parents and speech pathologists to support minimally verbal children
- ▶ Integrated Employer Success Tool (IEST) – an evidence-based guide for employers of adults on the autism spectrum.

Secret Agent Society

Social Skills Training Pty Ltd (SST) is a wholly-owned subsidiary of Autism CRC, which is further developing and commercialising an emotion regulation and resilience building program, Secret Agent Society (SAS).

SST's vision is to see young people empowered and resilient, pursuing their own pathway, strengths and interests. To meet this vision, SST holds the exclusive commercialisation rights to the SAS program and future program developments. It is responsible for the production and distribution of SAS program materials and, in addition, provides SAS Facilitator Training Courses in Australia, internationally and online.

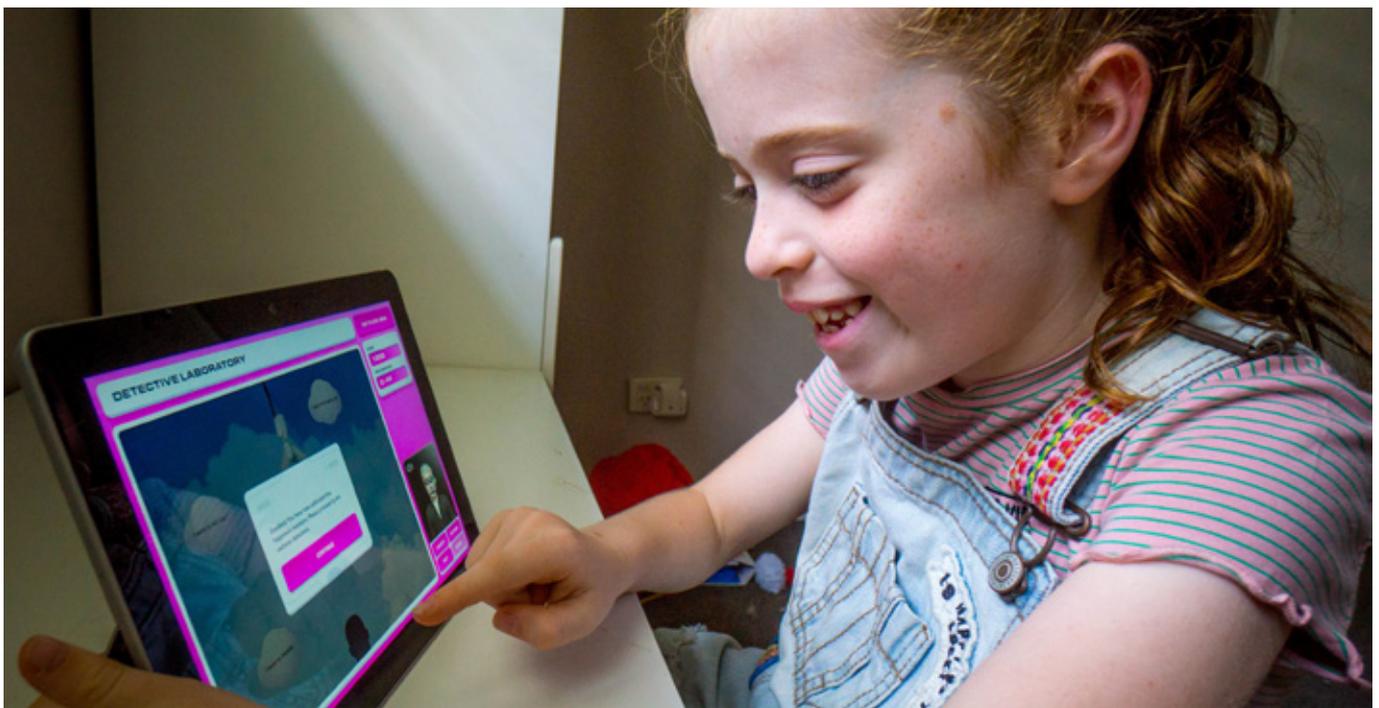
In the 2019-2020 financial year, the SST Board developed a new strategic plan focused on growing the Secret Agent Society's Small Group program (SAS-SG) through SST's support of its many service providers who offer this program, both in Australia and internationally. The Board also revised its risk register to mitigate risks that could hinder this strategy and to enable a nimble response to any substantial external change - a prime example being the COVID-19 pandemic. In November 2019, the Board appointed Adrian Ford (former CEO of Aspect) as SST's Executive Director to support the team and its work.

The 2019-20 financial year was SST's most successful year yet, reaching 2,394 children and their families through the SAS-SG program and providing a range of specialist resources to hundreds of families and their children. The company had an annual turnover of \$1.048m, exceeding \$1m for the first time. This included \$185,300 in export sales. All its Key Performance Indicators were met or exceeded.

Some of the year's highlights were:

- ▶ SST completed a computer game re-development project to update and expand the original SAS computer game into the new SAS Digital Headquarters (SAS Digital HQ) which now has increased device compatibility.
- ▶ SST supported its network of SAS providers to rapidly shift service delivery into telehealth during the first wave of COVID-19 restrictions, including the immediate development of digital alternatives for physical activities.
- ▶ SST transitioned all professional training courses to their existing live online training format to ensure continuity of access to team training during COVID-19 restrictions.
- ▶ SST commenced a large digital transformation project, aiming to move the SAS Small Group Program further into the forefront of innovative social-emotional skills development.
- ▶ With regard to the Australian market, National Disability Insurance Scheme (NDIS) support templates and guides were created to support coordinators and planners as well as service providers themselves to navigate the planning and reporting required by National Disability Insurance Agency when delivering SAS-SG with NDIS participants.
- ▶ SST and its associates trained 305 new SAS Facilitators across five countries, including 85 professionals in tailor-made workshops for COVID-19 adapted service delivery using SAS Digital Headquarters.

Researchers and clinicians around the globe continued to conduct and publish research on the effectiveness and adapted use of the SAS suite of programs. During the



reporting period there have been more than five conference presentations, four newly published articles, two large scale international studies moved into preparation for publication, and SST supported the successful establishment of a large community-based implementation study in Canada. Below is a list of publications published or submitted during the year.

- ▶ Zendequi, E.A., Beaumont, R., Chiu, A.W., Schild, J., & Bennett, S. (2020). Evaluating clinical outcomes in practice settings: Beyond the limits of grant-funded clinical research. *Professional Psychology: Research and Practice*, 51(2), 145-155.
- ▶ Beaumont, R., Pearson, R., & Sofronoff, K. (2019). A novel intervention for child peer relationship difficulties: The Secret Agent Society. *Journal of Child and Family Studies*, 28(11), 3075–3090.
- ▶ Beaumont, R.B., Smith-Merry, J., Costley, D., Howlin, P., Sofronoff, K., Roberts, J., Taffe, J.R., Gray, K.M., Clarke, K.S., Clark, T., Hodge, M. A., Horstead, S.K., & Einfeld, S.L. (2019). Implementation, evaluation and maintenance of a social-emotional skills training program for children with an Autism Spectrum Disorder in a specialist school setting. *International Journal of Special Education*, 34(1), 95-108.
- ▶ Costley, D., Baldwin, S., Clark, T., Howlin, P., Taffe, J. R., Beaumont, R., Gray, K.M., Einfeld, S., Smith Merry, J., Roberts, J., & Sofronoff, K. (2020). The association between parent engagement and child outcomes in social skills training programs: Discovering the Secret Agent Society in partnership. *Australasian Journal of Special and Inclusive Education*, 44(1), 46-59.
- ▶ Beaumont, R., Walker, H., Weiss, J., & Sofronoff, K. (under review). Randomized controlled trial of a video gaming-based social skills program for children on the autism spectrum. *Journal of Autism and Developmental Disorders*.

Dr Renae Beaumont, founder and author of the Secret Agent Society programs and now based in the USA, was involved in a number of media activities during the year including the Hacking Health documentary series in the US on the latest technological advances in medicine. It shone a light on one girl's journey through the Secret Agent Society and how it changed her and her family's life for the better. It spoke to how the program helped her to manage her anger and frustration better, to make friends, the evidence-base supporting the intervention, and what an SAS session looked like in action with a group of three cadets participating in the program at Weill Cornell Medicine in New York.

The Social Skills Training Pty Ltd Board is appointed by Autism CRC Ltd as the sole shareholder. Its members are:

- ▶ Ms Carole Green (Chair)
- ▶ Mr Adrian Ford (Executive Director)
- ▶ Mr Andrew Davis
- ▶ Mr Joe McLean
- ▶ Mr Paul Vincent

The SST Board met on seven occasions during the reporting period.



Secret is out

In 2020 Social Skills Training (SST) was excited to announce that Essential Participant, Aspect, has committed to a five-year rollout of the Secret Agent Society (SAS) Small Group Program. The program will run in nine Aspect schools across several school districts in the Sydney, Hunter/Central Coast, Riverina and Adelaide regions. Additionally, Aspect supports a range of satellite classes embedded in local schools such as Alstonville, Coffs Harbour and Wagga Wagga, where SAS will also be implemented.

The SAS Small Group Program is one of a suite of options available to clinical and educational services under the SAS evidence-based framework. The rollout began with SAS Professional Training for 56 educational and allied health professionals. More than 200 students will benefit from the program.

- ***“Teachers and parents alike can see improvements in the kids’ social and emotional development, all whilst the kids are having fun engaging with SAS materials.”***
- Jo Tisdell, Aspect School Principal

5.0 Governance

5.1 Autism CRC Board and Committees



Professor Robert van Barneveld **Chair**

BAgrSc (Hon), PhD, RANutr, FAICD

Robert became Chair of Autism CRC in November 2017. He is an experienced Director of small and large businesses, not-for-profits, peak bodies and ASX Top 300. He has extensive experience in corporate governance, research commercialisation and management, and government liaison at state and federal levels.

As a past President of Autism Queensland he is familiar with the needs of families and carers of people on the spectrum. His daughter was initially diagnosed with autism but later re-diagnosed with Rett Syndrome.

Robert was a Director of the Pork CRC Ltd (prior to its wind-up in 2019 and remains a Director of the legacy entity, Australasian Pork Research Institute Ltd) and has led three successful CRC bids, including the Autism CRC bid. He has also been involved in the establishment and transition of CRCs and has worked as a researcher within the Pork, Aquaculture and Aquafin CRCs.

Robert is an Adjunct Professor within the School of Environmental and Rural Science at the University of New England and the School of Agriculture and Food Sciences at the University of Queensland.

Robert is also Group CEO and Managing Director of the SunPork Group of Companies, which initiated the Autism and Agriculture Program and now employs 12 autistic adults in specialist animal care roles.



Ms Carole Green **Deputy Chair**

BAppSc (Comp), GradDipCorpGov, GradDipEd, MInfTech, MBA, CertTeach, GAICD

Carole has been an independent director of Autism CRC since its commencement in July 2013, a director of Social Skills Training since January 2017 and its Chair since January 2018. Previously, Carole held positions within a number of Cooperative Research Centres (CRCs) including Strategic Manager, Wound Management Innovation CRC, as well as Chief Operating Officer, Construction Innovation CRC. She has also been Company Secretary within CRC contexts.

She has experience in establishment, strategic direction, implementation of processes and systems within CRCs, and exploitation of research outputs. Carole also has more than 20 years' experience working with tertiary education, government, and industry across science, health, education, business and IT.

She has a wealth of experience in complex environments with multiple stakeholders, establishing and operating business structures, quality assurance and risk management.



Adrian Ford **Non-Executive Director**

BSocStud, FAICD

Adrian retired as CEO and Company Secretary of Autism Spectrum Australia (Aspect) in late 2019 after more than 19 years of leading Australia's largest national autism-specific service provider for autistic people, their families and their communities.

At the same time he moved from being a Nominee Director to a non-Executive Director on the Autism CRC as well as taking on a part time role as the Executive Director of Social Skills Training Pty Ltd, a subsidiary of the Autism CRC. As well, Adrian is a consultant in his own business, AJF Governance Advisory.

Adrian has extensive experience over 40 years with not-for-profit boards and management, governance structures, strategic planning, risk management, finances, HR and policy frameworks. While at Aspect Adrian was a founding member the Australian Autism Alliance and a director and former chair of the Australian Advisory Board for Autism (AABA). Adrian also chaired the Organising Committee for the inaugural Asia Pacific Autism Conference (APAC) in 2009 and again chaired APAC in 2017. He was an advisor to the Organising Committee of APAC 2019, held in Singapore – the first held out of Australia.



Dr Shirley Lanning *Independent Director*

BSc (Hons 1), PhD, FAICD

Shirley has been an independent director of Autism CRC since its inception in 2013. During this time, she has served on the R&D Committee, the Remuneration, Nominations and Selection Committee, the Autism CRC Access Committee and the Governance Program Management Committee.

She brings extensive experience in corporate governance, marketing and communications, business development, research management and commercialization in commercial and not-for-profit organisations in the UK and Australia.

She has served as a non-executive Board Director of a number of not-for-profit organisations, including NanoVentures Australia, Nanotechnology Victoria, the Pig Research and Development Corporation and AusBiotech, and as a Member of Government Advisory Councils, including the Federal Government's Advisory Council on Intellectual property and the Victorian Cancer Agency Consultative Council.

Shirley was the inaugural Executive Director of the UK BioIndustry Association and has been involved with the CRC Program for many years, serving as Federal Government Visitor to the CRC for Viticulture and the CRC for Cellular Growth Factors. She is a Fellow of the Australian Institute of Company Directors.



Mr Malcolm Mayfield *Independent Director*

BEng (Civil), GAICD

Malcolm is the founder and Managing Director of Autism STAR Pty Ltd. As well as being on the Autism CRC Board, Malcolm is a member of the Australian Autism Research Council, on the Management Committee for the Sylvia Rodger Academy and on the project teams for Future Leaders and Governance.

Malcolm's career includes working as a researcher in the UniSA Civil Engineering Laboratories and as a contract administrator in the construction industry. In those capacities, he has worked on sports stadiums, high-rise buildings, power stations, and subdivisions, and was highly regarded in his field.

Malcolm's view of the world changed when he self-diagnosed his Asperger's Syndrome at the age of 37 and had that diagnosis confirmed a few years later. Patterns in his life that had previously been confusing began to make sense and, as part of that process of greater awareness, he realised that in order to cope and succeed as an adult and a professional, he had developed independent success strategies that could be used by others on the autism spectrum. The concept and manifestation of Autism STAR grew out of that process of self-discovery.

Malcolm's goal is to shine a light on the autism spectrum to show the world that autism is a strength to be cherished and nurtured into success for all.



Mr Scott Reading *Nominee Director*

MCom, MBus (Logistics Management), MAICD

Scott is a Founding Director of the AEIOU Foundation for Children with Autism.

AEIOU is an Essential Participant of the Autism CRC and is a not-for-profit organisation which was established to deliver high-quality early intervention therapy and care. Its family centred program meets the Guidelines for Good Practice and supports children on the autism spectrum to develop essential life skills, independence, confidence and inclusion.

As a parent of a child on the spectrum, Scott understands first-hand the daily challenges that this condition can bring. His son William has been diagnosed with epilepsy, intellectual impairment and low functioning autism.

Scott has over 30 years' experience in senior management and leadership roles in industry sectors including retail, media, direct selling and small business. He has extensive corporate experience with

national and international companies including Coles Myer, Gordon & Gotch, Sara Lee, Tupperware Brands and Nutrimetics. Scott's skill sets include, lobbying, sales, marketing, finance, operations, IT, events management, CRM and fundraising initiatives.

During Scott's terms as a Director of the Autism CRC he has served on the Audit, Risk and Finance Committee, the Research and Development Committee, The Sylvia Roger Academy and for a short period as the Managing Director of the CRC during the company's search for a new CEO.



Mr Paul Vincent *Independent Director*

BBus (Acc), FCA, GAICD

Paul is a Chartered Accountant and has been a Director of Vincents Chartered Accountants since 1989. He has extensive experience in commercial litigation, providing evidence for criminal matters (fraud, family law property settlements), professional negligence actions, corporate governance and directors' duty breaches. Paul also mediates and arbitrates financial disputes. His accounting experience covers audit, insolvency, management, taxation and general accounting.

Paul is a regular presenter at conferences across Australia on a range of forensic accounting topics including, commercial dispute resolution, quantifying damages in commercial disputes, fraud detection and prevention and proceeds of crime related topics.



Mr Paul Field *Independent Director*

BA (Hons), MA, FAICD

Paul has deep experience in the translation of research in the life sciences, including the development of biobanks, diagnostic tests and biomarkers. He is a strategic advisor to a number of biotechnology companies, and he has in the past worked at the government agency Austrade, facilitating foreign direct investment into Australian biotechnology.

Paul was an inaugural director of the CRC from 2013-15, drawn to the CRC through his friendships with parents of autistic children. He was pleased to be reappointed to the Board in April 2018.



Mr Joe McLean *Nominee Director*

B Bus (Hons), Dip Teach, GAICD

Joe McLean is the Director, Research Partnerships, at UQ, and joined the Autism CRC Board in April 2018. He supports the Pro-Vice-Chancellor (Research Partnerships) in developing strategic research partnerships with industry, government and the not-forprofit sector. The role also involves oversight of contracting research services.

Joe has 20 years of experience working at the interface of research and markets across a broad range of industries and disciplines. Prior to taking on the position of Director, Research Partnerships, at UQ, Joe was Head of Strategy and Growth for Triple P International Pty Ltd helping develop new markets and advising on business strategy. He spent more than 10 years at UniQuest Pty Limited becoming manager of the social sciences and humanities group as well as leading the Consulting and Research and International Development divisions

Research and Development Committee

The Research and Development Committee is comprised of Essential Participant nominees and members appointed by the Board. The Committee provides a forum for consultation among the Essential Participants, a point of interaction between the Essential Participants and the Board, and guidance and recommendations to the Board in relation to research and development undertaken within the Autism CRC.

During the reporting period, the Research and Development Committee met twice and consisted of Professor Robert van Barneveld (Chair), Dr Shirley Lanning, Scott Reading, Paul Field and Essential Participant nominee representatives.

Andrew Davis (CEO), Professor Andrew Whitehouse (Research Strategy Director), Cheryl Mangan (Manager, Research Translation), Andrew Borneman (CFO), Professor Valsa Eapen (Program 1 Director), Professor Suzanne Carrington (Program 2 Director), Professor Torbjorn Falkmer (Program 3 Director), Robyn Synnott (Committee Secretary) and Therese Conway (Research Program Manager) also attended on invitation.

The Remuneration, Nominations and Selection Committee

The Remuneration, Nominations and Selection Committee assists the Board in fulfilling its corporate governance responsibilities including:

- ▶ providing recommendations for Director nominees to the Members
- ▶ ensuring a rotation is established whereby at least one third of Directors retire and are eligible for re-election annually

- ▶ establishing a process for the review of Board performance and the development of the Board
- ▶ undertaking succession planning for the Board
- ▶ reviewing the performance and remuneration of the CEO and making recommendations in this regard to the Chair of the Board
- ▶ reviewing the performance and remuneration framework for the Executive Team with the CEO.

During the reporting period, the Remuneration, Nominations and Selection Committee met once and consisted of Professor Robert van Barneveld (Chair), Joe McLean, Paul Field and Scott Reading, with the CEO and CFO also in attendance.

Audit, Risk and Finance Committee

The Audit, Risk and Finance Committee assists the Board in its oversight of the integrity of financial reporting, internal control structures, audit functions and also compliance and risk management systems relating to the finance and audit functions. This Committee ensures appropriate policies and procedures are in place to underpin best practice governance and to identify and manage corporate risk for the Company.

During the reporting period, the Audit, Risk and Finance Committee met six times and consisted of Paul Vincent (Chair), Carole Green, Malcolm Mayfield, and Joe McLean, with the CEO and CFO also in attendance.

6.0 Appendices

Appendix 1: List of Autism CRC Participants

Participant name	Type	Organisation type	ABN
AEIOU Foundation	Essential	Industry / Private Sector / End-user	19 135 897 255
Autism Queensland Ltd	Essential	Industry / Private Sector / End-user	79 253 351 418
Autism Spectrum Australia (Aspect)	Essential	Industry / Private Sector / End-user	12 000 637 267
Autism New Zealand	Essential	Industry / Private Sector / End-user/ International	
Curtin University	Essential	University	99 143 842 569
Griffith University	Essential	University	78 106 094 461
F. Hoffmann-La Roche Ltd	Essential	Industry / Private Sector / End-user/ International	
La Trobe University	Essential	University	64 804 735 113
Mater Research Ltd	Essential	Industry / Private Sector / End-user	28 109 834 719
Queensland Department of Education and Training	Essential	State Government / End-user	76 337 613 647
Queensland University of Technology	Essential	University	83 791 724 622
University of New South Wales	Essential	University	57 195 873 179
University of Queensland	Essential	University	63 942 912 684
University of Western Australia	Essential	University	37 882 817 280
Affymetrix Inc	Other	Industry / Private Sector / End-user / International	
Amaze	Other	Industry/Private Sector/ End-user	15 600 724 949
Asperger Services Australia	Other	Industry / Private Sector / End-user	14 389 908 238
AssistiveWare	Other	Industry / Private Sector/ International	
Australian Advisory Board for Autism	Other	Other / End-user	53 085 018 408
Australian College of Rural and Remote Medicine	Other	Other / End-user	12 078 081 848
Autism Association of South Australia Inc	Other	Industry / Private Sector/ End-user	41 905 977 886
Autism Association of Western Australia Inc	Other	Industry / Private Sector/ End-user	54 354 917 843
Autism Awareness	Other	Industry / Private Sector/ End-user	42 130 217 962
Autism Specific Early Learning and Care Centre - Anglicare SA	Other	Industry / End-user	69 187 578 153
Autism Specific Early Learning and Care Centre - KU Children's Services	Other	Industry / End-user	89 000 006 137
Autism Specific Early Learning and Care Centre - La Trobe University Community Children's Centre	Other	Industry / End-user	64 804 735 113
Autism Specific Early Learning and Care Centre - Nathan QLD (AEIOU)	Other	Industry / End-user	19 135 897 255
Autism Specific Early Learning and Care Centre – St Giles	Other	Industry / End-user	79 067 523 335
Autism Specific Early Learning and Care Centre - WA (AAWA)	Other	Industry / End-user	54 354 917 843

Participant name	Type	Organisation type	ABN
Autistic Self Advocacy Network of Australia and New Zealand (ASAN AUNZ)	Other	End-user	12 266 839 266
Autism Tasmania	Other	Industry / End-user	90 215 494 454
Autism West	Other	Industry / End-user	38 262 080 944
Brisbane Catholic Education	Other	Private sector / End-user	49 991 006 857
Catholic Education Commission of Victoria	Other	Private Sector / End-user	92 119 459 853
Catholic Education Office of WA	Other	Private Sector / End-user	97 244 688 522
Children's Health Queensland Hospital and Health Service	Other	State Government / End-user	62 254 746 464
Department of Health and Human Services Tasmania	Other	State Government	11 255 872 006
Department of Communities (Disability Services Commission), WA	Other	State Government / End-user	36 922 715 369
Hear and Learn	Other	Industry / Private Sector	26 125 822 479
I CAN Network	Other	End-user	63 608 173 100
iiNet Ltd (Acquired by TPG Internet Pty Ltd in August 2015)	Other	Industry / Private Sector	48 068 628 937
Joseph Piven	Other	Individual / International	
Macquarie University	Other	University	90 952 801 237
Minds and Hearts	Other	Industry / Private Sector/ End-user	51 128 736 103
National Rural Health Alliance	Other	Other / End-user	68 480 848 412
Pathwest Laboratory Medicine WA	Other	State Government	13 993 250 709
Renaee Beaumont Enterprises Pty Ltd	Other	Industry	50 129 179 675
South Australian Group Enterprises (SAGE)	Other	Private Sector/ End-user	40 005 498 775
The Aspergers Syndrome Clinic	Other	Industry / Private Sector / End-user	39 090 503 601
The Association of Independent Schools Queensland	Other	Industry / Private Sector/ End-user	88 662 995 577
The Royal Children's Hospital	Other	State Government / End-user	35 655 720 546
The Sydney Children's Hospital Network	Other	State Government / End-user	53 188 579 090
University of Sydney	Other	University	15 211 513 464
University of Wollongong	Other	University	61 060 567 686
Wenn Lawson	Other	Individual	13 004 434 638
Western Australian Autism Diagnosticians Forum Inc	Other	Other / End-user	51 286 721 089

Appendix 2: Annual Financial Report

Statements of Profit or Loss and Other Comprehensive Income

For the financial year ended 30 June 2020

	Consolidated Entity	
	30 June 2020	30 June 2019
	\$	\$
Revenue (cash and in-kind)	17,792,642	23,156,454
Expenses		
Research costs (cash and in-kind)	(13,907,776)	(19,075,245)
Employee benefits expense	(1,994,389)	(1,637,051)
Board fees and related expense	(291,598)	(252,038)
Depreciation and amortisation expense	(194,282)	(48,375)
Other expenses	(1,070,576)	(851,080)
Results from operating activities	334,021	1,292,665
Financing income	13,570	46,021
Finance costs	(30,891)	-
Net finance (costs)/income	(17,321)	46,021
Surplus before tax	316,700	1,338,686
Income tax expense	(30,300)	(1,677)
Surplus after tax	286,400	1,337,009
Other comprehensive income	-	-
Total comprehensive income for the period	286,400	1,337,009

Statements of Financial Position

For the financial year ended 30 June 2020

	Consolidated Entity	
	30 June 2020	30 June 2019
	\$	\$
Current assets		
Cash and cash equivalents	6,267,665	3,218,501
Trade and other receivables	282,857	346,451
Prepayments	84,087	98,896
Current tax asset	-	650
Inventory	47,807	90,070
Total current assets	6,682,416	3,754,568
Non-current assets		
Property, plant and equipment	33,451	27,927
Right-of-use asset	588,391	-
Trade and other receivables	-	-
Investment in wholly owned subsidiary	-	-
Formation Costs	3	3
Intangible Assets	4,387,307	4,079,065
Total non-current assets	5,009,152	4,106,995
Total assets	11,691,568	7,861,563
Current liabilities		
Trade and other payables	510,320	114,753
Provisions	152,787	117,379
Deferred revenues	2,952,795	2,863,403
Lease Liability	140,931	-
Current tax liability	30,300	-
Total current liabilities	3,787,133	3,095,535
Non-Current Liabilities		
Lease Liability	459,309	-
Total Non-Current Liabilities	459,309	-
Total liabilities	4,246,442	3,095,535
Net assets	7,445,126	4,766,028
Equity		
Retained earnings	7,445,126	4,766,028
Total equity	7,445,126	4,766,028

Cash and cash equivalents at 30 June 2020 of \$6,267,665 includes \$2,758,166 additional Participant Contribution received in FY2020 and contracted for specific project expenditure in FY2021. Additionally, the ACRC has in excess of \$3,500,000 committed for release on Commonwealth Agreement related activities.

Autism CRC prepared Special Purpose Finance Statements in FY2020 that were subject to external audit.

Appendix 3: Publications 2019-20

Program 1

Grove R., Paynter J., Vivanti G., Dissanayake C. & Eapen V. (2019). Social Communication Questionnaire. Factor Structure and Predictive value. *Journal of Child and Family Studies*, 28, pp 3385–3391 <http://dx.doi.org/10.1007/s10826-019-01519-0>

Mozolic-Staunton, B., Donnelly, M., Yoxall, J. & Barbaro, J. (2020). Early detection for better outcomes: Universal developmental surveillance for autism across health and early childhood education settings. *Research in Autism Spectrum Disorders*, 71, 101496. doi: 10.1016/j.rasd.2019.101496

Rabba, A.S., Dissanayake, C. & Barbaro, J. (2019). Parents' experiences of an early autism diagnosis: Insights into their needs. *Research in Autism Spectrum Disorders*, 66, 101415. doi: 10.1016/j.rasd.2019.101415

Whitehouse, A.J.O., Varcin, K.J., Alvares, G.A., Barbaro, J., Bent, C., Boutrus, M., Chetcuti, L., Cooper, M.N., Clark, A., Davison, E., Dimov, S., Dissanyake, C., Doyle, J., Grant, M., Iacono, T., Maybery, M.T., Pillar, S., Renton, M., Rowbottom, C., Sadka, N., Segal, L., Slonims, V., Taylor, C., Wakeling, S., Wan, M.W., Wray, J., Green, J. & Hudry, K. (2019). Pre-emptive intervention versus treatment as usual for infants showing early behavioural risk signs of autism spectrum disorder: a single-blind, randomised controlled trial. *The Lancet*, 3(9), 605-615. doi: 10.1016/S2352-4642(19)30184-1

Program 2

Adams, D., Clark, M. & Keen, D. (2019). Using self-report to explore the relationship between anxiety and quality of life in children on the autism spectrum. *Autism Research*, 12(10), 1505-1515. doi: 10.1002/aur.2155

Adams, D., Keen, D., Heussler, H., Wicks, R. & Roberts, J. (2019). Family outcomes for families of 4-5-year-old children on the autism spectrum who have received early childhood intervention in Australia. *Infants & Young Children*, 32, 186-200. doi: 10.1097/IYC.0000000000000143

Adams, D., Paynter, J., Clark, M., Roberts, J. & Keen, D. (2019). The Developmental Behaviour Checklist (DBC) profile in young children on the autism spectrum: The impact of child and family factors. *Journal of Autism and Developmental Disabilities*, 49(8), 3426-3439. doi: 10.1007/s10803-019-04067-0

Adams, D., Simpson, K. & Keen, D. (2019). Exploring anxiety at home, school, and in the community through self-report from children on the autism spectrum. *Autism Research*, early online. doi: 10.1002/aur.2246

Armstrong, R. M., Paynter, J., & Westerveld, M. F. (2019). Fiction or non-fiction: Parent-reported book preferences of their preschoolers with autism spectrum disorder. *Autism & Developmental Language Impairments*, 4. doi: 10.1177/2396941519896736

Beamish, W., Macdonald, E., Hay, S., Taylor, A.E., Paynter, J. & Tucker, M. (2020). A Model of Practice for building teacher capacity in educating young school-age children on the autism spectrum: User perspectives. *International Journal of Disability, Development and Education*, early online. doi: 10.1080/1034912X.2020.1774046

Carrington, S., Saggars, B., Webster, A., Harper-Hill, K. & Nickerson, J. (2020). What Universal Design for Learning principles, guidelines, and checkpoints are evident in educators' descriptions of their practice when supporting students on the autism spectrum? *International Journal of Educational Research*, 102, 101583. doi: 10.1016/j.ijer.2020.101583

Clark, M., Adams, D., Westerveld, M. & Roberts, J. (2019). How do teachers support their students on the autism spectrum in Australian primary schools? *Journal of Research in Special Educational Needs*, doi: 10.1111/1471-3802.12464

den Houting, J., Adams, D., Roberts, J., & Keen, D. (2020). Brief report: Investigating the impact of anxious symptomatology in autistic children. *Journal of Intellectual and Developmental Disability*, early online. doi: 10.1080/1034912X.2020.1727420

Harper-Hill, K., Beamish, W., Hay, S., Whelan, M., Kerr, J., Zelenko, O. & Villalba, C. (2020). Teacher engagement in professional learning: what makes the difference to teacher practice? *Studies in Continuing Education*, early online. doi: 10.1080/0158037X.2020.1781611

Macdonald, E., Trembath, D., Ashburner, J., Costley, D., Haas, K. & Keen, D. (2019) Utilisation of an intervention to support students on the autism spectrum:

Examining teachers' responses to Finished! The On-task Toolkit. *Journal of International Special Needs Education*, early online. doi: 10.9782/17-00019

O'Leary, K., Fluckiger, B., Paynter, J. & Westerveld, M. (2019). Parent perceptions of literacy learning of their young children on the autism spectrum in their first year of schooling. *Australian Journal of Education*, early online. doi: 10.1177/0004944119860639

Simpson, K., Adams, D., Bruck, S., & Keen, D. (2019). Investigating the participation of children on the autism spectrum across home, school and community: A longitudinal study. *Child: Care, Health and Development*, 45(5), 681-687. doi: 10.1111/cch.12679

Simpson, K., Paynter, J., Wicks, R. & Westerveld, M. (2019). Early literacy learning experiences across home and community libraries for young children who have autism. *Advances in Neurodevelopmental Disorders*, early online, 1-11. doi: 10.1007/s41252-019-00145-7

Taylor, A., Beamish, W., Tucker, M., Paynter, J. & Walker, S. (2019). Designing a Model of Practice for Australian teachers of young school-age children on the autism. *Journal of International Special Needs Education*, early online. doi: 10.9782/18-00017

Westerveld, M.F., Paynter, J., & Wicks, R. (2020). Shared book reading behaviors of parents and their verbal preschoolers on the autism spectrum. *Journal of Autism and Developmental Disorders*, 50, 3005–3017. doi: 10.1007/s10803-020-04406-6

Wicks, R., Paynter, J. & Adams, D. (2019). Exploring the predictors of family outcomes of early intervention for children on the autism spectrum: An Australian cohort study. *Journal of Early Intervention*, early online. doi: 10.1177/1053815119883413

Wilson, W.J., Downing, C., Perrykkad, K., Armstrong, R., Arnott, W.L., Ashburner, J. & Harper-Hill, K. (2019). The "acoustic health" of primary school classrooms in Brisbane, Australia. *Speech, Language and Hearing*, early online. doi: 10.1080/2050571X.2019.1637042.

Program 3

Arnold, S.R.C., Foley, K-R., Hwang, Y.I., Richdale, A.L., Uljarevic, M., Lawson, L.P., Cai, R.Y., Falkmer, T., Falkmer, M., Lennox, N., Urbanowicz, A. & Trollor, J.N. (2019). Cohort profile: the Australian Longitudinal Study of Adults with Autism (ALSAA). *BMJ Open*, 9, e030798. doi: 10.1136/bmjopen-2019-030798

Arnold, S.R.C., Higgins, J. & Trollor, J.N. (2020). Health services for Australian autistic adults: Commentary on "The experiences, views and needs of health professionals who provide care to adults on the autism spectrum". *Research and Practice in Intellectual and Developmental Disability*, early online. doi: 10.1080/23297018.2020.1753566

Arnold, S.R.C., Huang, Y., Hwang, Y.I., Richdale, A., Trollor, J.N., & Lawson, L.P. (2020). "The single most important thing that has happened to me in my life": Development of the Impact of Diagnosis Scale – Preliminary Revision (IODS-PR). *Autism in Adulthood*, 2(1). doi: 10.1089/aut.2019.0059

Black, M.H., Chen, N.T.M., Lipp O.V., Bölte, S. & Girdler, S.J. (2020). Complex facial emotion recognition and atypical gaze patterns in autistic adults. *Autism*, 24(1), 258-262. doi: 10.1177/1362361319856969

Ee, D., Hwang, Y.I., Reppermund, S., Srasuebku, P., Trollor, J.N., Foley, K-R. & Arnold, S.R.C. (2019). Loneliness in adults on the autism spectrum. *Autism in Adulthood*, 1(3), 182-193. doi: 10.1089/aut.2018.0038

Hwang, Y.I., Arnold, S.R.C., Srasuebku, P. & Trollor, J. (2019). Understanding anxiety in adults on the autism spectrum: an investigation of its relationship with intolerance of uncertainty, sensory sensitivities and repetitive behaviours. *Autism*, early online. doi: 10.1177/1362361319868907

Jovevska, S., Richdale, A.L., Lawson, L.P., Uljarević, M., Arnold, S.R.C. & Trollor, J.N. (2020). Sleep quality in autism from adolescence to old age. *Autism in Adulthood*, early online. doi: 10.1089/aut.2019.0034

Lawson, L.P., Richdale, A.L., Haschek, A., Flower, R.L., Vartuli, J., Arnold, S.R.C. & Trollor, J. N. (2020). Cross-sectional and longitudinal predictors of quality of life in autistic individuals from adolescence to adulthood: The role of mental health and sleep quality. *Autism*, 24(4), 954-967. doi: 10.1177/1362361320908107

Rezae, M., McMeekin, D., Tan, T., Krishna, A., Lee, H. & Falkmer, T. (2019). Public transport planning tool for users on the autism spectrum: from concept to prototype. Disability and Rehabilitation: Assistive Technology, early online. doi: 10.1080/17483107.2019.1646818

Sahin, E., Bury, S., Flower, R.L., Lawson, L.P., Richdale, A.L., & Hedley, D. (2020). Psychometric evaluation of an Australian version of the Vocational Index for Adults with Autism. *Autism in Adulthood*, early online. doi: 10.1089/aut.2019.0060

Tang, J.S.Y, Chen, N.T.M., Falkmer, M., Bölte, S., & Girdler, S.J. (2019). A systematic review and meta-analysis of social emotional computer based interventions for autistic individuals using the serious game framework. *Research in Autism Spectrum Disorders*, 66, 101412. doi: 10.1016/j.rasd.2019.101412

Urbanowicz, A., Parkin, T., van Dooren, K., Girdler, S., Ciccarella, M., Lennox, N. (2020). The experiences, views, and needs of health professionals who provide care to adults on the autism spectrum. *Research and Practice in Intellectual and Developmental Disabilities*, early online. doi: 10.1080/23297018.2020.1735943

Not program specific

den Houting, J. & Pellicano, E. (2019). A portfolio analysis of autism research funding in Australia, 2008-2017. *Journal of Autism and Developmental Disorders*, 49(11), 4400–4408. doi.org/10.1007/s10803-019-04155-1

Flower, R. L., Sadka, N., Richdale, A., & Haschek, A. (2019). The Australian context: Commentary on 'Mothers' experiences of the transition of young people with autism spectrum disorder to adult care' (McMinn, Schulz & Ludlow, 2019), and 'Challenging the status quo: Commentary on Mothers' experiences of the transition of young people with autism spectrum disorder to adult care' (Beadle-Brown & Roberts, 2019). *Research and Practice in Intellectual and Developmental Disabilities*, 6(2), 147-153. doi: 10.1080/23297018.2019.1652928

Pellicano, E., Lawson, W., Hall, G., Mahony, J., Lilley, R., Davies, C., Arnold, S.R.C., Trollor, J.N. & Yudell, M. (2020). Documenting the untold histories of late-diagnosed autistic adults: A study protocol using oral history methodology. *BMJ Open*, 10:e037968. doi: 10.1136/bmjopen-2020-037968

Reports 2019-20

Program 1

Eapen, V., Masi, A. & Kahn, F. (2020). Australian Autism Biobank follow-up cohort pilot study: Final Report. Brisbane: Cooperative Research Centre for Living with Autism

Program 2

Clark, T., Beamish, W., Bruck, S., Gibbs, V., Robinson, A., Gallagher, E., Taylor, A. & Macdonald, L. (2019). Models of Practice: To support the transition of students on the autism spectrum into and between Early and Middle Years classrooms. Brisbane: Cooperative Research Centre for Living with Autism

Flower, R. L., Haschek, A., Lawson, L. P., & Richdale, A. L. (2019). Study of Australian School Leavers with Autism (SASLA): Longitudinal Profile 2019. Brisbane: Cooperative Research Centre for Living with Autism

Flower, R. L., Haschek, A., Lawson, L. P., & Richdale, A. L. (2019). Study of Australian School Leavers with Autism (SASLA): Parent/Carer Baseline Profile 2019. Brisbane: Cooperative Research Centre for Living with Autism

Saggers, B., Tones, M., Dunne, J., Aberdein, R., Ashburner, J., Brereton, M., Bruck, S., Carrington, S., Clark, T., Edwards, C., Gibbs, V., Harper-Hill, K., Russell, T., Willis, J. & Wilson, C. (2019). Early Years Behaviour Support Program (EYBSP): Application of tele-classroom consulting (TCC) practices to support classroom teachers to meet the challenging and complex needs of students on the autism spectrum in the early years of schooling (5–8 years). Final Report. Brisbane: Cooperative Research Centre for Living with Autism

Shochet, I.M., Saggers, B.R., Carrington, S.B., Orr, J.A, Wurfl, A.M., Mazzucchelli, T., Duncan, B.M., Kelly, R.L., Smith, C.L., Gill, C., Haas, K., & O'Hare, A. (2020). School Connectedness: Acceptance, respect and support. Final Report. Brisbane: Cooperative Research Centre for Living with Autism

Sofronoff, K., Beaumont, R., Hinton, S., Day, J., & Clarke, R. (2019) Secret Agent Society – Whole of Classroom (SAS-WOC) Trial. Full Report. Brisbane: Cooperative Research Centre for Living with Autism

Westerveld, M., Paynter, J., Simpson, K., McCartney, D., Hurley, A., & O'Leary, K. (2020). Story Time: Providing early literacy sessions in libraries to preschoolers on the autism spectrum and their parents. Final Report. Brisbane: Cooperative Research Centre for Living with Autism

Wilson, W.J., Harper-Hill, K., Ashburner, J., Downing, C., Armstrong, R., & Perrykkad, K. (2019). The impact of improved classroom acoustics on autistic students. Brisbane: Cooperative Research Centre for Living with Autism

Program 3

Ashburner, J., Jones, J., Tomkins, V., McLucas, R., Bobir, N., Taylor, J. & Lister, J. (2019). The development and evaluation of a goal setting tool for adolescents and adults on the spectrum. Full report. Brisbane: Cooperative Research Centre for Living with Autism

Bradford, D., Ireland, D., McDonald, J., Tan, T., Hatfield-White, E., Regan, T., Kidd, T., Farr-Wharton, G. (2020) 'Hear' to help chatbot: Co-development of a chatbot to facilitate participation in tertiary education for students on the autism spectrum and those with related conditions. Final Report. Brisbane: Cooperative Research Centre for Living with Autism

Ciccarella, M., Hatfield, M., Portsmouth, L., Wilmot, A., & Falkmer, M. (2020). Better Outcomes and Successful Transitions for Autism (BOOST-A): From research to practice. Final Report. Brisbane: Cooperative Research Centre for Living with Autism

Haas, K., Wilson, N.J., Cordier, R., Vaz, S. & Chung-yeung Lee, H. (2020). The experiences of young autistic adults in using metropolitan public transport. Brisbane: Cooperative Research Centre for Living with Autism

Not program specific

Australian Autism Research Council. (2019). Australian Autism Research Council: 2019 Research Priorities. Brisbane: Cooperative Research Centre for Living with Autism

Gatfield, O. & Haar, V. (2019). Future Leaders 2018: Evaluation report: Executive Summary. Brisbane: Cooperative Research Centre for Living with Autism

Robinson, A. & Gatfield, O. (2020). Future Leaders 2019: Evaluation report. Brisbane: Cooperative Research Centre for Living with Autism

Book chapters

Program 2

Carrington, S. & Saggers, B. (2019). Chapter 5: Systems and Politics of Provision. In R. Jordan, J.M. Roberts & K. Hume (eds), *The SAGE Handbook of Autism and Education*. SAGE Publications, London. ISBN: 9781473959538. doi: 10.4135/9781526470409

Appendix 4: Resources developed 2019-20

Program 1

Hudry, K., Masi, A. & van der Meer, L. (2020). Diagnosis, early Intervention & sleep: Autism Month Webinar. Brisbane: Cooperative Research Centre for Living with Autism.

Program 2

Ciccarella, M., Hatfield, M., Portsmouth, L., Wilmot, A. & Falkmer, M. (2020). Better outcomes and successful transitions in school leavers [Core research project]. Autism CRC. <https://inclusioned.edu.au/node/166>

Teaching practices derived from core research project:

- Support adolescent-centered transition planning [Teaching practice]. Autism CRC. inclusioned.edu.au/node/2244
- Start transition planning early [Teaching practice]. Autism CRC. inclusioned.edu.au/node/2214
- Focus on the bigger picture in transition planning: Work experience [Teaching practice]. Autism CRC. inclusioned.edu.au/node/2243
- Focus on the big picture in transition planning: career interests [Teaching practice]. Autism CRC. inclusioned.edu.au/node/2639
- Encourage big dreams in transition planning [Teaching practice]. Autism CRC. inclusioned.edu.au/node/2242
- Find a champion for the transition planning team [Teaching practice]. Autism CRC. inclusioned.edu.au/node/2245

Clark, T., Beamish, W., Bruck, S., Gibbs, V., Robinson, A., Gallagher, E., Taylor, A. & Macdonald, L. (2020). Models of practice [Core research project]. Autism CRC. inclusioned.edu.au/node/199

Teaching practices derived from core research project:

- Incorporate special interests in the classroom [Teaching practice]. Autism CRC. inclusioned.edu.au/node/2255
- Establish classroom rules [Teaching practice]. Autism CRC. inclusioned.edu.au/node/2286
- Share information through home-school communication [Teaching practice]. Autism CRC. inclusioned.edu.au/node/2285
- Use instructional sequences in your classroom [Teaching practice]. Autism CRC. inclusioned.edu.au/node/2279
- Meet student's sensory needs [Teaching practice]. Autism CRC. <https://inclusioned.edu.au/node/2283>
- Organise your classroom [Teaching practice]. Autism CRC. inclusioned.edu.au/node/2281
- Respond constructively to student behaviour [Teaching practice]. Autism CRC. inclusioned.edu.au/node/2287
- Use task analysis in your classroom [Teaching practice]. Autism CRC. inclusioned.edu.au/node/2288
- Use visual self-management tools in your classroom [Teaching practice]. Autism CRC. inclusioned.edu.au/node/2387

Davey, K., Shochet, I.M. & Wurfl, A.M. (2020). Building resilience in children and teenagers: Autism Month Webinar. Brisbane: Cooperative Research Centre for Living with Autism.

Harper-Hill, K., Beamish, W., Whelan, M., Kerr, J., Zelenko, O., Mangan, C., James, B., Jackson, C. & Carrington, S. (2020). inclusionED. [web platform] Autism CRC. www.inclusioned.edu.au

Hinchliffe, K., Sagggers, B., Chalmers, C. & Hobbs, J. (2020). Robotics social clubs [Core research project]. Autism CRC. inclusioned.edu.au/node/190

Teaching practices derived from core research project:

- Working collaboratively: Robotics social clubs [Teaching practice]. Autism CRC. inclusioned.edu.au/node/2228
- Make decisions: Robotics social clubs [Teaching practice]. Autism CRC. inclusioned.edu.au/node/2237
- Communicate effectively: Robotics social clubs [Teaching practice]. Autism CRC. inclusioned.edu.au/node/2236
- Negotiate, resolve conflicts: Robotics social clubs [Teaching practice]. Autism CRC. inclusioned.edu.au/node/2213
- Improve teamwork skills: Robotics social clubs [Teaching practice]. Autism CRC. inclusioned.edu.au/node/2229

Macdonald, L., Keen, D., Trembath, D., Ashburner, J., Costley, D. & Haas, K. (2019). Structured teaching [Core research project]. Autism CRC. inclusioned.edu.au/node/181

Teaching practice derived from core research project:

- Structure tasks using work systems [Teaching practice]. Autism CRC. inclusioned.edu.au/node/2204
- Ozdowska, A., Ashburner, J., Wyeth, P., Carrington, S. & Macdonald, L. (2020). Overcoming written difficulties [Core research project]. Autism CRC. inclusioned.edu.au/node/187

Teaching practice derived from core research project:

- Implement self-regulated strategy development (SRSD) [Teaching practice]. Autism CRC. inclusioned.edu.au/node/2240

Sagggers, B., Klug, D., Harper-Hill, K., Ashburner, J., Costley, D., Clark, T., Bruck, S., Trembath, D., Webster, A. A. & Carrington, S. (2020) Australian educational needs analysis [Core research project]. Autism CRC. inclusioned.edu.au/node/161

Teaching practice derived from core research project:

- Practices Use visual schedules to help students stay on task [Teaching practice]. Autism CRC. inclusioned.edu.au/node/2198

Sagggers, B., Tones, M., Dunne, J., Aberdein, R., Ashburner, J., Brereton, M., Bruck, S., Carrington, S., Clark, T., Edwards, C., Gibbs, V., Harper-Hill, K., Russell, T., Willis, J. & Wilson, C. (2020). Early Years Behaviour Support [Core research project]. Autism CRC. inclusioned.edu.au/node/174

Teaching practice derived from core research project:

- Use collaborative partnerships to foster inclusion [Teaching practice]. Autism CRC. inclusioned.edu.au/node/2772

Shochet, I.M., Sagggers, B.R., Carrington, S.B., Orr, J.A, Wurfl, A.M., Mazzucchelli, T., Duncan, B.M., Kelly, R.L., Smith, C.L., Gill, C., Haas, K. & O'Hare, A. (2020). School connectedness: Acceptance, respect, and support [Core research project]. Autism CRC. inclusioned.edu.au/node/191

Teaching practice derived from core research project:

- Foster school connectedness using the WISE model [Teaching practice]. Autism CRC. inclusioned.edu.au/node/2868

Wilson, W.J., Harper-Hill, K., Ashburner, J., Downing, C., Armstrong, R. & Perrykkad, K. (2020). Classroom acoustics [Core research project]. Autism CRC. inclusioned.edu.au/node/197

Teaching practice derived from core research project:

- Improve your classroom's acoustics [Teaching practice]. Autism CRC. inclusioned.edu.au/node/2400
- Assess your classroom acoustics [Teaching practice]. Autism CRC. inclusioned.edu.au/node/2399

Program 3

Bradford, D., Kuzminski, R., Lawson, W., Milbourn, B. & Pellicano, E. (2019). Connection and quality of life: Autism Month Webinar. Brisbane: Cooperative Research Centre for Living with Autism.

Not program specific

Bartz, A., Cifuentes, J., Gribble, T. & Robertson, G. (2019) Autistic voices: Autism Month Webinar. Brisbane: Cooperative Research Centre for Living with Autism.

Appendix 5: Conference presentations 2019-20

Program 1

Alvares, G.A. & the Australian Autism Biobank Team (2019). Demographic and clinical characteristics of participants in the Australian Autism Biobank [Poster]. Autism-Europe International Congress, 12-15 September, Congress Centre Nice Acropolis, Nice. Autism-Europe and Autisme France

Program 2

Beamish, W., Taylor, A.E., Paynter, J., Tucker, M. Macdonald, E. & Rodgers, W. (2019). The Early Years Model of Practice: Supporting teachers of young students on the autism spectrum in Australian primary schools. Australian Association for Research in Education 2019 Conference, 1-5 December, QUT Kelvin Grove, Brisbane. Australian Association for Research in Education

Beamish, W. & Taylor, A. (2019). Supporting the SEL of young children on the autism spectrum: Trialling an Australian model of practice for the early years [Poster]. Social and Emotional Learning Exchange, 2-4 October 2019, Marriott

Marquis, Chicago. The Collaborative for Academic, Social, and Emotional Learning (CASEL)

Carrington, S. (2019). Autism appropriate educational environments & programs that optimise students' social, behavioural and academic success. Stavanger Hospital, Norway

Carrington, S. (2019). Inclusion and Exclusion; Autism CRC insights and results. Aarhus University, Danish School of Education, Copenhagen, Denmark

Carrington, S., Harper-Hill, K., Whelan, M., Kerr, J., Wilson, W. (2019). Supporting teachers to include all: Research to Practice. New Zealand Education Summit. Auckland. 25/10/2019- 27/10/2019

Carrington, S., Harper-Hill, K., Sagggers, B. & Shochet, I. (2019) The School Years Program, The Cooperative Research Centre for Living with Autism. Australian Association of Research in Education Conference, Brisbane, QLD

Clark, M. & Adams, D. (2019). "What do you like most about yourself?" Perceptions of positive attributes in children on the autism spectrum. International Association for the Scientific Study of Intellectual and Developmental Disabilities World Congress, 6-9 August 2019, SEC Centre, Glasgow. International Association for the Scientific Study of Intellectual and Developmental Disabilities

Harper-Hill, K., Whelan, M., Kerr, J., Zelenko, O. & Beamish, W. (2019). The Early Years Model of Practice: Supporting teachers of young students on the autism spectrum in Australian primary schools. Australian Association for Research in Education 2019 Conference, 1-5 December, QUT Kelvin Grove, Brisbane. Australian Association for Research in Education

Sagggers, B., Ashburner, J. Odier-Guedj, D. & Whelan, M. (2019). Collaborative partnerships in action: Planning from methodologies to actions. Australian Association for Research in Education 2019 Conference, 1-5 December, QUT Kelvin Grove, Brisbane. Australian Association for Research in Education

Sagggers, B. (2019). Supporting rural and remote educators to meet the needs of students on the autism spectrum: A tele-classroom consultation (TCC) approach. Australian Association for Research in Education 2019 Conference, 1-5 December, QUT Kelvin Grove, Brisbane. Australian Association for Research in Education

Program 3

Black, M.H., Tan, T., Bölte, S., Chen, N.T., Lipp, O.V. & Girdler, S.J. (2020). Exploring the effectiveness of EEG-based biomarkers during facial emotion recognition in classifying autism in adulthood [Poster]. International Society for Autism Research 2020 Annual Meeting, 3 June, Online. International Society for Autism Research

Brooker, K., de Vries, T., Harley, D. & Urbanowicz, A. (2019). Improving the knowledge and skills of medical students when providing healthcare to adults on the autism spectrum with and without co-occurring intellectual disability: Developing an online module. Australian Association of Developmental Disability Medicine Conference, 3-4 October, Telethon Kids Institute, Perth. Australian Association of Developmental Disability Medicine

Foley, K-R., Hwang, Y.I., Stacey, T., Froude, E., Arnold, S.R.C. & Trollor, J.N. (2019). Exploring Autistic adults experience of adulthood through the ICF. Occupational Therapy Australia 28th National Conference and Exhibition, 10-12 July 2019, International Convention Centre, Sydney. Occupational Therapy Australia

Harsanyi, M., Froude, E., Foley, K-R. & Arnold, S.R.C. (2019). Employment profiles of autistic adults in Australia. Occupational Therapy Australia 28th National Conference and Exhibition, 10-12 July 2019, International Convention Centre, Sydney. Occupational Therapy Australia

Haschek, A., Flower, R., Richdale, A. L., Uljarević, M., Cai, R. Y., Lawson, L. (2020). Trait emotional awareness in autistic adolescents and young adults [Poster]. International Society for Autism Research 2020 Annual Meeting, 3 June, Online. International Society for Autism Research.

Hayden-Evans, M., D'Arcy, E., Evans, K., Milbourn, B., Chamberlain, A., Whitehouse, A.J.O., Eapen, V., Phillips, S., Bölte, S. & Girdler, S.J. (2020). Coproducing holistic proxy and self-report assessment of functioning tools based on the ICF Core Sets for Autism Spectrum Disorder [Poster]. International Society for Autism Research 2020 Annual Meeting, 3 June, Online. International Society for Autism Research

Huang, Y., Arnold, S.R.C., Foley, K-R. & Trollor, J.N. (2020). "You have to find it yourself": Experiences of support following adult autism diagnosis in Australia [Poster]. International Society for Autism Research 2020 Annual Meeting, 3 June, Online. International Society for Autism Research

Hwang, Y.I., Arnold, S.R.C. Srasuebku, P. & Trollor, J.N. (2019). Understanding anxiety and autism symptoms in adults on the spectrum – the crucial role of intolerance of uncertainty. Society for Mental Health Research Conference, 27-29 November, RACV City Club, Melbourne. Society for Mental Health Research

Kersten, M, Wilson, N., Coxon, K. & Lee, H. (2019). What does it take? Developing community mobility to support inclusion for young Australian adults on the autism spectrum. Autism-Europe International Congress, 12-15 September, Congress Centre Nice Acropolis, Nice. Autism-Europe and Autisme France

Kersten, M., Wilson, N.J., Coxon, K. & Lee, H.C. (2019). Developing community mobility and independence for young adults on the autism spectrum: Viewpoint of parents of young adults. Occupational Therapy Australia 28th National Conference and Exhibition, 10-12 July 2019, International Convention Centre, Sydney. Occupational Therapy Australia

Scott, M.T., Falkmer, M., Kuzminski, R., Falkmer, T. & Girdler, S.J. (2020). Process evaluation of a randomised controlled trial evaluating an autism-specific workplace tool for employers [Poster]. International Society for Autism Research 2020 Annual Meeting, 3 June, Online. International Society for Autism Research

Trollor, J.N. (2019). Emerging findings in autism in adulthood. Australian Association of Developmental Disability Medicine Conference, 3-4 October, Telethon Kids Institute, Perth. Australian Association of Developmental Disability Medicine

Not program specific

D'Arcy, E., Evans, K., Chamberlain, A., Hayden-Evans, M., Milbourn, B., Whitehouse, A.J.O., Eapen, V., Wray, J., Bölte, S. & Girdler, S.J. (2020). Development and piloting of an International Classification of Functioning, Disability and Health (ICF) Core Set based assessment of functioning tool for young people diagnosed with autism or other neurodevelopmental conditions [Poster]. International Society for Autism Research 2020 Annual Meeting, 3 June, Online. International Society for Autism Research

D'Arcy, E., Evans, K., Chamberlain, A., Hayden-Evans, M., Milbourn, B., Whitehouse, A.J.O., Eapen, V., Wray, J., Bölte, S. & Girdler, S.J. (2020). Using the International Classification of Functioning, Disability and Health (ICF) Core Sets to describe functioning for young children with, or at risk of neurodevelopmental conditions: A case study [Poster]. International Society for Autism Research 2020 Annual Meeting, 3 June, Online. International Society for Autism Research

Evans, K., Chamberlain, A., Girdler, S.J., Milbourn, B., D'Arcy, E., Hayden-Evans, M., Bölte, S., Eapen, V., Wray, J. & Whitehouse, A.J.O (2020). Formalising an assessment of functioning process for individuals undergoing an autism diagnostic evaluation and/or service planning in Australia [Poster]. International Society for Autism Research 2020 Annual Meeting, 3 June, Online. International Society for Autism Research

Appendix 6: Intellectual property

Description	Project reference	Nature of IP	Background IP	Centre IP
Project intellectual property				
Australian Autism Biobank Database, Questionnaires, Data Dictionary and Data.	1.002RC	Copyright Confidential information		X
AXAS™ Autism related risk prediction software	1.003RC	Copyright Trademark	University of Queensland	
Graduate Certificate in Autism Diagnosis Online course content: Intro to Autism, Diagnosis of Autism, Practicum, Adult and toddler modules, evaluation data, analyses and report	1.004RC	Copyright Confidential information		X
Developmental Surveillance for Autism Social Attention and Communication Study-Revised, developed by La Trobe University (SACS-R); Evaluation data and analyses, Assessment videos and the training materials for SACS-R.	1.005RC	Copyright Confidential information	SACS system owned by La Trobe University	X
Transcriptome analyses of human brain tissue Knowhow and confidential information.	1.019RC	Copyright Confidential information		X
BrainsTerm Model for stem cell transduction from blood. Research data, analyses and report.	1.020RI	Confidential information Copyright		X
Diagnostic practices and reliability in Australia Questionnaire, Survey data, analyses and report.	1.021RS	Copyright		X
Pathways beyond diagnosis Family support package (online and paper form) website source code, design and content, model of single session therapy post diagnosis, facilitator manual. Evaluation data, analyses and reports.	1.022RS	Copyright Confidential information		X
Autism subtyping Research data, analyses and reports.	1.023RS	Copyright Confidential information		X
Brain connectivity Research data and analyses.	1.033RI	Copyright Confidential information		X
System genomics Methodologies and protocol. Research data and analyses.	1.042RC	Copyright Confidential information	University of Queensland own methods and protocols related to derivation and analysis of data	X
Therapy for infants showing early signs of autism iBASIS-VIPP, ASD Subtype project research data and analyses.	1.043RS	Copyright Confidential information	iBASIS-VIPP owned by University of Manchester SACS system owned by La Trobe University	X
Diagnostic inconsistencies in New Zealand Survey, research data and analyses.	1.058RU	Copyright Confidential information		X
Australian Autism Biobank pilot Questionnaires, research data and analyses.	1.059RU	Copyright Confidential information		X

Description	Project reference	Nature of IP	Background IP	Centre IP
<p>A multistate trial of an early surveillance program for autism within General Practices in Australia</p> <p>Research data, analyses and findings.</p>	1.064RS	Copyright Confidential information	<p>SACS system owned by La Trobe University</p> <p>Frances Glascoe is the owner of the IP for PEDS; The Royal Children's Hospital, Melbourne holds the Australian license for the use of PEDS</p> <p>Q-CHAT-10 made available by UNSW</p> <p>LTSAE made available by UNSW</p>	X
<p>The detection of white matter microstructural alterations in autistic individuals at clinical magnetic field strengths</p> <p>Research data, analyses and report.</p>	1.065RS	Copyright Confidential information		X
<p>Inflammation and nueromodulation in autism</p> <p>Research data, analyses and report.</p>	1.073RU	Copyright Confidential information		X
<p>Understanding the biological and behavior attributes leading to sleep difficulties.</p> <p>Research data, analyses and report.</p>	1.074RU	Copyright Confidential information		X
<p>School Years Program (Program 2)</p> <p>Conceptual model for in-kind contributions.</p>	2.006RC	Copyright		X
<p>The Longitudinal Study of Australian Students with Autism</p> <p>Trajectory study parent, teacher, principal questionnaires, data, analyses, findings and report.</p>	2.007RS	Copyright Confidential information		X
<p>Secret Agent Society Whole-of-Class</p> <p>Secret Agent Society Whole of Class Program and training materials, evaluation data, analyses and report.</p>	2.008RS 2.008RS_PP	Copyright Confidential information	SAS Program owned by Renae Beaumont Enterprises and Autism CRC subsidiary, Social Skills Training Pty Ltd	X
<p>Education Needs Analysis</p> <p>Surveys for teachers, parents, students, survey data V2 report, <i>inclusionED</i> core research, content and multimedia resources.</p>	2.009RC	Copyright Confidential information		X
<p>Overcoming difficulties in written expression</p> <p>Videos, game format, website, source code and design, manuals and teachers' materials, evaluation data, analyses, report, <i>inclusionED</i> core research, practice content and multimedia resources.</p>	2.010RS 2.053RU	Copyright Confidential information		X
<p>Helping students stay on task and move between tasks</p> <p>Teacher training packages and resources for structured teaching, the On-task Toolkit, evaluation data, analyses, findings, report, <i>inclusionED</i> core research, practice content and multimedia resources.</p>	2.011RS 2.011RS_PP	Copyright Confidential information	Original Structured Teaching resources owned by Aspect	X

Description	Project reference	Nature of IP	Background IP	Centre IP
<p>Early literacy project suite</p> <p>Research reports, fact sheets, FAQs, emergent literacy training module and resources, shared book reading intervention, questionnaires, data, analyses, findings and report.</p>	2.034RI 2.035RI 2.036RI	Copyright Confidential information	Parent – Child Book reading checklist owned by Griffith University Child Assessment data owned by AEIOU	X
<p>Autism, anxiety and school functioning</p> <p>Research data, analyses and report.</p>	2.025RI	Copyright Confidential information		X
<p>Lego robotics club evaluation</p> <p>Robotics resource kits, manual for teachers, <i>inclusionED</i> core research and practice content and source code, evaluation data, analyses and report.</p>	2.026RI	Copyright Confidential information		X
<p>Early Years Behaviour Support Project</p> <p>MyCalendar app, teleconsultation protocols, tools evaluation data and analyses.</p>	2.027RS 2.027RS_PP	Copyright Confidential information	MyCalendar app owned by Queensland University of Technology	X
<p>Classroom acoustics</p> <p>Research data, analyses, multimedia resources and <i>inclusionED</i> practice content.</p>	2.028RS	Copyright Confidential information		X
<p>School connectedness</p> <p>Resourceful Adolescent Program for parents, teachers, and adolescents, RAP Program adaptations for autism (RAP-A), research data, analyses, report and <i>inclusionED</i> core research and practice content.</p>	2.029RS 2.029RS_PP	Copyright Confidential information	RAP Program owned by Ian Shochet. RAP-A, owned by Queensland University of Technology	X
<p>School connectedness website</p> <p>Website source code, design and multimedia content.</p>	2.029RS_PP2	Copyright Confidential information	RAP Program owned by Ian Shochet. RAP-A, owned by Queensland University of Technology	X
<p>How was your day?</p> <p>Parent surveys, teacher surveys, child surveys pertaining to home school communications, survey data, analyses and report.</p>	2.036RI	Copyright Confidential information		X
<p>Primary school transition Models of Practice</p> <p>Website, source code, design, manuals, evaluation data, analyses, multimedia resources and <i>inclusionED</i> core research and practice content.</p>	2.037RS	Copyright Confidential information		X
<p><i>inclusionED</i> design and content development</p> <p>Website prototype, logo and livery, domain, design, source code, core research, practice and multimedia content, evaluation data and report.</p>	2.045RU 2.063RU	Copyright Trademark Confidential information		X
<p>StoryTime</p> <p>E-learning early literacy training program for librarians, multimedia resources, evaluation data, analyses and report.</p>	2.052RU	Copyright Confidential information		X
<p>PowerWriter</p> <p>Videos, app designs, source code, manuals and teachers' materials, evaluation data, analyses and reports.</p>	2.010RS 2.053RU	Copyright Confidential information		X

Description	Project reference	Nature of IP	Background IP	Centre IP
Middle Years Behaviour Support Project MyCalendar app, teleconsultation protocols, tools evaluation data and analyses.	2.057RS	Copyright Confidential information	MyCalendar app owned by Queensland University of Technology Tools, protocols, evaluation data, analyses and findings owned by Autism CRC	X
Effects of humanoid robots on narrative role-taking abilities in children on the spectrum Research data and analyses.	2.060RI	Copyright Confidential information	Peabody picture Vocabulary test 4th edition owned by L.M. and D.M. Dunn, licensed by Queensland University of Technology	X
Collaborative partnerships in action Research data, analyses and findings.	2.066RU	Copyright Confidential information		X
An educators guide to myWAY Employability: Enabling support with transition planning for students on the spectrum Research data, analyses, findings, <i>inclusionED</i> research and practice content and multi-media resources.	2.067RU	Copyright Confidential information		X
Australian Longitudinal Study of Adults with Autism Longitudinal survey questionnaire, data, analyses, research summaries and reports.	3.013RC	Copyright Confidential information		X
Integrated Employment Success Tool (IEST™) Trademark name, content, format, design, tool and evaluation data, analyses, findings and report.	3.014RC	Copyright Confidential information Trademark		X
Better Outcomes and Successful Transitions for Autism (BOOST-A) BOOST-A website source code, designs, career responder system, training program resources including instructional videos, website content and algorithms and co-design data, analyses, findings, reports, <i>inclusionED</i> core research, practice content and multimedia resources.	3.014RC 3.048RU	Copyright Confidential information	Career Interest test owned by Jame Athanasou, licensed by Education Services Australia	X
Health and wellbeing of adults with autism Health hub website source code, content, materials and design. Autism CHAP evaluation data and analyses. CHECK Program training modules, Act on Your Life Program and resources. Research data, analyses, findings and report.	3.015RC 3.049RU	Copyright Confidential information		X
Longitudinal Study of Australian School Leavers Questionnaires for adults and parents, data, analyses, findings and report.	3.016RC	Copyright Confidential information		X
Optimisation of recruitment Research data, findings and report.	3.017RC	Copyright		X
Studio G: Multimedia Program for young adults Evaluation data and report.	3.030RI	Copyright		X

Description	Project reference	Nature of IP	Background IP	Centre IP
Peer mentoring program Peer mentoring program modules, manuals, facilitator, mentee materials and evaluation data analyses, findings.	3.032RS	Copyright Confidential information		X
MindChip Program Mind Chip program, Brain Computer Interface Game, content, source code, design.	3.032RS	Copyright Confidential information		X
Using big data to answer important questions on health and wellbeing Research analyses, findings and report.	3.038RI	Copyright Confidential information	Health Administration Cooperation data sets owned by HAC.	X
Supporting staff and students on the spectrum in STEM programs Website for staff, decision tree protocol, visual walk through lecture/tutorial, evaluation data and report.	3.039RI	Copyright		X
Driving project Driving instructor website source code, content, evaluation data, findings and analyses.	3.040RS	Copyright Confidential information		X
Public transport project App designs, logo, source code, content, evaluation data, findings, analyses and report.	3.041RS	Copyright Confidential information		X
Health Pathways Initiative Autism HealthPathways content, evaluation data and analyses.	3.046RI	Copyright Confidential information		X
Goal-Setting Tool for Adolescents and Adults (AAGST) AAGST evaluation data and report.	3.047RI	Copyright Confidential information	Original Goal Setting Tool copyright owned by Autism Queensland.	X
Autism@Work Questionnaires, research data, analyses and findings	3.054RI	Copyright Confidential information		
Development of an Assessment of Functioning Tool Based on ICF Core Sets Assessment tool, research data, analyses, findings and report.	3.061RI	Confidential information	ICF Core sets copyright owned by World Health Organisation	X
'Hear' to Help chat-bot technology Research data, analyses, findings and content for chatbot.	3.062RI	Copyright Confidential information	Chatbot technology owned by CSIRO	X
Autism-specific quality of life assessment tool Assessment tool, research data, analyses, findings and report.	3.068RI	Copyright Confidential information		X
MyWAY Employability, Telstra Foundation Tech4Good Web site and service design, domain, source code, content, <i>inclusionED</i> core research, practice content and multimedia resources.	3.072	Copyright Confidential information		X

Description	Project reference	Nature of IP	Background IP	Centre IP
Investigating autistic burnout Research data, analyses and findings.	3.076RI	Copyright Confidential information		X
Inclusive Research Practice Guides and Checklists Versions 1 and 2.		Copyright		X
Future Leaders Program Modules and e-learning resources. Evaluation data, analyses and report.	Sylvia Rodger Academy	Copyright		X
Governance Program Modules and e-learning resources.	Sylvia Rodger Academy	Copyright		X
Research Program Modules and e-learning resources. Evaluation data, analyses and report.	Sylvia Rodger Academy	Copyright		X
Research Program Visual Research Dictionary	Sylvia Rodger Academy	Copyright		X
National Guideline for Assessment and Diagnosis of Autism Consultation data, analyses, Guideline and community summaries.	0.007	Copyright		X
Autism & Agriculture project Autism and Agriculture employment program resources, evaluation data, analyses and report.	0.008	Copyright	Specialisterne Australia own copyright in original employment program resources	X
Relate-ABLE Survey data, analyses findings and report. Web designs, content and multimedia resources.	0.022	Copyright		X
Non Project intellectual property held by Autism CRC				
Autism CRC logo and livery		Trademark		X
autismcrc.com.au		Domain Name Copyright		X
Autism CRC Connect Hub		Domain Name Copyright		X
apps4autism.com		Domain Name Copyright		X
Sylvia Rodger Academy logo and livery		Trademark		X
turnKey CRC A ready to use software solution developed especially for Cooperative Research Centres (CRCs) using Salesforce.com.		Software		X

Intellectual property (Copyright) related to the Secret Agency Society (SAS) Computer Game owned by Social Skills Training Pty Ltd, a wholly-owned subsidiary of Autism CRC Ltd for the purpose of commercialising the SAS Program.

Item	Ownership
The software (the computer program, including the source code, and protected as a literary work) in the computer game, including the CD, downloadable and online versions of the game.	Social Skills Training Pty Ltd
The graphics, fonts, images of characters and concept artwork (protected as artistic works) included in the computer game.	Social Skills Training Pty Ltd and Renae Beaumont Enterprises as tenants in common.
The animated visual elements of the computer game which are seen as a moving picture (protected as a film).	Social Skills Training Pty Ltd and Renae Beaumont Enterprises Pty Ltd as tenants in common.
The composition of the sound effects and in-game audio of the computer game (protected as musical works).	Social Skills Training Pty Ltd
The sound samples of the computer game (protected as sound recordings).	Social Skills Training Pty Ltd
Copyright in Secret Agent Society Whole of Class program resources.	Social Skills Training Pty Ltd and Renae Beaumont Enterprises
Copyright in source code and data in online and downloadable versions of SAS computer game, and licence management system.	Social Skills Training Pty Ltd
Copyright in Social Skills Training Pty Ltd website - content, materials, design.	Social Skills Training Pty Ltd

Patent applications owned by Social Skills Training Pty Ltd

United States Provisional Patent Application No. 62/945351

Trademarks owned by Social Skills Training Pty Ltd

The following mark is registered in Australia, Canada, Madrid Protocol (TM), European Community (designated on Madrid Protocol) and United States of America (designated on Madrid Protocol).



The following plain text mark is registered in Australia, Canada, Madrid Protocol (TM), European Community (designated on Madrid Protocol), Japan (designated on Madrid Protocol) and United States of America (designated on Madrid Protocol):

Secret Agent Society: Solving the Mystery of Social Encounters

The following plain text mark is registered in Australia, Madrid Protocol (TM), European Community (designated on Madrid Protocol), United Kingdom (designated on Madrid Protocol) and New Zealand (designated on Madrid Protocol, with other international registrations pending:

Secret Agent Society

The following are unregistered marks of Social Skills Training Pty Ltd



Appendix 7: Glossary

AASQA	Autism Academy for Software Quality Assurance	IDPA	Integrated Diagnostic Protocol for Australia
ACT on your life	Acceptance and Commitment Therapy anxiety program	IEST	Integrated Employment Success Tool
ACU	Australian Catholic University	INSAR	International Society for Autism Research
AEIOU	AEIOU Foundation	IP	Intellectual property
AITSL	Australian Institute of Teaching and School Leadership	LASA	Longitudinal Study of Australian Students with Autism
ALSAA	Australian Longitudinal Study of Adults with Autism	LTU	La Trobe University
AO	Officer of the Order of Australia Medal	MoP	Models of Practice
ASAN AUNZ	Autistic Self Advocacy Network of Australia and New Zealand	MYBSP	Middle Years Behaviour Support Project
ASD	Autism Spectrum Disorder	NBPSA	Neurodevelopmental and Behavioural Paediatric Society of Australasia
APAC	Asia Pacific Autism Conference	NDIA	National Disability Insurance Agency
ASELCC	Autism Specific Early Learning and Care Centre	Neurodiversity	Concept that neurological differences – such as Autism, Attention Deficit Hyperactivity Disorder (ADHD) and Tourette Syndrome – are to be recognised, accepted and respected as any other human variation.
ASfAR	Australasian Society for Autism Research Conference	NESA	New South Wales Education Standards Association
Aspect	Autism Spectrum Australia	NHMRC	National Health and Medical Research Council
ATSI	Aboriginal and Torres Strait Islander	NSW	New South Wales
Autism SA	Autism South Australia	OT	Occupational Therapy
BOOST-A	Better Outcomes and Successful Transitions – Autism	PhD	Doctor of Philosophy
CALD	Culturally and Linguistically Diverse	QLD DET	Queensland Department of Education and Training
CEO	Chief Executive Officer	QUT	Queensland University of Technology
CFO	Chief Financial Officer	RAP	Resourceful Adolescent Program
CU	Curtin University	RAP-A	Resourceful Adolescent Program for Autism
Autism CHAP	Comprehensive Health Assessment Program for autistic adults and adolescents	RHD	Research Higher Degree
CIP	Centre Intellectual Property	RCT	Randomised Control Trial
CoEP	Classrooms of Excellence Program	SACS-R	Social, Attention and Communication Surveillance – Revised
CRC	Cooperative Research Centre	SAS	Secret Agent Society
CRM	Customer Relationship Management	SAS-WOC	Secret Agent Society Whole-of-Class program
EVAP	Education and Vocational Assessment Protocol	SASLA	Study of Australian School Leavers with Autism
EYBSP	Early Years Behaviour Support Project	SME	Small and Medium-sized Enterprise
GCAD	Graduate Certificate in Autism Diagnosis	SST	Social Skills Training Pty Ltd – a wholly owned subsidiary of Autism CRC
GP	General Practitioner	STEM	Science, Technology, Engineering and Maths
GU	Griffith University	TCC	Tele-Classroom Consultation
HFA	High Functioning Autism	UNSW	University of New South Wales
Human-Centred Approach	Also referred to as Human-Centred Design Thinking – an approach to problem solving that involves human perspectives at all phases of the problem-solving process.	UQ	University of Queensland
IASSIDD	International Association for the Scientific Study of Intellectual and Developmental Disabilities	UTAS	University of Tasmania
I CAN	The I CAN Network	UWA	University of Western Australia
		WMR	Wesley Medical Research

Our values



Inclusion

Working together with those with the lived experience of autism in all we do



Innovation

New solutions for long-term challenges



Independence

Guided by evidence-based research, integrity and peer review



Cooperation

Bringing benefits to our partners; capturing opportunities they cannot capture alone



Autism CRC

The University of Queensland
Long Pocket Precinct
Level 3, Foxtail Building
80 Meiers Road
Indooroopilly Qld 4068

T +61 7 3377 0600

E info@autismcrc.com.au

W autismcrc.com.au



@autismcrc



Australian Government
Department of Industry, Science,
Energy and Resources

Business
Cooperative Research
Centres Program