

Inquiry into the opportunities to improve mental health outcomes for Queenslanders

Submission from the Tropical Brain and Mind Foundation, Townsville

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There is no health without brain health

The Tropical Brain and Mind Foundation (TBMF) wishes to provide the Inquiry with an example of a locally developed, collaborative community example of how to address and improve the very concerning mental health of Queenslanders.

The Tropical Brain and Mind Foundation, a not-for-profit charity (ABN: 56428597957), was established in 2014 in response to the increasing incidence of mental health issues experienced in the community. Our vision is "For communities to flourish, individuals must also flourish which requires healthy minds and bodies". The Foundation's focus is to support innovation in the area of brain health research and practice, brain skills and the economic benefits that come from such projects.

Currently, we have initiated three major projects, two local and the other both national and international. They are:

- a) Mentally Healthy City Townsville
- b) A proposal to establish "The Brain Place: a Centre for Brain Health in the Tropics"
- c) North Queensland Elite Youth Rugby League Project

a) Mentally Healthy City Townsville

Townsville was the first city in Australia to take up the Mentally Healthy City challenge to support population-wide wellbeing. Mentally Healthy City Townsville (MHCT) is auspiced by the Tropical Brain & Mind Foundation (TBMF) to take action to support the communities within the Townsville City Council Local Government Area to achieve a balance of mental health and wellbeing.

This program is now available for other communities to take up and adapt.

The national statistics show that 45% of the population will live with mental distress in their lifetime and 20% of the population will live with mental distress in any twelve-month period. To address these shocking and growing statistics mental health and wellbeing must be everyone's business.

The TBMF's commitment to MHCT is clearly stated in the Foundation's purpose... *a community-based organisation that exists to promote and improve brain health and wellbeing through advocacy, education, and research.* The Foundation's aspiration is to create *flourishing communities where healthy minds, bodies and environments* are evident. MHCT's Charter takes a whole of community approach to take action to support the communities within the TCC area to achieve a balance of mental health and wellbeing that nurtures a city where *"a state of well-being in which every individual realises his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community."*

For further details on this program please see Attachments A and B

b) The Brain Place: Centre for Brain Health in the Tropics

The Brain Place will be a world class tropical research, service delivery and educational centre based in Townsville, North Queensland. The Brain Place will bring together top researchers, brain health professionals and community members to better understand brain health.

As Australia's largest city in the tropics, Townsville will host this collaborative and innovative facility to provide much needed research, service provision and education that will improve and inform governments, universities, doctors, business leaders and the wider community.

The Brain Place will be the first centre globally to be focussed on brain health research, service delivery and education in and for the tropics. See Attachments C and D attached.

c) North Queensland Elite Youth Rugby League Project

This research project was an initiative of the Bishop Michael Putney Fellowship under the auspices of the Tropical Brain and Mind Foundation. In 2016, after a number of elite junior rugby league players in Townsville took their own lives, a Townsville Emerging Leaders group decided to raise funds to support research into what could be done to help such young people.

Over \$170,000 was raised by this group of young business leaders who ran golf days, Hit the Hill and other fund raisers. The research project is now completed and they are in the process of applying the research findings in schools and clubs. See Attachment E for further details.

Our message

Our message to the inquiry is that there is little funding for innovation in the area of mental health. Most inquiries look at how to improve existing services and policies. There are no funding sources for Level 1 (prevention and self management for those at risk) of the National Mental Health Plan, as Levels 3-5 (moderate, severe and acute illness) suck up most of the available funding. We need to be looking at prevention in a much more focussed way, particularly to address the drastic statistics and cost of workplace absenteeism and productivity. Our proposal to establish the Brain Place as a centre for research, service and education will address this gap. We are currently seeking funds to do this.

We would be delighted to present in person to the Inquiry.

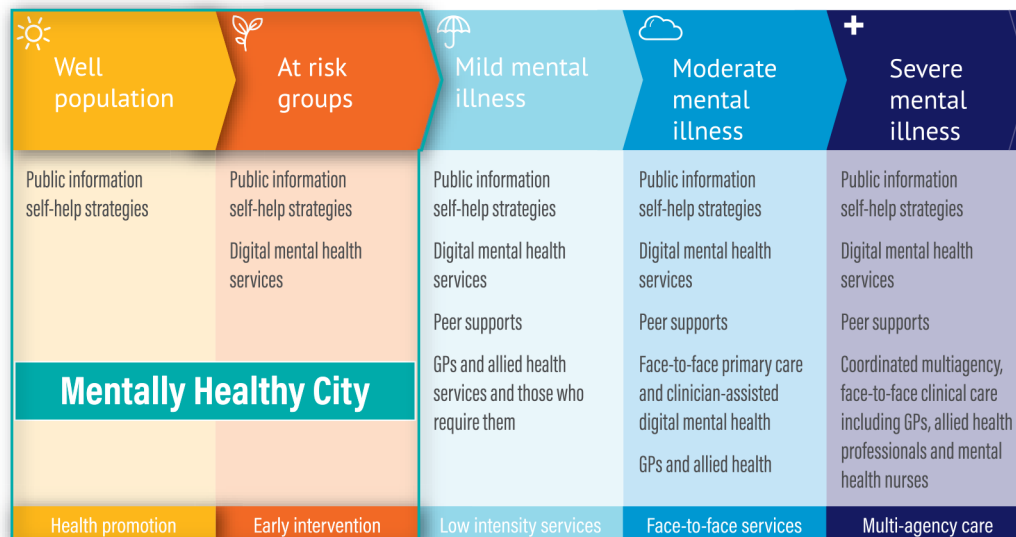
Attachments

- A. Outline of the Mentally Healthy City Townsville initiative
- B. 7 Ways to Wellbeing for Townsville Small Business
- C. One pager on the Centre for Brain Health in the Tropics
- D. Four page brochure on the Centre for Brain Health in the Tropics
- E. Four page summary of the North Queensland Elite Youth Rugby League Research

a) Mentally Healthy City Townsville

The National Mental Health strategy is based on the Stepped Care Model provided below.

Mental health step care model



MHCT Activities Financial Year 21/22

Between July and December 2021, the Tropical Brain and Mind Foundation's (TBMF) Mentally Healthy City Townsville (MHCT) delivered a Grant funded by the Department of Small Business, Employment and Training (DSBET) to assist Townsville small businesses to access training and support focussed on building self-help skills. This work is encapsulated in Step 1 and to some degree Step 2 in the National Mental Health Step Care Model.

MHCT very successfully delivered training and support to small businesses in a manner that met their needs and workplace demands. The key request from small business owners and staff was for a strong focus on wellbeing, self-care strategies and leading/managing a mentally health workplace. Training focused on both physical and emotional wellbeing and was delivered at the workplace or a suitable and accessible location. Training times were offered before and after work and during lunch time as this flexibility enabled maximum participation.

This grant also created an opportunity for MHCT to compile and publish **"7 ways to well-being for Townsville small business"** (this booklet is attached for your reference). Six local small business owners and a leading psychiatrist with a passion for brain health contributed to the content in this booklet. The content contained in the "7 ways to well-being for Townsville small business" may be contextualised to meet the needs of other local government areas, diverse community groups, individuals, and industry sectors.

Given the findings of the Australian Productivity Commission Inquiry into Mental Health released in June 2020, as stated below, it is clear that **secure and appropriate funding for Step 1 and 2 (prevention and early intervention) is severely lacking** and must be of paramount importance and a very high priority to address the significant impact of mental wellbeing health and suicide in the small business sector and broader communities.

MHCT has found it extremely difficult or near impossible to identify any sustainable funding for Step 1 and 2 on the Step Care Model. This is especially relevant in 2022 given the ongoing impact of Covid 19 on the small business sector and the broader community groups. The figures below clearly demonstrate the undeniable impact on productivity. A strong economy cannot be realised without flourishing communities.

The Productivity Commission Report identified that in the Financial Year 2018/2019 it is estimated that the approximate economic cost of mental ill-health and suicide was between \$43 billion - \$70 billion.

- \$16 billion spent on direct healthcare and other support services.
- **\$12billion - \$39 billion** was a result of **lost productivity** and economic participation (lost productivity may also be referred to a *presentism*, i.e., people attending work performing at 50% productivity – attention to mental wellbeing has a significant role to play in addressing this issue as its impact on small business, employees and their families is of paramount importance.)
- \$15 billion care provided by family and friends.

An overview of the small business industry indicates that:

- Small business accounts for 98% of Australian businesses (ASBFEO, 2019), increasing by 6% since 2016 (ASBFEO, 2016),
- Employed 2.2 million people (2019),
- The majority, or 62%, are self-employed (2019), and
- 27% (2019) are micro-businesses.

Challenges for small businesses were cited as access to finance, access to innovation, access to justice, cybersecurity and Australian Government assistance and procurement. (Main Report: Small Business Owners and Mental Health 2020).

In August 21 MHCT also delivered a highly successful Carer Retreat, focussing on self-care strategies for carers registered with Wellways Carer Gateway.

MHCT Activities Financial Year 20/21

Work commenced on the consultation and development of a MHCT Charter to specify the organisations and community groups that form the stakeholder engagement cohorts as well as engagement activities.

Extensive work was undertaken to update and refresh the MHCT Website; this included a partnership with Implemental UK. MHCT created a Wheel of Well-being (WoW) landing page highlighting the 'Introduction to Well-being' short training course and links to further information on WoW.

Significant work was carried out to adjust the Department of Small Business, Employment and Training (DSBET) MHCT Small Business Grant to meet the needs of local small businesses in Townsville; the delivery of this grant will be completed by December 2021.

Significant consultation meetings were undertaken to ensure that MHCT would have an opportunity to participate in the establishment of the federally funded Adult Mental Health Hub to be established in Townsville in December 21.

MHCT has regularly attended the North Qld Alliance for Mental Health to provide feedback regarding local resources and workshops available to community organisations.

The Wellness Academy was established with the GO1 platform offering online mental health and wellbeing training. (Lack of funding has had a significant impact on the MHCT's capacity to continue with this venture).

Between July 2020 to 30 June 2021, MHCT successfully delivered mental health and well-being workshops that were a combination of online and face to face delivery. These workshops focused on mental health and well-being resilience to meet the needs of communities and businesses impacted by the 2019 floods and the COVID-19 pandemic.

MHCT supported school-based partnerships, including WoW workshops for parents to help implement well-being at home. Key learnings of the WoW were focused on assisting families to address the impact of COVID-19 within work and school learning environments.

MHCT Community Champions and Advocates have participated in mental health and well-being training such as Mental Health First Aid and WoW.

MHCT sponsored the Townsville BBQ Battle in 2020 and 2021 to promote mental health and well-being within the community. In 2020 the BBQ Battle was impacted by the restrictions of COVID-19 and was turned into a virtual event that was delivered at specific Townsville BBQ outlets and aired live via Facebook.

MHCT successfully led a Community BBQ with Matt Golinski to specifically promote mental health, well-being, and healthy eating. Dr Calogero Longhitano (Carlo) shared his insight and knowledge into healthy eating and Matt Golinski prepared an easy low-cost meal.

MHCT attends the Townsville Area Compassionate Communities Interagency Network (TACCIN) monthly meetings. This creates an opportunity to engage with seven Local Government Areas in the THHS regarding palliative care as well as providing updated mental wellbeing information.

MHCT delivered two rounds of a Community Sponsorships Program (November 2020, and March 2021) through a grant funded by the Department of Communities, Disabilities, and Seniors.

Kirwan Police station teamed up with MHCT to place MHCT stickers on first responder vehicles. This initiative has prompted further consultation with Kirwan Police to provide MHCT resources such as posters and other help seeking information for staff. TCC also placed MHCT stickers on their vehicle fleet, which supports MHCT brand recognition. MHCT Small Business Champions also agreed to display MHCT logo stickers on their vehicles, and MHCT logos on work shirts as well as providing Service Finder Cards to clients.

MHCT continued to provide ongoing support in 2021 for Strive Lane activities, Get Active (January), O-Week Market Day JCU Townsville Campus (February), Founder Wellness Breakfast (April), Townsville Small Business Expo (May), Life Skills Queensland Community Event (May), Townsville Multicultural Day (May), walk4mentalhealth (May), Our Townsville (June), Townsville BBQ Battle (June), walk4mentalhealth (June), and HIPPY parents group presentation/workshop Community Gro Upper Ross (June). MHCT also provided ongoing support for a Mental Wellbeing Impact Assessment workshop (August), and Local promotion of Mental health week (October) in 2020.

Significant consultations were undertaken with Wellways Carer Gateway and Carers to prepare for a Carer Retreat to be delivered in August 21; the first Carer Retreat outside of the southeast corner.

MHCT has successfully negotiated a Case Study feature in the QAMH Wellbeing First Report to be launched in July 2021. This Case Study is featured in Part 1: Mental Health Crisis, this section discusses the need for a significant investment in the areas of Prevention and Early Intervention as clearly articulated in the feature discusses the role of MHCT in the Findings of the Australian Productivity Commission Inquiry into Mental Health launched in June 2020.

MHCT contributed to an academic article: "Mentally Healthy City Townsville: Promoting Well-being in Communities" to be included in a Book written by Associate Professor Abraham Francis, Head, Social Work, and Human Services College of Arts, Society, and Education (CASE), in the Division of Tropical Environments and Societies (DTES), James Cook University, Australia.

7 ways to well-being for Townsville small business



Mentally Healthy
City Townsville™



What is well-being?

Mentally Healthy City Townsville (MHCT) believes that 'well-being is everyone's business, and it starts with me!'

Well-being happens in communities that work together to strengthen and nurture the environments where people live, work, and play to thrive and flourish.

Well-being is challenging to define; however, well-being is about what helps people flourish now and into the future, in other words "how are we doing?"

The factors affecting well-being will change from time to time because what one person feels is their perfect state of well-being may be completely different from another person, depending on their goals, ambitions, and personalities.

Why is well-being important to small business?

Taking a proactive approach to well-being is good for small business because it increases employee retention, security, and productivity, which decreases the cost of continual recruitment and training.

The Findings: Australian Productivity Commission Inquiry Mental Health delivered in June 2020 stated that the



Dr Cathy Day
Chair, Tropical Brain and Mind Foundation

cost of lower economic participation and lost productivity to the Australian economy was between \$12 - \$39 billion in the 2018/19 financial year. These figures indicate the imperative nature of addressing well-being for small business.

We have produced this resource; 7 ways to well-being for Townsville small business to enhance well-being in our local region.

We invite you to learn from other locals as we all work together to improve well-being in our community.

Dr Cathy Day
Chair
Tropical Brain and Mind Foundation

1. Understanding the workspace.



2. Enhancing connectedness.



3. Building capability.



4. A continual improvement approach.



5. Encouraging brain health.



6. Coaching for success.



7. Supporting someone in distress.



7 ways to well-being for Townsville small business

The Australian Productivity Commission Inquiry Report - Mental Health released in June 2020 includes these key statistics:

Direct approximate economic cost of mental ill-health and suicide is \$43 billion - \$70 billion.

\$16 billion per year is spent on healthcare and other support services.

Lost productivity and economic participation costs \$12 - 39 billion per year.

\$15 billion worth of care is provided by family and friends.

The cost of mental ill-health and suicide to Australia is \$151 billion.

Facts to consider.

The Small Business Owners and Mental Health Report 2020 indicates:

Small business accounts for 98% of Australian businesses.

The small business sector employs 2.2 million people.

62% are self-employed.

Challenges for small businesses were cited as access to finance, access to innovation, access to justice, cybersecurity and Australian Government assistance and procurement.

1. Understanding the workspace.

We spend a large portion of our day in the workplace, whilst we pay attention to mental well-being at work, we also need to focus on the workspace. For example, unfavourable workspaces can reduce productivity, conversely a favourable workspace can increase productivity by 5% - 15%. Plants help bring more fresh oxygen into the air, which could reduce illnesses and allergies.

Ask your employees what they need regardless of whether you work inside or outside. Maybe an anonymous survey that enables workers to express what things are hindering their productivity; this gives the business owner somewhere to start. Creating a truly productive workplace requires ongoing communication with all workers. - smallbusinessbonfire.com



2. Enhancing connectedness.

As human beings we all have a need to belong, we need to have a closeness or a feeling of connectedness with family, friends, and work colleagues. We also need to understand what motivates our behaviour so that we can build satisfying relationships. Quality customer relations is critical to the success of small business.

Giving employees the power and freedom to take real ownership of their work; this can often be challenging and fun, but it also offers a sense of security and personal safety as they develop their skills. These things collectively create a genuine sense of belonging to the business. - Dr William Glasser.



Be inspired by a local business leader.

"Physical beings or objects are noticed in the workspace but what about the small things like lighting, noise, and access to fresh air, they also impact on maintaining a healthy workspace. Working under the North Queensland sun means heat is a huge factor! So, we drink plenty of water and take shade breaks."

Kyle Holznagel - Lexerturf & Landscaping.



Be inspired by a local business leader.

"Our mission at Moksha Room's is to meld health, beauty, and creative expression into a nurturing space for all. We focus on individual talents and strengths and encourage continuous personal and professional growth opportunities. Productivity flourishes when staff are safe and connected."

Cindy Walker - Moksha Room Hair & Beauty.



Taking action.

- ✓ Take regular breaks to refresh and reset.
- ✓ Have a water bottle close by to stay hydrated.
- ✓ Ensure all adequate PPE is in the workplace before commencing work.
- ✓ Listen to your workers be approachable.
- ✓ Check the workspace for what is not obvious.

Taking action.

- ✓ Provide healthy and nutritious food for staff on very busy days.
- ✓ Personalise time for each employee, separate from staff meetings, listen, and negotiate to meet both needs.
- ✓ Connect through mental wellbeing and physical activities.
- ✓ Provide space that is open to creative opportunities for staff to express their ideas for the direction of the business.
- ✓ Be flexible and individualise staff hours, where possible without compromising mental wellbeing.

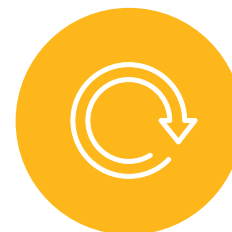
3. Building capability.

Small business owners support their employees through the peaks and troughs of life by keeping communication open, listening to concerns, being non-judgemental and finding ways to support their valued employees. Support may be informal, but employees will feel heard and valued. Small business owners ensure their employees have the resources, skills and wellbeing support they need to perform their roles. Employees are clear about what is expected of them, they feel confident raising issues, and feel connected to the team and valued for their contributions. They feel they can be themselves at work, no matter who they are or where they come from.

- www.mentalhealthcommission.gov.au/mental-health-reform/national-workplace-initiative



4. A continual improvement approach.



Creating mentally healthy workplaces is a journey made up of small continuous improvement actions. Sometimes it may require a bold strategic shift or investment. Continuous improvement for mental wellbeing is not a set and forget exercise; it is something that requires ongoing attention and evolves over time. Ensuring mental well-being takes continual improvement, assessing where action is required and learning from what works and what needs improvement. Everyone has a role to play and there are no simple solutions. Small businesses need a different approach to larger organisations, and different roles and professionals offer different perspectives to mentally healthy workplaces.

- www.mentalhealthcommission.gov.au/mental-health-reform/national-workplace-initiative

Be inspired by a local business leader.

"To be productive our small business needs workers who have both technical and people skills. If all of the wheels are on the cart at home the worker performs more efficiently. We know the value of asking for help, so we engage Centacare to help our workers and their families when life throws a curved ball. Focusing on mental well-being builds a capable workforce and a productive business."

Stuart Cunningham - Core Developments NQ.



Be inspired by a local business leader.

"Having an attitude to serve our youth in the best possible way keeps us ahead of the game at Strive Lane - Developing Tomorrow's Leaders. This encompasses a positive attitude towards lifelong learning to ensure we effectively help young people benefit from the opportunities we introduce."

Joe Mikaele Ah-Kuoi - Strive Lane.



Taking action.

- ✓ Stay alert and know when to take preventive steps.
- ✓ Don't sweat the small stuff.
- ✓ Listen to your workers, happy home life productive worker.
- ✓ Stay ahead of the game staff training matters.
- ✓ Pay attention when building work teams, understand your workers skills and personalities.

Taking action.

- ✓ Start with the end in mind and know why you are in business.
- ✓ Know and connect with your customers.
- ✓ Provide an excellent service and treat everyone with respect and dignity to protect your reputation.
- ✓ Prioritise a realistic balance that ensures me-time amongst the thick of your working day or week.

5. Encouraging brain health.

The human brain is the command centre for the nervous system and enables thoughts, memory, movement, and emotions by a complex function that is the highest product of biological evolution. Maintaining a healthy brain during one's life is the uppermost goal in pursuing health and longevity.

Brain health is an emerging and growing concept that encompasses brain development, plasticity, functioning, and recovery across the life course. Good brain health is a state in which every individual can realise their own abilities and optimise their cognitive, emotional, psychological, and behavioural functioning to cope with life situations.

- Professor Zoltan Sarnyai MD, PhD, MA (Cantab) Professor of Pharmacology.



Be inspired by a local business leader.

"There's no health without mental health! Science is helping us understand how we can improve our brain health. Frame your activities in a positive light. Chunk down complex tasks in smaller achievable pieces and celebrate success! Take time off and recharge your mind."

Dr Calogero Longhitano - Townsville Hospital and Health Service.



Taking action.

- ✓ Look after your brain health everyday.
- ✓ Choose to eat healthy, nutritious, and natural food.
- ✓ Take breaks regularly, look out of the window at nature every now and then.
- ✓ Get your heartbeats up daily by walking, running, swimming or whatever makes your heartbeat faster.
- ✓ Spend quality time with your loved ones and nurture your passions.

6. Coaching for success.



Small business leaders who inspire their employees to collaborate to deliver productive quality work are coaching for success. These leaders eliminate coercion and fear, they build a culture of wellbeing that focuses on quality and self-evaluation. Leaders who coach for success ask themselves the following self-reflective questions: Do your employees see you as a leader or a boss? Is the emphasis on 'getting the job done' or 'doing the job well'? Do your employees evaluate their work for quality? Successful leaders have tremendous energy and help others become energised. They engage employees in articulating a shared vision of quality and success. They set standards and encourage employees to evaluate their work, which leads to increased quality and productivity.

- Managing to Inspire Bringing Out the Best in Those You Supervise Bob Sullo.

Be inspired by a local business leader.

"The Townsville Multicultural Support Group is a genuinely diverse workplace where we create a seat at the table to encourage an opportunity for all to be included and participate. We are mindful that just because someone is invited, it does not mean they are included. We encourage an honest, transparent and collaborative work environment." Stephanie Naunton - Townsville Multicultural Support Group.



Taking action.

- ✓ Explore what motivates your team members? How do they learn best?
- ✓ Develop team members skills, loyalty, and trust - if they help draft the road map, they will be committed to the journey ahead.
- ✓ Remember there is no 'I' in Team – listen to empower.
- ✓ Acknowledge quality work and show appreciation to foster a loyal and enthusiastic workforce.
- ✓ Trust in and respect your employees and they will trust you.
- ✓ Prepare for the worst- the rest is easy!

7. Supporting someone in distress.

A conversation can make a difference in helping someone feel less alone and more supported when they are in distress. Don't underestimate the importance of just 'being there', showing someone that you care, and they matter is important. Don't be afraid to Ask because your support may make all the difference. There is no right or wrong way to say that you are concerned, just be genuine and explain why you are concerned. Listen carefully, take your time, there is no rush. Don't offer solutions, help them to feel comfortable and at ease, be ready to sit in silence. Support and thank them for trusting you. Keep what is discussed private unless they are at risk of hurting themselves or someone else. Be patient, ask what you can do to provide support.

- www.beyondblue.org.au



Be inspired by a local business leader.

"We know that barbering is about connecting with people, more than it is about cutting hair. Our clients trust us and talk openly to us because we have personal contact with them. Ensuring staff have the relevant training ensures that we can remain calm and know just what to say when supporting somebody in distress."

Karen Bennett - Bennett's Barber Shop.



Taking action.

- ✓ Listen - sit somewhere private, face the person, and give them your undivided attention.
- ✓ Stay calm - no matter what they say, offer reassurance but not specific advice or opinion.
- ✓ Ask open ended non-judgemental questions.
- ✓ Be ok with silence, just sitting with somebody can often help calm them.
- ✓ Offer to assist them in seeking further help.
- ✓ Continue to support them and follow up later.

Want to learn more?

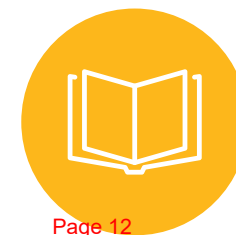
To continue learning more about ways to well-being for your business, take a look at these great resources:

- ✓ www.mentallyhealthycitytownsville.com.au
- ✓ www.tropicalbrainandmind.com.au
- ✓ www.pc.gov.au
- ✓ www.industry.gov.au
- ✓ www.mentalhealthcommission.gov.au/mental-health-reform/national-workplace-initiative
- ✓ www.headsup.org.au
- ✓ www.beyondblue.org.au
- ✓ www.blackdoginstitute.org.au
- ✓ www.worksafe.qld.gov.au
- ✓ www.cores.org.au
- ✓ www.lifeline.org.au
- ✓ www.mentalhealthcommission.gov.au
- ✓ www.qmhc.qld.gov.au
- ✓ www.smallbusinessbonfire.com
- ✓ www.glasseraustralia.com.au
- ✓ www.mhfa.com.au

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This resource has been compiled by Cathy O'Toole. Design by Grey and Grey. Published by Tropical Brain and Mind Foundation (Mentally Healthy City Townsville).

Tropical Brain and Mind Foundation respectfully acknowledges the Traditional Owners of the land on which we work, learn and play, the Wulgurukaba of Gurambilbarra and Yunbenun and Bindal peoples and we pay our respects to their elders, past, present and emerging.





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Thanks to funding from



Australian Government



**Queensland
Government**

The Tropical Brain and Mind Foundation presents:

A Proposal to establish a Centre for Brain Health in the Tropics

Background

By 2050 half of the world's population will live in the Tropics. In the global Tropics the burden caused by the lack of brain health has almost doubled in the last 30 years, whereas the burden caused directly by tropical infectious diseases has in fact decreased. Lack of brain health likely costs over US\$10 trillion annually for the global Tropics. Yet, there is no institute or centre anywhere in the world specifically dedicated to the promotion of brain health in the global Tropics.

Townsville is well-placed and uniquely positioned with JCU's outreach to the Tropics, to promote brain health in our region and worldwide. We have advanced, world-leading research programs in tropical infectious diseases, chronic diseases disproportionately affecting people in this region and First Nations people health, both physical and mental. Most importantly, pioneering work at JCU and AITHM is aimed to understand the complex interactions between infectious agents and chronic diseases as they relate to the health of the body and the brain. We have the proven ability to harness natural resources of the Tropics to restore and maintain brain health.

Proposal

To establish the first Centre for Brain Health in the Tropics with outreach across tropical regions of Australia and the global tropics. The Centre will be designed to advance **innovative research** and practice on epidemiology, neurobiology and **treatment of diseases of the brain and mind associated with toxicity within biological, social and ecological environments**. Research will also focus on circumstances that create optimal brain function contributing to overall wellness and productive and vibrant societies.

Stakeholders

Currently, the centre is planned to be located within TropiQ Precinct with collaborations and partnerships to be forged with TUH, Mater Hospital, JCU, AITHM and local clinicians. As a community driven project, it is essential that the wider community benefits from the development of the centre through education, community involvement and clinical outcomes.

The Foundation welcomes feedback and suggestions from Clinicians and other hospital staff with an interest in the important work.

There is no health without brain health.

Centre for Brain Health in the Tropics



Website: <https://www.tropicalbrainandmind.com.au/>

Contact: Dr Catherine Day, (Chair, TBMF), cday@tbmf.com.au

Mental Health Select Committee

Centre for Brain Health in the Tropics

A Proposal of the Tropical Brain and Mind Foundation –
Townsville, Queensland, Australia



The Centre will be located within TropiQ Health and Intelligence Precinct in Townsville, Queensland, Australia.

Mental Health Select Committee

The Proposal

The proposal is to establish the first *Centre for Brain Health* with outreach across the tropical regions of Australia and the global tropics. It will have a broad outreach dedicated to advancing frontiers in innovative research and practice within well-integrated programmes on epidemiology, neurobiology and treatment of stress-related mental illness relevant to the tropics. Moving to a post-covid world, the new and developing concepts of Brain Health and Brain Skills are emerging as important drivers of economic and social recovery. These concepts encompass neural development, plasticity, mental health functioning and recovery across the life course. The Centre will be incorporated within the health and intelligence precinct known as TropiQ, working closely with Townsville University Hospital and James Cook University and other international centres of Brain Health Research. Through the auspicing body, Tropical Brain and Mind Foundation, the centre will also have partnerships with the Sunshine Coast Neuroscience and Mind – Thompson Centre and the Kimberley Brain and Mind Foundation.

The Purpose

TropiQ is a collaboration between Townsville University Hospital, James Cook University, the Townsville City Council, the Australian Defence Force and the CSIRO and with relevant stakeholders, from the local community to other communities in the tropics, to most effectively address the needs of our region. This particularly applies to the island nations close to Australia and the effects of climate change on the health of their citizens. Research with Indigenous people is also a priority given that over 11% of the north Queensland population is Indigenous. The Centre will be multidisciplinary and internationally collaborative. It will provide research-based services and the Centre will make any technologies and discoveries available to the wider community and create revenue for sustainability and further development.

The Need

Mental and neurological conditions are today's most urgent unmet need requiring new and innovative research and strategies. "Brain disorders are among the leading causes of ill health and disability world-wide which lead to monumental loss of human capability and avoidable suffering. This situation has been magnified by Covid 19" (Healthy Brains Global Initiative, 2020). 450m people worldwide live with mental illness and the economic cost is \$US3trillion but only 3% of global health resources are targeted to brain health. Major Depressive Disorders burden in the tropics will continue to increase by about 60% over the next 30 years (Ketheesan et al. 2018).

The Centre will value add new knowledges and better address the health, social and economic burden that brain disorders create. In the initial construction phase, the Centre will create economic opportunities with approx. 94,000 man-hours work to develop/construct, and new job opportunities. It will create investment as businesses seek new ways to improve workforce participation and productivity. The research will aim to advance social and brain capital needed for the post Covid era.

Brain Health

The global economic burden of mental illness is expected to rise in the coming decade. The World Health Organization (WHO) Global Burden of Disease Survey estimates that stress-related mental health conditions, including depression, anxiety disorders, psychotic and substance use disorders, will be the leading cause of disability world-wide. These disorders have the highest contribution to overall health burden in Australia.

The Centre's research is based on our contemporary understanding of mental illness, which emphasise that early developmental injury, chronic stress and trauma are at the core of common and debilitating mental health conditions. Rather than focussing on current, much-debated diagnostic categories, such as major depression and the anxiety of psychotic disorders, we aim to target the root causes of mental illness by either decreasing the biological impact of stress on the brain or through building resilience.

There is a unique, bidirectional interaction between infectious diseases, mental and other chronic disorders in the Tropics. Infections during early development increase the likelihood of mental illness and chronic metabolic and cardiovascular disorders in later life. Epidemics and pandemics have major impact on physical and mental health. Toxic stress and long-term psychological trauma are shared risk factors for increasing susceptibility to infections as well as to the development of chronic physical and mental illness.



Research and social impact programs

Research programs within the Centre will specifically address the unique challenges in our region. Research will be well integrated with the service arm of the Centre and there will be a reciprocal communication between researchers, health care providers and the community.

1. **Mental Health Services Research:** This evaluation research in “real-world” settings will take advantage of the availability of decades of clinical mental health data currently buried in under-utilised databases.
2. **Tropical Mental Health Epidemiology:** We will specifically focus on tracking the emergence and progression of mental illness in our region with a strong focus on Indigenous social and emotional well-being. Beyond the classic epidemiological tools, the Centre will include biological measures of stress to track how the body’s stress response contributes to the emergence of mental ill health.
3. **TropiKids:** The Centre will provide a home for a new longitudinal study of children in northern Australia and the tropics. This programme will provide a treasure trove of data on how early risk factors such as stress, trauma, infection, nutritional and metabolic abnormalities shape child development and mental health. This programme will have a strong Indigenous focus, which will make it unique and highly valuable in our effort to close the Indigenous health gap.
4. **iBrain-iStress:** The Centre will be in the forefront of utilising new technologies. This programme will research new ways to use smart phones and other similar devices to better diagnose and treat mental illness in our region.
5. **StressLab:** The StressLab will discover new ways to inhibit the deleterious effects of early risk factors such as stress, trauma, infections and nutrition through multiple integrative streams such as acute/chronic stress biomarkers, functional stress tests, epigenetic testing for transgenerational stress.
6. **Money on my Mind:** The dynamics of Financial Worry. Little attention has been paid to the dynamics of financial worry. This international research project will address the following questions: Does (the perception of) financial worry change over time? How does financial worry relate to and influence personal well-being, social and human capital, and labour market behaviour? What moderating factors may mitigate the dynamics of financial worry?
7. **Mentally Healthy City Townsville Program.** A mentally healthy city addresses mental health as a comprehensive, whole of life, health and well-being agenda involving individual citizens and the support of the broader community. The existing Mentally Healthy City program helps the people of Townsville flourish and thrive as a community by heightening the focus on mental wellness and through assisting individuals and organisations to better support those people who from time to time may be mentally unwell. This program will make available a framework for other cities to use.
8. **Aboriginal and Islander Family Research.** The Centre will provide a home for research with families and will be led by Aboriginal and Islander researchers.
9. **Research that contributes to the training and education of medical and health workers.**

Budget and Costings

(Details are available as required)

The building

\$21,800,000 (approx. 3,570m² building area on a 4,000m² site [*approx. 94,000 man-hours work to develop/construct*]. Quantity Surveying assessment by Stark Consulting & Associates.

Proposed Annual Staffing

\$1,227,100 Total (inc. on-costs of 30%) per year. This includes a Director, an Associate Director, an Administrator, an Indigenous Researcher, a postdoctoral researcher, 2 PhD scholarships, and 5 visiting scholars for up to 6 months each. (For 5 years this will be \$6,135,500)

Operational costs per year

\$366,548 Estimated total outgoings for the property in the first year based on \$98.57 per sqm NLA, the ability for sustained NABERS rating, and flexibility for aligned private sector and public sector tenant partners.

Assessment provided by Craig Stack from Knight Frank.

Continuing funding will be sought through

Grant Applications (Philanthropic, Federal Government, State Government, Local Government, PHNs)

Fee for service programs and projects

Training programs and Short Courses

Rent charged on space utilised by organisations

Government/Industry commissioned research

Centre Construction - Economic Impact in Townsville

The construction cost of the Centre is estimated at \$21.8million, which will particularly benefit the non-residential building and the construction services sectors in Townsville. This initial investment will trigger further business sales revenue more widely in the city worth \$35.3million (as a result of indirect industry-support effects and consumption-induced effects). The total (direct and indirect) business sales revenue effect of the Centre construction in Townsville is therefore estimated at \$55.2million.

In terms of Gross Regional Product (GRP), the construction of the Centre adds \$6.4million to Townsville's GRP directly and triggers a further addition of \$12.7million to Townsville's GRP indirectly. The total (direct and indirect) GRP contribution of the Centre construction to the Townsville economy is therefore estimated at \$19.1million.

In terms of employment, the construction of the Centre adds 39 FTE jobs (annualised) to the Townsville labour market directly and 83 indirectly. The total (direct and indirect) employment contribution of the Centre construction to the Townsville labour market is therefore estimated at 122 jobs for local people.

In unprecedented economic times, the construction of the Centre will contribute significantly to rebuilding the local economy and providing much-needed local employment opportunities.

(Analysis by
Assoc. Prof. Riccardo Walters)

Tropical Brain and Mind Foundation

For communities to flourish, individuals must also flourish which requires healthy minds and bodies.

The Foundation seeks and encourages research excellence in brain health, brain skills and the economic benefits that come from such projects. Multidisciplinary research that leads to clinical and therapeutic interventions are encouraged.

Our Patron



Air Chief Marshal Sir Angus Houston AK, AFC (Ret'd)

was awarded the Knight of the Order of Australia in January 2015 for extraordinary and pre-eminent achievement and merit in service to Australia, through distinguished service in the Australian Defence Force, continued commitment to serve the nation in leadership roles, particularly the national responses to the MH370 and MH17 disasters, and in a variety of roles in the community. Sir Angus retired from the military in July 2011 after serving for 41 years. He was Chief of the Australian Defence Force from 2005-2011 and prior to that was Chief of Air Force for four years. He was Chair

of the Anzac Centenary Advisory Board from 2011-2013 which provided strategic advice to the Australian Government in relation to the planning and implementation of the Anzac Centenary.

Sir Angus is Chancellor for the University of the Sunshine Coast. He Chairs a number of boards and also serves as a board member for numerous organisations. He is a visiting fellow of the Australian National University National Security College. In addition, he is the Ambassador/Patron of numerous charitable organisations including several mental health organisations. Sir Angus has been awarded four honorary doctorate degrees from the University of South Australia, the Australian National University, the University of New South Wales and Griffith University.

TBMF Board

Dr Catherine Day OAM (Chair); Prof Suzanne McGinty (Deputy Chair); Mr Matthew Keating (Secretary); Ms Lisa Banks; Prof Max Bennett OA, Mr Alan Newman; Ms Eleni Millios-Hullick; Ms Louise Vella Cox; Ms Trudi Anderson; Ms Lyn Lagana; Ms Tash Henderson (Treasurer).

Advisors to the Foundation

Prof Ian Wronski – DVC, Tropical Health and Medicine, JCU

Prof Zoltan Sarnyai – Prof. of Neuroscience, JCU

Prof Brett McDermott – Prof. of Psychiatry, JCU

Dr Lynore Geia – Academic Lead, Aboriginal and Torres Strait Islander Health, JCU

Associate Professor Riccardo Walters – Academic Head, Economics JCU

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NORTH QUEENSLAND ELITE YOUTH RUGBY PLAYER PROJECT

In 2016, after a number of elite junior rugby league players in Townsville took their own lives, a Townsville Emerging Leaders group decided to raise funds to support research into what could be done to help such young people.

Professors Zoltan Sarnyai and Brett McDermott from James Cook University were commissioned in late 2017 to undertake a three-year research project entitled *“Eliminating suicide among elite youth Rugby League athletes in North Queensland”*.

The project had two aims:

1. Provide research-based information to understand risk and resilience factors in elite junior rugby league players and to aid the development of evidence-based interventions to eliminate suicide in this group.
2. Create an explanation of risk and protection from youth suicide in this population, that could be easily understood and used by the young person, parents, educators, sporting and health professionals.

Who took part in the research?

All participants were male and in the elite squads of either the school or club they attended. The age of participants ranged from 16 to 19 years. There were 57 players in the under 18 group (the school-based players) and 37 players aged 18-19 (the club-based players). 22 of the total participants, approximately one quarter, were Aboriginal and Torres Straits Islander players.

What were the researchers looking for?

1. an assessment of the mental health, stress vulnerability and resilience of the 94 players interviewed
2. biological, psychological and social factors that contribute to both risk and resilience for suicide behaviour
3. practical evidence-based interventions to provide a care pathway for elite youth rugby league players at risk of suicide.

What did the researchers do?

They used a range of internationally validated survey tools and biomarkers, such as Athletic Identity Measurement Scale, Flourishing Scale, Early Adolescent, Kessler Psychological Distress Scale (10), Patient Health Questionnaire -9, Child and Adolescent Trauma Screen, Family Assessment Device – General Functioning Scale and analysis of hair cortisol.

In addition, there were open-ended questions in the questionnaire for free listing of issues.

What did they find out?

The assessment of club-based junior rugby league players showed

- Very healthy levels of emotional well-being and low levels of psychological distress
- High scores for emotional well-being
- Highly unlikely that any club player would warrant a mental health intervention

There was a different picture for school-based rugby league players

- School-based players had significantly higher psychological distress scores than club-based players. 8/25 (32%) of participants scored in the **moderate to severe** range and this proportion of players with **psychological distress** warrants a specific intervention.
- Approximately 11% of players recorded 5 or more traumatic events in childhood
- School-based players, similar to other adolescents, have circumstances that can increase stress: life stage, emotional development and education stresses for final year students.

For both groups, Aboriginal and Torres Straits Islander status was not a risk factor for higher levels of psychological distress but these players were more likely to experience PTSD symptoms.

Overall, player strengths included family functioning scores similar to Australian norms. From a rugby league perspective (history of injuries, head knocks and athletic identity), this group of participants had many indicators of good functioning.

- The average number of self-reported injuries for the whole player group was 3.9 with the number of injuries ranging from 1-11 (the older player group was approximately 4 times less likely to answer this question). The range of injuries included fractures (e.g., nose, wrist, hand, shoulder blade) and torn ligaments and tendons.
- Self-report of head 'knocks' was common; only 2 players stated they had not experienced a head 'knock'. The mean number was 2.9 and the number of head knocks ranged from 0-10 head knocks. There was no significant relationship between player self-reported injuries/head knocks and psychological distress
- A high athletic identity makes it more likely for the individual to form relationships with other athletes and to engage in sport related behaviours such as training. For this group of players, there was a good sense of optimism about themselves.
- Athletic identity may have adverse effects such as overtraining, the possibility of using performance enhancing drugs and experiencing depression if an injury was sustained. In this sample, athletic identity was not related to psychological distress, the experience of childhood traumatic events, PTSD symptoms, or more challenging family functioning.

What does the research literature say?

There is no once-off intervention to decrease the risk of suicide.

But there are clear evidenced-based principles for intervening:

- the principle of 'do no harm'
- becoming aware of the changing nature of suicide at the individual level
- changing external pressures and stressors
- bottom-up over top-down approaches
- providing more sophisticated and targeted multicomponent programs
- incorporate lived experience
- develop initiatives with the communities in which the program intends to function
- operate across multiple levels
- *develop a longer-term systematic program for reducing distress rather than short-term fixes.*

What should be done?

It is recommended that schools and clubs that are engaged with junior elite rugby players provide a suite of interventions, all with a strong evidence-base currently used in Australian mental health practice.

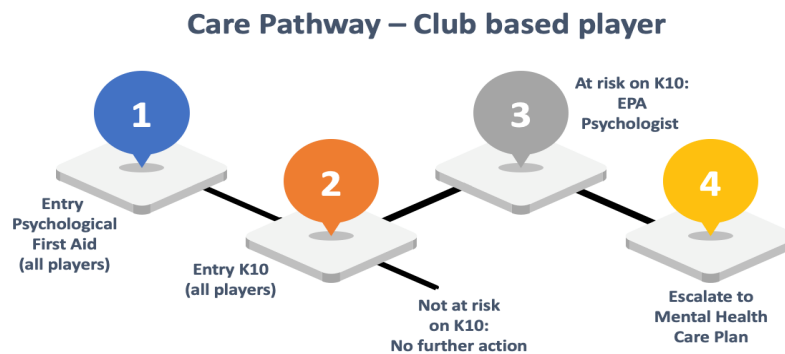
These include

- Psychological First Aid to improve mental health literacy and help seeking behaviour;
- screening for psychological distress with the K10 measure;
- establishing pathways with the player's General Practitioner to create mental health care plans and facilitate uptake of care.

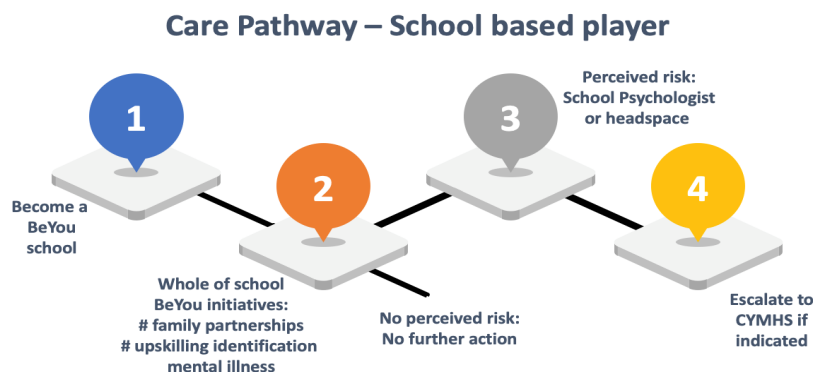
- Encouraging schools to join BeYou, the Australian Mental Health Initiative for Educators.

In practice, this means

1. Club-based players of all ages would benefit from a dedicated emotional health care pathway
 - Attending Youth Psychological First Aid (PFA) at entry to program
 - Yearly, K10 measure
 - Access to a process similar to the Employee Assistance Program (EPA) to assist with interpretation of the K10 and providing a brief mental health intervention
 - Facilitation of General Practitioner Mental Health Care Plans for players who require further psychological input



2. School-based players would benefit from a dedicated emotional health care pathway
 - Attending Youth Psychological First Aid (PFA) at entry to the program
 - Yearly, plus as indicated, K10 measures
 - Registration of the school as a BeYou (Australian Mental Health Initiative for Educators) School for whole of school resilience building initiatives, including school/family partnerships, early support of school guidance or counselling staff or Headspace
 - Facilitation of referral to Child and Youth Mental Health Services for players who require further psychological input.



3. Suicide prevention for all elite junior rugby league players
 - For club-based players, all initiatives in Recommendation 1 above are consistent with current multilevel interventions to prevent suicide
 - Schools should consider the suicide program identified by BeYou in addition to multilevel undertakings in Recommendation 2.

- Headspace suicide post-vention service should be utilized should a club or school experience a player who completes suicide or there is knowledge of a player who survives a very serious suicide attempt.

4. Risk Monitoring

- The Kessler Psychological Distress Scale (K10) should be used as an emotional health screening instrument.
- The services of a health professional (General Practitioner or mental health professional) should be employed to interpret the results of a completed K10 in a timely manner and provide the player with recommendations.

5. Improving mental health literacy and help seeking behaviour

- The care pathway should be provided to all players when accepted into the elite program, including a Psychological First Aid (PFA) program at entry. PFA improves participant mental health literacy and help seeking behaviour.
- The mental health literacy of *any staff involved* in either school-based or club elite player programs should be improved by attendance at a workplace emotional health program such as Heads Up for a mentally healthy workplace.

