Strategic Plan 2021 – 2026

Strategic Position (June 2021)

The Multiple Sclerosis (MS) Research Flagship was launched by the College of Health of Health and Medicine (CoHM), Menzies Institute for Medical Research (University of Tasmania) in 2016. The Flagship was created as an integrated pipeline of research from basic discovery science to clinical, public health, health economics and implementation research.

In just five years, we have significantly amplified our MS research impact by bringing together these established research areas. Collaboration, partnership, and team effort have played an enormous part. The active involvement of consumers and stakeholders has been fundamental to the success of the Flagship. The Flagship has fostered the shared passion of researchers and the community to reduce the impact of MS on individuals and the community.

Highlights from the past five years include:

- We have more than doubled the annual income of the Flagship since it was launched in 2016.
- We have secured major national funding for MS research, including the 2019 announcement of a $10M grant from the Medical Research Future Fund and a variety of other national competitive grants.
- We have developed and implemented an effective intervention to improve quality of life – the “Understanding Multiple Sclerosis” Massive Open On-line Course (MOOC)\(^1\) which has now enrolled more than 20,000 people world-wide and has been rated the #1 Most Popular MOOC in the world in 2019.
- We have implemented a clinical trial informed by our neurobiology research (the Magnetic Brain Stimulation (MBS), TAURUS trial)
- We have established the tools and platforms we need to support the pipeline of research from the laboratory to the clinic including MS STEM (a biobank containing stem cell lines that are generated from individuals with MS or their unaffected family members).
- We are supported by an outstanding core team and a robust governance structure (the Flagship Steering Committee, the Consumer & Community Reference Committee, and the Scientific Advisory Committee)

This next phase of the Flagship is about consolidation. In a challenging external climate, we will build on the progress to date with a view to long term sustainability.

The MS Research Flagship would like to thank all staff, students, committee members, consumers & community members, supporters and funders for their ongoing support and dedication to achieving the shared vision and goals of the Flagship.

\(^1\) [https://ms.mooc.utas.edu.au/](https://ms.mooc.utas.edu.au/)
## SWOT Analysis

### Strengths

- Core vision / mission / aspiration
- Menzies is connected with the majority of MS research in Australia
- Board / leadership commitment to MS research
- Strong track record in MS research
- Good track record at building & sustaining collaborations
- Menzies researchers are well connected and networked nationally / internationally
- Multi-disciplinary research leaders
- Location in Tasmania (highest incidence of MS)
- Strong support from the community
- Excellent infrastructure and facilities; genomics & human stem (MS STEM)
- High quality epidemiology and long-term longitudinal studies
- Good data linkage expertise
- Genomics laboratory structure
- Governance and oversight
- Diversity of members / groups/collaborations

### Weaknesses

- University of Tasmania is generally a follower not a leader for collaborations- people coming to MS Research Flagship now
- Limited succession plans for research / clinical leaders
- Business continuity
- Absolute numbers of people living with MS in Tasmania quite small (but high participation)
- Developing skills - imaging, immunology, implementation sciences, randomised controlled trials, genetic epidemiology. Have strengthened collaborations to provide access to skills
- Fragility of medical research sector / university sector
- Focusing only on MS

### Opportunities

- Position Tasmania as the destination of choice for high impact MS research
- Build translational pipeline with proof of concept - getting there
- Develop talent pipeline – issue with recruitment of PhD’s into dry research.
- Sustain and diversify funding
- Access national and international philanthropic support
- MS research as a state and national priority, increasing awareness through champions and advocates (MSRA; MSA)
- Become the Hub for an Australian network / wider community
- Increase national reputation and community recognition of Menzies / University of Tasmania
- Capitalise on Tasmania’s out-sized political weight
- Impacting policy
- Best practice consumer involvement & engagement
- Pivot to other complex diseases
- Learnings from Flagship model

### Threats

- Fragility of sector
- Loss of MS Research / Clinical Leaders
- Lack of funding
- Competition from other Australian research centres (potential threat – currently more of an opportunity)
- Lack of definable success – needs definitive achievements / stories
- Poor NHMRC success rates
- COVID restrictions
## Multiple Sclerosis Research Flagship Strategy (2021-2026)

The Multiple Sclerosis Research Flagship is an inter-disciplinary hub of multiple sclerosis research at the Menzies Institute for Medical Research (CoHM, University of Tasmania).

### Our vision:
Reduce the impact of multiple sclerosis (MS) for individuals and the community.

### Our mission:
Generate, translate, apply, and implement knowledge on the causes, treatment, and prevention of MS through an integrated pipeline of research.

### Our aspiration:
To be internationally recognized for leading knowledge implementation in MS and related disorders.

### Our focus:
- Understanding the biology of multiple sclerosis and related disorders.
- Educating and raising awareness of MS and its impacts.
- Decreasing societal impact of MS.
- Preventing MS in people at high-risk.
- Improving quality of life for all people affected by MS.
- Identifying and modifying factors associated with genetic risk.

### We are committed to:
- Actively involving consumers in all aspects of the Flagship.
- All members of the Flagship thriving and excelling.
- Always learning from the MS community.
- Research impact for the benefit of the Tasmanian community.

### Our objectives

<table>
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<th>1. Conduct high impact, translational research to improve health &amp; benefit to society.</th>
<th>2. Foster a thriving community of inter-disciplinary MS researchers.</th>
<th>3. Increase excellence and capacity of multidisciplinary research on MS &amp; related disorders.</th>
<th>4. Sustain &amp; diversify funding for MS research.</th>
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<tbody>
<tr>
<td>a.</td>
<td>Develop research and advocacy in partnership with MS consumers.</td>
<td>a. Building the next generation of Flagship leaders.</td>
<td>a. Encourage and incentivise external collaborations.</td>
<td>a. Develop a Medical Research Future Fund funding strategy.</td>
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<td>b.</td>
<td>Expand education and outreach programs.</td>
<td>b. Tailored career support for early-mid career researchers and students.</td>
<td>b. Meet skills and infrastructure requirements for laboratory and clinical trials research.</td>
<td>b. Ensure alignment with national MS research agenda.</td>
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<td>c.</td>
<td>Build skills and infrastructure for research impact.</td>
<td>c. Mentoring for Flagship members.</td>
<td>c. Build Institute and University-wide engagement of Flagship.</td>
<td>c. Identify and leverage international funding sources.</td>
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### Our strategies

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<th>Identified and translated MS target genes into early phase clinical trials.</th>
<th>Identified cost-effective treatments and interventions.</th>
<th>Determined magnetic brain stimulation’s (MBS) efficacy and safety profile.</th>
<th>Secured funding to explore prognostic biomarkers e.g. utilizing a multi-omics approach in the AUSLONG cohort.</th>
<th>Expanded the reach of the “Understanding Multiple Sclerosis” Massive Open On-line Course (MOOC) and additional short courses.</th>
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### Our goals

By 2026, we will have:

- Operationalised MS Stem
- Identified and translated MS target genes into early phase clinical trials.
- Identified cost-effective treatments and interventions.
- Determined magnetic brain stimulation’s (MBS) efficacy and safety profile.
- Secured funding to explore prognostic biomarkers e.g. utilizing a multi-omics approach in the AUSLONG cohort.
- Expanded the reach of the “Understanding Multiple Sclerosis” Massive Open On-line Course (MOOC) and additional short courses.
Objective 1: Conduct high impact, translational research to improve health & benefit to society.

a. Develop research and advocacy in partnership with MS consumers.
   - Build primary carer and GP involvement in Consumer Reference Committee.
   - Develop a consumer & community involvement & re-imbursement plan for the Flagship (aligned with Institute policy; Health Consumers Tasmania and TCHI).
   - Create a carers cohort for Australian MS Longitudinal Study (AMSLS).
   - Develop approaches to involve consumers who are “hard to reach.”
   - Improve applicability of MS clinical trials. Explore development of an MS specific and sensitive cognitive assessment tool and/or MS core outcome set (COS)e.g., COMET initiative in collaboration with Cynthia Honan.
   - Conduct a consumer priority-setting exercise for MS Research Flagship researchers and Tasmanian consumers

b. Expand education and outreach programs.
   - Update the approach for advertising and promotion of the MOOC.
     e.g., Article in “Brain Health: Time Matters in MS Guide for Healthcare Professionals.”
     e.g., Paid ads (plus article/advertorial) in AMA magazines' promoting MOOC.
   - Train Flagship members in plain language communication with support from the Consumer and Community Reference Committee (C&CRC).
   - Present to a range of events and forums (e.g., World MS Day) involving both consumers and researchers.
   - Develop strategy for social media promotion of the Flagship with an identified target audience.
   - Develop additional online resources that complement the Understanding MS MOOC.

c. Build skills and infrastructure for research impact.
   - Develop use and application of Researchfish database and technology platforms relevant to impact.
• Assess skills and infrastructure gaps/needs for research impact e.g., knowledge brokering; impact gathering; story telling; consumer involvement & stakeholder engagement; graphic design; legal; technology transfer. These require time, resources, and responsibility.

• Integrate appropriate elements of the AAMRI Research Impact Framework to Flagship.  

Objective 2: Foster a thriving community of inter-disciplinary MS researchers

a. **Building the next generation of Flagship leaders.**
   - Individual career plans, guided by Scientific Advisory Committee, for all Flagship research (Level C and above) and professional leaders identifying potential succession.
   - Provide peer support & access to consumer involvement for grant writing.
   - Review impact of Flagship PhD students that have finished their PhD.
   - Administrative support for Program Manager and Consumer Engagement Manager.

b. **Tailored career development for early-mid career researchers (EMCRs) and students.**
   - Develop a career development framework with career pathways for students and EMCRs.
   - Identify high quality PhD applicants for targeted scholarships opportunities.
   - Assess need / opportunity for new postdoctoral fellows and PhD students.
   - Identify opportunities for relevant placements or internships outside Institute.

c. **Mentoring for Flagship members**
   - Assign buddies for new Flagship team members.
   - Assess individual need for external / internal mentoring (not necessarily academic) tailored to individual needs.

Objective 3: Increase excellence and capacity of multidisciplinary research on MS & related disorders

a. **Work with partners, collaborators, and Flagship Scientific Advisory Committee to foster research excellence.**

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2 Black Dog Institute have an entire team dedicated to knowledge transfer and implementation

• Re-define the focus of genomics research.
• Improve visibility of excellence by including “multiple sclerosis” as a keyword in peer-reviewed publications.
• Assess resources and skills to support strategic collaboration (e.g., stakeholder engagement).

b. **Value-adding skills and infrastructure for laboratory and clinical trials research.**
• Develop commercial viability of MS STEM with legal; ethical; social and commercialisation support.
• Provision in grant applications for database development/data managers; clinical trial coordinators; quality assurance; statistics; graphic design, knowledge brokering, admin.

c. **Build Institute and University-wide engagement of Flagship.**
• Lead & support Institute-wide initiatives including consumer involvement policy and strategy; mentoring / career development initiatives; social media promotion; impact support.
• Identify opportunities for collaboration and engagement across the University.

**Objective 4: Sustain & diversify funding for MS research.**

a. **Beyond Medical Research Future Fund (MRFF) funding strategy**
• Develop and implement a co-ordinated long-term plan for funding beyond the term of the current MRFF grant (30 June 2024) with support from the Scientific Advisory Committee. This should include a pro-active approach to general calls for funding from the MRFF, and NHMRC Synergy and CRE schemes.
• Encourage and support high quality, competitive, EMCR’s fellowship applications and ensure readiness.
• Identify and respond to commercialisation opportunities, focusing on financial sustainability and the protection of intellectual property rights.

b. **Ensure alignment with national MS research agenda.**
• Continue to build partnerships with MS Australia, MS Research Australia and MS Limited.

c. **Leverage international funding sources.**
• Identify and progress funding applications to relevant international funding sources for MS Research.
MS Research Flagship 5-year goals

Objective 1

Foster an integrated pipeline of high impact research to improve health & benefit to society.

- Grow Consumer Reference Committee by 50%. With at least 30% of that increase to be GPs or carers.
- 2-3 specific skills or infrastructure needs for research impact are resourced with clearly articulated measures.
- At least 2 research initiatives developed in partnership with MS consumers will be resourced and implemented.
- MOOC reach to GPs and allied health professionals has increased by at least 50%.
- Ensure a clear plan for the longevity of the Understanding MS MOOC (beyond MSL funding).
- Flagship social media engagement has grown by 25%.
- MS Stem is a commercially viable resource for the MS research community.
- Most (75%) Flagship staff and students are utilising Researchfish.

Objective 2

Foster a thriving community of inter-disciplinary MS research.

- Administrative support provided for the Program Manager and Consumer Engagement Manager (high priority).
- Retention of at least 75% of current staff.
- Assist in the development of Menzies career development and mentoring initiatives.
- 2 new Level E researchers, 3 new Level D researchers, 4 new Level C researchers.

Objective 3

Increase excellence and capacity of multidisciplinary research on MS & related disorders.

- More than 50% of Flagship peer-reviewed publications have “multiple sclerosis” in the title, keyword or abstract (currently 23%).
- Flagship publications have an FWCI of greater than 1.62 (current).
- 2 – 3 value adding skills or infrastructure are resourced with clearly articulated measures.
- 3 – 4 new multi-disciplinary collaborations involving University of Tasmania researchers outside of the Institute.

Objective 4

Sustain & diversify funding for MS research.

- At least 1 investigator led research project is funded from international funding sources.
- 3 – 5 translational projects are funded from the MRFF.
- Government funding\(^4\) is approximately 50%\(^5\) of all Flagship funding (currently 70%).
- Non-government funding\(^6\) is approximately 45% of all Flagship funding (currently 27%).
- International funding is approximately 5% of all Flagship funding (currently 3%).

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\(^4\) Includes NHMRC, MRFF, any other Federal funding initiatives and Tasmanian Government funding.

\(^5\) Breakdown based on average figures for MRI funding from the Association of Australian Medical Research Institutes (https://www.aamri.org.au/2018-financial-activity/)

\(^6\) Includes philanthropic, not-for-profit, commercial funding
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<th>List of GP and Primary Health Care Practitioner news outlets</th>
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<tr>
<td>Vicdoc</td>
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<tr>
<td>Doctor Q</td>
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<tr>
<td>Australian Medicine, Ausmed</td>
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<td>Australian Family Physician</td>
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