



## NEWSLETTER MARCH 2022

### WHO ARE WE?

We are a team of researchers from a number of institutions, who are linked with the Acquired Brain Injury Communication Lab at the University of Sydney. Our team is lead by Professor Leanne Togher, and includes experienced researchers, post-doctoral researchers, PhD and honours students, and project staff. You can find out more about us and our work by visiting:

<https://abi-communication-lab.sydney.edu.au/>

### BRAIN INJURY AUSTRALIA RESEARCH PARTNERSHIP:

Developing skills to use social media safely and successfully after brain injury

A pilot project, funded by *icare* NSW, is currently in progress, as a partnership between Brain Injury Australia and researchers in the ABI Communication Lab. The aim of this project, called “social-ABI-lity”, is for people with a brain injury to connect safely and successfully on social media.



In 2021, the social-ABI-lity project involved 16 people with an acquired brain injury developing their social media skills through a short training course and participating in a moderated Facebook group. Some members have described the benefits of being involved. Participants provided feedback such as, “I gained contact with peers in a professional, structured manner” and, “It helped when I was bored and isolated.” Participants also provided ideas to make the group more helpful.

These ideas included more reminders to check and post in the Facebook group, and the need for more structured goals. The research project team are using this feedback to plan recommendations for how to run brain injury Facebook groups in the future.



**In 2022, the project will be running again and there is another opportunity for people with a brain injury to participate.**

Volunteering will include completing some interviews, completing an online course to develop social media skills, and participating in a private moderated Facebook group to practise social media skills over a 8 week program. This is an ethically approved research project, through the University of Sydney. **To find out more about participating, contact Melissa Brunner at: [melissa.brunner@sydney.edu.au](mailto:melissa.brunner@sydney.edu.au)**

### NEW VR RESEARCH PROJECT



**Using VIRTUAL REALITY to assess communication skills after traumatic brain injury**

Researchers in the ABI Communication Lab are starting a new research project using virtual reality. This project will trial virtual reality (VR) apps with people with TBI and speech pathologists. We are interested in learning about the participants’ opinions and experiences to provide us with information about how we can use VR to assess cognitive-communication disorders and to inform the design of future VR tasks.

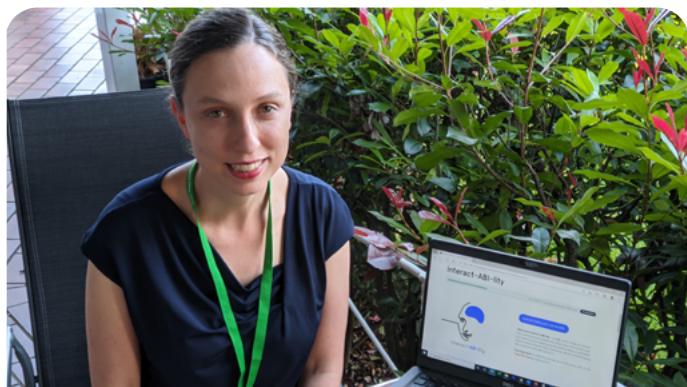
Volunteering will include completing some interviews and questionnaires, testing virtual reality apps with a researcher, and giving feedback about using virtual reality. This study has been approved by the University of Sydney Human Research Ethics Committee. **To find out more about participating, contact Sophie Brassel at: [sophie.brassel@sydney.edu.au](mailto:sophie.brassel@sydney.edu.au)**

## NEW ONLINE RESOURCE ABOUT COMMUNICATION AFTER BRAIN INJURY: **interact-ABI-lity**



**interact-ABI-lity** is a new self-guided online course about communication after brain injury for family members, friends, and carers of people with an ABI. This course has been developed from a partnership between the *University of Sydney*, *University of Technology Sydney*, and *Brain Injury Australia*. *icare NSW* provided funding support for development of the course as part of the Social Brain Toolkit.

This course has information about how communication changes after ABI, and how best to help. The course has been developed based on best evidence about supporting communication after ABI, and with input from people with ABI and their family members. The resources include video stories featuring four people who have an ABI and their family members.

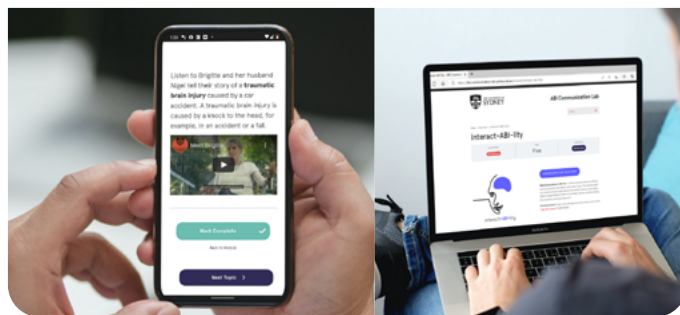


Dr Rachael Rietdijk is a speech pathologist and researcher from The University of Sydney who has worked on developing the course. Rachael notes that this resource fills an important need, explaining,

**“interact-ABI-lity is the first self-guided short course focussed on communication after a brain injury which families or friends can access independently at any time. Our aim is that providing this information will create better understanding of communication issues after ABI.”**

The course is currently open for enrolments as part of an ethically approved research project. All are

welcome to sign-up for free at <http://bit.ly/interact-ABI-lity>. For more information about interact-ABI-lity and the Social Brain Toolkit project, contact Rachael Rietdijk at [rachael.rietdijk@sydney.edu.au](mailto:rachael.rietdijk@sydney.edu.au).



## ★ CONGRATULATIONS ★ TO OUR GRADUATING HONOURS STUDENTS

We would like to congratulate graduating speech pathology students **Zali Hall** and **Kelly Yiew** who recently completed their honours research projects with the ABI Communication Lab.

**Zali's research** was a systematic review exploring co-constructed communication interventions in ABI populations. Zali's review highlighted the value and clinical feasibility of co-constructed communication interventions in supporting everyday communication. Zali's findings were well received at the Aphasia CRE meeting in November 2021.

**Kelly's research** focussed on using software to automatically analyse the facial expressions that people with a brain injury and people without a brain injury used while retelling stories. Kelly's findings will help us to plan further research about how this software might be used clinically.

We wish Zali and Kelly all the best as they start their careers as speech pathologists.

## HONOURS RESEARCH

Fourth year Speech Pathology honours student **Erica Zhang** is conducting a project that explores the nature of important event narratives told by individuals with severe TBI at 6 months, 1 year and 2 years following their injury.

Erica achieved an outstanding result for her honours proposal (Congratulations Erica!) and is currently at the stage of data analysis. We anticipate that these findings will inform future narrative-based interventions across the recovery continuum.

## UPCOMING PRESENTATIONS

**Prof Leanne Togher** is the invited keynote speaker for the **German Association of Aphasia** (Gesellschaft für Aphasieforschung und Behandlung) at Bielefeld University, Germany (28-29 October 2022).

**Prof Togher** has also been invited to give the **Mark Rochon Distinguished Lecture, Toronto Rehabilitation Institute**, Toronto, Canada (26 September 2022)

**Members of the ABI Communication Lab** will also be presenting research at the **45th ASSBI Brain Impairment Conference** (5-7 May 2022, Perth/hybrid) (Australasian Society for the Study of Brain Impairment - ASSBI Conferences) and at the **International Aphasia Rehabilitation Conference** (22-24 June, 2022, Philadelphia, USA). <https://www.aphasiaaccess.org/iarc2022/>

## NHMRC PARTNERSHIP GRANT SUCCESS

**Prof Togher** is a chief investigator on the \$3.5m NHMRC Partnership Grant entitled:

### Optimising functional and social independence and safety of older people living with dementia in care homes: Implementation research

The 5-year project will promote and accelerate the integration and knowledge translation of evidence on person centred, reablement approaches to dementia care in aged care homes, in order to improve functional and social independence, safety, and overall health and wellbeing of residents with dementia, and reduce avoidable costs.

This will include a multidisciplinary approach to care, with speech pathology involvement comprising staff communication partner training, provision of alternative and augmentative communication where needed, as well as personalised speech pathology consultations for those with communication disabilities.

The project is **led by Prof Yun-Hee Jeon** at The University of Sydney with a multidisciplinary team and aged care providers.

## speechBITE

Speech Pathology Database for Best Interventions and Treatment Efficacy

**SpeechBITE continues to be supported by Speech Pathology Australia in 2022**

## PUBLICATIONS

### 2022

#### Living with cognitive communication disorders.

Hoepner, J. & Togher, L. (2022). Living with cognitive communication disorders, (Chapter 22, 543-580). Aphasia and related neurogenic communication disorders, 3rd Edition. Papathanasiou, I. & Coppens, P. (Eds). Burlington, MA: Jones & Bartlett.

#### Assessment and treatment of speech and language disorders following traumatic brain injury.

Togher, L., Elbourn, E. & Keegan, L. (2021). Assessment and treatment of speech and language disorders following traumatic brain injury. (Chapter 67, 1026-1039). In Brain Injury Medicine, Third Edition, Nathan Zasler, Douglas Katz, Ross Zafonte (Eds), New York: Demos Medical.

#### Co-producing knowledge of the implementation of complex digital health interventions for adults with acquired brain injury and their communication partners: A mixed-methods study protocol.

Miao M, Power E, Rietdijk R, Debono D, Brunner M, Salomon A, McCulloch B, Wright MR, Welsh M, Tremblay B, Rixon C, Williams L, Morrow R, Evain J, Togher L. (2022). Co-producing knowledge of the implementation of complex digital health interventions for adults with acquired brain injury and their communication partners: A mixed-methods study protocol. JMIR Research Protocols. 24/11/2021:35080 <https://preprints.jmir.org/preprint/35080/accepted>

### 2021

#### Description and effectiveness of communication partner training in TBI: A systematic review.

Behn, N., Francis, J., Togher, L., Hatch, E., Moss, B., Hilari, K. (2021). Description and effectiveness of communication partner training in TBI: A systematic review. Journal of Head Trauma Rehabilitation, 36 (1), 56-71, Publish ahead of print, [doi.org/10.1097/HTR.0000000000000580](https://doi.org/10.1097/HTR.0000000000000580)

#### Reporting on novel complex intervention development for adults with social communication impairments after acquired brain injury.

Behn, N., Marshall, J., Togher, L. & Cruice, M. (2021). Reporting on novel complex intervention development for adults with social communication impairments after acquired brain injury. Disability and Rehabilitation, 43 (6), 805-814, [doi.org/10.1080/09638288.2019.1642964](https://doi.org/10.1080/09638288.2019.1642964)

#### Discourse analysis of humor after traumatic brain injury.

Keegan, L. & Togher, L. (2021). Discourse analysis of humor after traumatic brain injury. American Journal of Speech Language Pathology, 30 (2), 949-961, [doi.org/10.1044/2020-AJSLP-20-00059](https://doi.org/10.1044/2020-AJSLP-20-00059)

### **Participants' perspectives of feasibility of a novel group treatment for people with cognitive communication difficulties following acquired brain injury.**

Behn, N., Marshall, J., Togher, L. and Cruice, M. (2021). Participants' perspectives of feasibility of a novel group treatment for people with cognitive communication difficulties following acquired brain injury. *Disability and Rehabilitation*, 43 (2), 171-180, [doi.org/10.1080/09638288.2019.1618929](https://doi.org/10.1080/09638288.2019.1618929)

### **Recommendations for the design and implementation of virtual reality for acquired brain injury rehabilitation: Systematic Review.**

Brassel, S., Power, E., Campbell, A., Brunner, M., & Togher, L. (2021). Recommendations for the design and implementation of virtual reality for acquired brain injury rehabilitation: Systematic Review. *Journal of Medical Internet Research*, 23, (7), e26344, <https://www.jmir.org/2021/7/e26344>

### **Social media and people with traumatic brain injury (TBI): A meta-synthesis of research informing a framework for rehabilitation clinical practice, policy, and training.**

Brunner, M., Hemsley, B., Togher, L., Dann, S., & Palmer, S. (2021). Social media and people with traumatic brain injury (TBI): A meta-synthesis of research informing a framework for rehabilitation clinical practice, policy, and training. *American Journal of Speech Language Pathology*, 30 (1), 19-33, [doi.org/10.1080/09638288.2019.1685604](https://doi.org/10.1080/09638288.2019.1685604)

### **Rehabilitation professionals' views on social media use in traumatic brain injury rehabilitation.**

Brunner, M., Togher, L., Palmer, S., Dann, S. & Hemsley, H. (2021). Rehabilitation professionals' views on social media use in traumatic brain injury rehabilitation. *Disability and Rehabilitation*, 43 (14), 1955-1964 [doi.org/10.1080/09638288.2019.1685604](https://doi.org/10.1080/09638288.2019.1685604)

### **Transdiagnostic Assessment Protocol for Neurodevelopment and Mental Health: A Harmonised National Data Collection Network for Neurodevelopmental Disorders.**

Boulton, K., Coghill, D., Silove, N., Pellicano, E., Whitehouse, A., Bellgrove, M., Rinehart, N., Lah, S., Redoblado-Hodge, M., Badawi, N., Heussler, H., Rogerson, N., Burns, J., Farrar, M.A., Nana, R., Novak, I., Goldwater, M., Munro, N., Togher, L., Nassar, N., Quinn, P., Middeldorp, C., & Guastella, Adam (accepted 15 October 2021). Transdiagnostic Assessment Protocol for Neurodevelopment and Mental Health: A Harmonised National Data Collection Network for Neurodevelopmental Disorders, *JCCP Advances*. [doi.org/10.1002/jcv2.12048](https://doi.org/10.1002/jcv2.12048)

### **The impact of cognitive-communication difficulties following traumatic brain injury on the family: a qualitative focus group study.**

Grayson, L., Brady, M., Ali, M. & Togher, L. (2020). The impact of cognitive-communication difficulties following traumatic brain injury on the family: a qualitative focus group study. *Brain Injury*, 35, (1), 15-25 [doi.org/10.1080/02699052.2020.1849800](https://doi.org/10.1080/02699052.2020.1849800)

### **Improving natural social interaction: Group rehabilitation after Traumatic Brain Injury.**

Keegan, L.C, Murdock, M., Suger, C. & Togher, L. (2021). Improving natural social interaction: Group rehabilitation after Traumatic Brain Injury. *Neuropsychological Rehabilitation*, 30 (8) 1497-1522, [doi.org/10.1080/09602011.2019.1591464](https://doi.org/10.1080/09602011.2019.1591464)

### **Narrative discourse intervention after traumatic brain injury: A systematic review of the literature.**

Steel, J., Elbourn, E. & Togher, L. (2021). Narrative discourse intervention after traumatic brain injury: A systematic review of the literature. *Topics in Language Disorders*, January/ March 2021 - Volume 41 - Issue 1 - p 47-72, [doi.org/10.1097/TLD.0000000000000241](https://doi.org/10.1097/TLD.0000000000000241)

### **A web-based service delivery model for communication training after brain injury: A mixed-methods, prospective, Hybrid II implementation-effectiveness study protocol.**

Miao M, Power E, Rietdijk R, Togher L, Brunner M, Debono D. (2021). A web-based service delivery model for communication training after brain injury: A mixed-methods, prospective, Hybrid II implementation-effectiveness study protocol. *JMIR Research Protocols*, 10 (12) e31995, <https://preprints.jmir.org/preprint/31995/accepted>

### **Implementation of online psychosocial interventions for people with neurological conditions and their caregivers: A systematic review protocol.**

Miao, M., Power, E., Rietdijk, R., Brunner, M., Togher, L. (2021). Implementation of online psychosocial interventions for people with neurological conditions and their caregivers: A systematic review protocol, *Digital Health*, 7 <https://doi.org/10.1177/20552076211035988>.

### **Comparing higher and lower weekly treatment intensity for chronic aphasia: A systematic review and meta-analysis.**

Pierce, J.E., O'Halloran, R., Menehemi-Falkov, M., Togher, L., & Rose, M. (2021). Comparing higher and lower weekly treatment intensity for chronic aphasia: A systematic review and meta-analysis. *Neuropsychological Rehabilitation*. 31 (8) 1289-1313 [doi.org/10.1080/09602011.2020.1768127](https://doi.org/10.1080/09602011.2020.1768127)

### **Statistical analysis plan (SAP) for the COMPARE trial: a 3-arm clinical trial to determine the comparative effectiveness of Constraint-induced Aphasia Therapy Plus and Multi-modality Aphasia Therapy to usual care in chronic post-stroke aphasia**

Rose, Miranda; Rai, Tapan; Cadilhac, Dominique; Carragher, Marcella; Copland, David; Foster, Abby; Godecke, Erin; Hurley, Melanie; Kim, Joosup; Meinzer, Marcus ; Wilcox, Cassie; Nickels, Lyndsey; Togher, Leanne (2021) Statistical analysis plan (SAP) for the COMPARE trial: a 3-arm clinical trial to determine the comparative effectiveness of Constraint-induced Aphasia Therapy Plus and Multi-modality Aphasia Therapy to usual care in chronic post-stroke aphasia, *Trials*.22 (1), article 303.