



2025 FightMND Drug Development Grants

Table of Contents

03 Acronyms and Definitions

04 Introduction

- 04 FightMND Call for Proposals
- 04 Tiered Stages of Drug Development Grants

05 Drug Development Grant Outline

- 05 Scope for Drug Development Grants
- 05 Stage 1 Drug Development Grants
- 05 Stage 2 Drug Development Grants

07 Additional Details for Drug Development Grants

- 07 Collaboration
- 07 Biotechnology and Pharmaceutical Companies
- 07 MND Research Experience
- 07 Phase I Clinical Trials Milestones
- 07 Timeline for Future Development

08 Review of Applications

- 08 Assessment Criteria for Review
- 08 FightMND Values
- 08 Privacy and Confidentiality
- 08 Conflict of Interest Reviewers and GRP
- 08 Acknowledgement of Support

09 Funding – Scope and Criteria

10 Submission Guidelines

- 10 Letter of Intent
- 12 Full Applications
- 12 Requirements for Full Applications
- 12 Application Form
- 13 Project Proposals
- 13 Research Plan and Background
- 13 References (2 pages max.)
- 13 Timeline (1 page max.)
- 13 Impact Statement (1 page max.)
- 14 Transition Plan (3 pages max.)
- 14 Budget (1 page max.)
- 14 Milestones (1/2 page max. Phase I Clinical Trials Only)
- 15 Declaration of Research Funding from Other Sources
- 15 Curriculum Vitae of All Investigators (3 pages max. per Investigator)
- 15 Collaboration Plan (2 pages max.)
- 15 Letter of Support from the Administering Institution(s) (1 page max.)
- 15 Timeline (1 page max.)
- 15 Budget
- 16 How to Submit
- 17 Reporting

18 Terms and Conditions

24 Appendix 1

24 Intellectual Property Rights and Commercial Activities

26 Appendix 2

26 Scoring Descriptors for Drug Development Grants

Acronyms and Definitions

Administering Institution: Organisation responsible for administration of the research project, and the receipt and distribution of grant funds. A grant can only have one Administering Organisation.

Applicant: Researcher leading the research the Primary Investigator (PI), who is responsible for the overall direction of the project, leading and supporting co-Investigators (CIs), completion and lodgement of the application, and progress and reporting on the project. The Applicant must obtain written commitment from their laboratory Head and Heads of Departments/Administering Institution (or company executive where applicable), and must assume responsibility for undertaking and completing the activities outlined in the application. Where the project involves multi-site research, the Applicant must obtain written commitment from all Heads of Departments/Administering Institution (or company executive where applicable) of collaborative partners and co-Investigators not within the Administering Organisation.

Co-Investigator(s): Responsible for carrying out some aspects of the research under the guidance and leadership of the Applicant/Primary Investigator.

Collaboration and Collaborator/Collaborative Partner(s): All people, Investigators and Organisations involved in the Drug Development Project are considered to be collaborators. Collaboration may be between a combination of disciplines, Departments and/or Organisations. It includes Organisations or individuals that provide specific resources that contribute to the research. Co-Investigators represent a specific sub-group of collaborators who are directly involved in the conduct of the project but are not responsible for the direction and progress of the project.

By encouraging collaborative agreements, FightMND is asking researchers to consider looking beyond their discrete Departments and Organisations, and to seek out people who may be doing similar research. This may allow for stronger and higher quality research proposals and reduce research duplication. **Goods and Services Tax:** Goods and Services Tax (GST) imposed in accordance with the *A New Tax System (Goods and Services Tax) Act 1999*, and related Acts and Regulations. GST will be paid on top of grant amounts where appropriate. This will be determined by the Administering Institution's GST status.

Motor Neurone Disease (MND): For the purposes of these Drug Development Grants, the definition of MND includes the following progressive neurological disorders that destroy motor neurons: Amyotrophic Lateral Sclerosis (ALS); Primary Lateral Sclerosis (PLS); Progressive Muscular Atrophy (PMA); Progressive Bulbar Palsy; and Pseudobulbar Palsy.

Stage 1 Drug Development Grant: *Early phase Drug Development Grants* awarded with an offer of up to AUD \$550,000. Projects must focus on the identification and development of a lead drug candidate, including candidates for which little or no preliminary data has been obtained, with the goal of generating data suitable for a Stage 2 Drug Development Grant and data that supports the progression and further development of the candidate drug(s) towards IND-enabling studies and a clinical trial for MND.

Stage 2 Drug Development Grant: *Late phase Drug Development Grants* awarded with an offer of up to AUD \$1,200,000. Applicants must have a lead candidate in hand and projects should focus on the further development of lead candidates tracking towards a clinical trial for MND, with the goal of generating data suitable for an IND application.

Translational Research: Research facilitating the transfer or translation of new basic knowledge of disease mechanisms gained in the laboratory into the development of new methods for the treatment and/ or prevention of MND in humans.

Within this scope, research projects may include:

- the preclinical development of new treatments and interventions for MND; or
- testing the effectiveness of treatments for MND.

Introduction

To support translation of promising new treatments for MND/ALS, FightMND is supporting early (Stage 1) and late (Stage 2) Drug Development Grants.

FightMND Call for Proposals

Drug Development Grant applications in support of preclinical research, development and assessment of therapeutics for MND/ALS through to (and including) completion of Phase I clinical trials.

Grant applications will be considered for:

- New Therapeutic Development Grants: Supporting post-discovery, preclinical development of therapeutics for MND through a wide range of development activities – from validation of therapeutic leads to the submission of investigational New Drug applications to regulatory bodies.
- **Repurposing Development Grants:** Supporting hypothesis-driven drug repurposing efforts focused on new therapeutics for MND. Proposals should test compounds currently approved for other indications in established preclinical models of MND, and target either: mechanism(s) of action common to both diseases; or new or novel mechanism(s) of action (supported by appropriate preliminary data or evidence).

APPLICATIONS OPEN: 04 November 2024

LETTER OF INTENT DUE: 16 December 2024, at 17:00 AEDT

SUBMIT LETTER OF INTENT TO: FightMND Grant Management System at https://fightmnd.fluxx.io/

INVITATION TO SUBMIT FULL APPLICATION: 20 December 2024

FULL APPLICATION DUE: 24 March 2025 at 17:00 AEDT

RECIPIENTS NOTIFIED: August 2025

Tiered Stages of Drug Development Grants

Drug Development Grants for new or repurposed therapeutics will be offered in two tiers:

- **Stage 1:** awarded with an offer of up to **\$550,000** in support for 3-year projects to identify and validate a lead candidate for further development for MND.
- **Stage 2:** awarded with an offer of up to **\$1,200,000** in support for 3-year projects where a lead candidate with strong preclinical evidence is in hand.

Projects with a period of performance of less than 3-years will also be considered. Support will not normally exceed 3 years and applicants should submit proposals that are focused and compatible with a 3-year time period.

The continuation of a Drug Development Grant within this period will be subject to periodic review after the submission of satisfactory progress reports, which are required at six-monthly intervals. Industry partnership applications are strongly encouraged with shared funding proposals.

Note: it is NOT an Australian Regulatory requirement for drugs to have an IND submission prior to commencement of projects in Australia.

Drug Development Grant Outline

Scope for Drug Development Grants

The scope for Drug Development Grants is as outlined below:

- The proposed projects are expected to be product-driven and focused clearly on therapeutics, and it is anticipated that the agents and/or data generated from these projects will lead directly to the advancement of new therapies for MND to roll out into human clinical trials.
- Applications must include any supporting preliminary data relevant to the phase(s) of the preclinical development process covered by the proposed research.
- Stage 1 Drug Development Grants should focus on:
- Identifying or developing a lead candidate;
- Generating preclinical data for candidates to support their development as a therapeutic for MND.

While there may be little or no preliminary data available for the candidate drug or gene therapy proposed at the time of application, proposals must demonstrate solid evidence backing the candidate drug(s) suitability for MND, and a strong rationale and pathway demonstrating the drug candidate's potential for ultimately treating MND.

Projects can include but are not limited to:

- Determining a lead candidate from a shortlist of candidates through target engagement and safety and efficacy studies;
- Testing of a new gene therapy approach against a new or established MND target;
- Optimisation of drug chemistry to develop lead candidate;
- Generation of preclinical data in multiple preclinical MND models.

This may include studies in human tissues or iPSC lines to strengthen animal data. iPSC or induced neuronal models should clearly display hallmark MND pathology.

Stage 1 Drug Development Grants must be designed to support the progression of a lead candidate(s) through the drug development pipeline. Primary outcomes should:

- Provide solid evidence determining whether or not a candidate drug(s) or gene therapy is suitable and worthy of progressing further through the MND drug development pipeline;
- Significantly advance a candidate drug(s) or gene therapy towards a clinical trial for MND. This may be by generating data that advances the candidate drug(s) to a Stage 2 FightMND Drug Development Grant (to be submitted as a new/ separate application in competition with other applications at the time of applying) and towards IND-enabling studies and/or a clinical trial for MND.
- Stage 2 Drug Development Grants should focus on the further development of a candidate drug(s) that is in hand through to completion of Phase I clinical trials. There should already be solid preclinical evidence that demonstrates the candidate drug(s) has strong potential as a therapeutic(s) for MND and provides considerable merit for further development and generating INDenabling data, and a clinical trial for MND.

Where supporting data for a candidate drug(s) is already available in preclinical model of MND, Stage 2 Drug Development Grant applications may assess and validate a candidate drug(s) in additional preclinical models/strains to ensure their potential for treating MND. However, the primary objective of Stage 2 Drug Development Grants should be to generate IND-enabling data that significantly advances the candidate drug(s) path towards a clinical trial for MND.

Stage 2 Drug Development projects may therefore incorporate the following:

- Using and developing (where applicable) biomarkers to assess and establish potential efficacy signals of the lead drug(s).
- Secondary validation of lead compounds obtained from screening or by other means to demonstrate target selectivity and mechanism of action. Note: Investigators must have evidence of target engagement of the lead drug(s) in an MND model before advancing to a Stage 2 Drug Development grant.
- Generating ADME, pharmacokinetic, pharmacodynamic and toxicology data for the candidate drug(s), suitable for their progression to the US Investigational New Drug (IND) and Australian TGA CTN application stage.
- Formulation and stability of the candidate drug(s).
- Riluzole therapy is widely used within the human MND/ALS patient population. Therefore, all preclinical efficacy, PK, and toxicology studies of new compounds supported by these Drug Development Grants **should include experiments with and without riluzole as an add-on therapy, to assess for any possible drug interactions where appropriate**.
- Over 98% of compounds intended for therapeutic use in the CNS never reach the market because of their inherent inability to cross the Blood Brain Barrier (BBB). Therefore, it is critical to determine the BBB permeability of CNS drug candidates early in drug discovery, so that candidates with poor CNS penetration can be excluded or structurally modified, and promising candidates can be accelerated through the development process. Applications should include details of BBB permeability assessment and preferably will include 2 or more of the following where relevant:
 - o *in vitro* BBB permeability assessment; o *in vivo* BBB permeability assessment; and o *in silico* BBB permeability assessment.

- Where possible, applications should include details for the design and implementation of full-scale current Good Manufacturing Practice (cGMP) production of the lead compound and the delivery systems for use in advanced preclinical and initial clinical trials.
- There is a preference for Drug Development projects aimed at **sporadic** MND with the use of appropriate models of disease to justify such application. (Projects aimed at familial MND will be considered).
- Standards for Preclinical Study Design: All projects should adhere to a core set of standards for rigorous study design and reporting to maximise the reproducibility and translational potential of the preclinical research. An example of such standards is described in Landis, S.C., et al. (2012), A Call for transparent reporting to optimize the predictive value of preclinical research, Nature 490:187-191.
- To improve reproducibility and potential translation of animal data into new treatments for patients:
 - Preclinical animal studies should follow standardised protocols such as those outlined in the Ludolph et al. (2010), Guidelines for preclinical animal research in ALS/MND: A consensus meeting, Amyotrophic Lateral Sclerosis, 11:1-2,38-45.
- Applications incorporating additional studies in human tissues and/or iPSC lines to strengthen animal data are encouraged and will be looked upon favourably. iPSC or induced neuronal models should clearly display hallmark MND pathology.
- Projects using **multiple preclinical disease models/strains** (e.g. SOD1, cytoplasmic mislocalised TDP43, C9orf72, etc) to help demonstrate possible replication of effect of treatment and/or improved application of results will be looked upon favourably.

Additional Details for Drug Development Grants

Collaboration

The preclinical drug development process may require resources beyond those available at a single organisation. Therefore, Drug Development Grants are open to Investigators participating in synergistic collaborations focused on testing and developing lead agents for the treatment of MND. Collaborations should be dedicated to a single, synergistic preclinical development project or study rather than an additive set of subprojects (i.e. the combined efforts of the collaboration must provide greater benefit than the sum of individual research initiatives).

If a collaboration is proposed, letters confirming/ supporting the collaboration are required. If the collaboration is multi-organisational, participating organisations will ensure the success of the collaboration by resolving potential intellectual and material property issues and by removing organisational barriers that might interfere with achieving high levels of cooperation. Details on these processes must be included in the application.

Biotechnology and Pharmaceutical Companies

Biotechnology or pharmaceutical companies are encouraged to apply. Whether a biotechnology or pharmaceutical company applies for these grants as an individual applicant or as part of a collaboration, the company is expected to leverage its own resources to complement the funding provided by these grants.

MND Research Experience

Applicants with limited MND research experience are strongly encouraged to collaborate with those having more substantial expertise in MND research and/or MND model systems.

Phase I Clinical Trials -Milestones

Applications for a Phase I clinical trial must include Project/Study Milestones that align with the proposed budget. Milestones can include, but are not limited to:

- Human Research Ethics Committee (HREC) approval for the study;
- GMP manufacture/stability set up;
- Completion of GMP stability;
- Clinical Trial commencement;
- · Recruitment of 10th trial participant;
- Completion of all study visits and database lock.
- · Final report received by FightMND

Note: Meeting milestones is an important requirement for Phase I clinical trials supported by FightMND Drug Development Grants. Continuity of funding is dependent on milestone achievement, and future payment instalments will not be made until the relevant milestone has been achieved. Please consider this when planning your study, milestones and budget.

Timeline for Future Development

Where relevant, applications for projects must include a realistic timeline of future development to a Phase I trial. Projects demonstrating a true bench-tobedside applicability between 24 – 36 months will be considered favourably.

Review of Applications

Assessment Criteria for Review

Applications will be reviewed by national and/or international experts on the following criteria for both stages of Drug Development Grants:

- · Research Strategy and Feasibility
- Impact and Transition potential
- Personnel and Budget

Each criteria is scored out of seven by peer reviewers, according to FightMND guidelines. Refer to Appendix 2 for scoring descriptors for Drug Development Grants.

FightMND Values

The alignment of research proposals with FightMND values are also considered when reviewing applications. These are:

Community – driving collaboration in the community, including knowledge sharing.

Integrity – supporting research excellence and research with high-impact potential.

Urgency – research that is driven by and demonstrates urgency.

Boldness – supporting innovative research that takes considered and justified risks aimed at developing a better treatment and/or cure for MND.

Efficiency – supporting research in a disciplined manner, being cognisant of proposed budgets and financial and non-financial costs.

Privacy and Confidentiality

All information contained in applications forwarded to FightMND will be regarded as confidential. Documents containing personal information will be handled and protected in accordance with the provisions of the *Privacy and Data Protection Act 2014* (Vic). Personal information will only be disclosed with the permission of the individual to whom it relates, or where the Act allows.

Applicants consent to the information supplied as part of their application being disclosed for the purposes of the evaluation and administration of the application and grant. Such disclosure includes but is not limited to independent reviewers/ assessors, the FightMND Grant Review Panel (GRP), the FightMND Board, and relevant employees of FightMND involved in the research grant process.

Applicants acknowledge that announcement of funded Drug Development Grant applications will involve a dissemination of information to the public about their general nature.

Conflict of Interest – Reviewers and GRP

FightMND requires its independent reviewers and the GRP to act in an ethical manner, declare conflicts of interest, and withdraw from considering applications where such conflict does or may exist.

Acknowledgement of Support

Successful applicants are required to acknowledge FightMND in any publications, public announcements, media, and scientific meeting presentations or discussion forums pertaining to research conducted. FightMND materials, logos, and images can be supplied for this purpose, if required.

Funding – Scope and Criteria

The scope and criteria for funding is as outlined below:

- The maximum period of grant funding for Drug Development projects is 3 years.
- The maximum allowable direct research cost for Drug Development Grants is:
 - **\$550,000** AUD for Stage 1 Drug Development Grants; and
 - **\$1,200,000** AUD for Stage 2 Drug Development Grants.
- More cost-effective studies that do not request the full available funding amount are encouraged.
- The applicant may request the entire maximum funding amount for a project that may have a period of performance less than the maximum of 3 years with appropriate justification.
- Timelines must be clearly described (Gantt chart format) with clear go/no-go milestones.
- Payment structure will be based either:
 - On achievement of milestones, which will be finalised jointly with the Investigators and the FightMND Cure Team if the project is approved for funding. A minimum of 6-monthly progress reports will be required; or
 - In six (6)-monthly instalments. The initial sum awarded by FightMND will be for the first six (6) months only. Continuity of funding, in six (6)-monthly instalments, will depend on the submission, by the Primary Investigator, of satisfactory progress reports (every 6 months) and an itemised financial report (every 12 months), and their approval by FightMND.
- For Phase I clinical trials, continuity of funding is dependent on milestone achievement. Future payment instalments will not be made until the relevant milestone has been achieved.
- The research project can commence immediately upon receipt of a signed Grant Agreement, and must commence within 3 months of the agreed commencement date outlined in the executed Grant Agreement.
- Travel costs of up to \$5,000 AUD per year to attend and/or present at scientific/technical meetings are allowed within the budget.

- Investigators at all academic levels are eligible to submit applications.
- The applicant must be the Primary Investigator (PI) and have the lead role in directing the project. In addition:
 - The level of contribution and role of the PI and other co-Investigators (CIs) must be clearly defined in the application;
 - The PI may be based internationally; and
 - Applications involving collaborations with MND researchers within Australia will be looked upon favourably.
- Cash and in-kind co-contributions from applicants will be viewed favourably.
- Any other actual or proposed sources of funding to support the project must be disclosed.
- FightMND reserves the right of refusal of any project applications that it deems fall outside these criteria.
- Successful applicants are encouraged to provide regular information or feedback on their research to be circulated by FightMND for MND patients and carers. The Primary Investigator (or co-Investigator(s)) is/are required to present progress of the Drug Development Project at research symposiums annually, and to FightMND donors and supporters at FightMND research symposiums.
- It is an expectation of successful applicants that project findings are to be published in appropriate peer-reviewed academic and professional journals with details sent to FightMND. Costs to enable open access for publications may be included in the budget.
- Open-science standards are encouraged by FightMND where possible, and research proposals demonstrating open-science practise and information and knowledge-sharing will be considered favourably (for further detail, see https://www.unesco.org/en/open-science/about).

Applicants are limited to four (4) submissions as an Investigator, of which a maximum of two (2) can be as Primary Investigator, across all schemes (excluding Fellowships).

Submission Guidelines

Letter of Intent

Submission of Letter's of Intent

FightMND will only accept Letter's of Intent submitted via the Fluxx Grant Management System, which can be accessed at the following link https://fightmnd.fluxx.io.

All administrative information and Letter's of Intent, as outlined below, are to be entered into the application forms in Fluxx. Resources are available to help you with this new submission procedure.

- How to register a new user account in Fluxx (manual)
- How to submit a Drug Development Grant Letter of Intent in Fluxx (written manual)
- How to submit a Drug Development Grant Letter of Intent in Fluxx (guided video)

If you experience any issues or have questions regarding the submission process, please contact the FightMND Cure team at researchgrants@fightmnd.org.au.

Requirements for Submitting a Letter of Intent

A Letter of Intent must include the following:

1) Application Form

Details on the Application form will be entered directly into FightMND's Grant Management System (Fluxx) at https://fightmnd.fluxx.io/, and will include the following:

- Primary Investigator information;
- Administering Institution information;
- Project title;
- Category of Drug Development Grant;
- · Estimated budget of project;
- · Estimated duration of project; and
- Lay summary of project (1500 characters).





2) Letter of Intent

(2 pages max.)

Please use the template below as an example of the format required in submission of your letter of intent, to be uploaded with the application as a single pdf in FightMND's Grant Management System at https://fightmnd.fluxx.io/.

Letters of intent should be prepared on A4 size pages with a minimum size 12 font (calibri preferred), one (1) cm minimum page margins and **must not exceed 2 pages** in length.

A brief CV of the Primary Investigator (2 pages max.) should also be added to the Letter of Intent pdf and uploaded onto FightMND's Grant Management System for consideration.

Project Title:

Primary Investigator:

Brief description of relevant pre-clinical or clinical evidence that supports the study rationale:

Project aims:

Project Key Words (4 maximum)

Brief description of the study design:

Where applicable, list the MND models that will be utilised in the proposal:

Indicate how the project aims will help translate therapeutics for the treatment of MND/ALS to the clinic:

Details of each proposed collaborator involved in the project, including:

Name and Affiliations; and

Specific role relevant to project aims.

The total budget cannot exceed AUD \$550,000 for Stage 1 Drug Development Grants, and AUD \$1,200,000 for Stage 2 Drug Development Grants (unless additional funding sources are available outside of these grants). FightMND does not provide funding for indirect or overhead costs, or on-costs, of an Administering Institution. If invited to submit a full application, where the budget for the overall project exceeds the maximum amount of either AUD \$550,000 or AUD \$1,200,000 awarded by FightMND, the full application will require disclosure of budget details of the entire study, including: the TOTAL funding amount so far secured for the entire study; the approach being made by the applicants to secure the additional funding (if not secured); and the anticipated timeframe to secure the additional funding.

Submission Guidelines

Full Applications

Should you be invited to submit a full application,

FightMND will only accept applications submitted via the Fluxx Grant Management System, which can be accessed at the following link https://fightmnd.fluxx.io.

All administrative information and project proposals as outlined below are to be entered into the application forms in Fluxx. Resources are available to help you with this new submission procedure.

- How to submit a Drug Development Grant in Fluxx (written manual)
- How to submit a Drug Development Grant in Fluxx (guided video)

If you experience any issues or have questions regarding the submission process, please contact the FightMND Cure team at researchgrants@ fightmnd.org.au.

Requirements for Full Applications

Applications must include the following:

Application Form

Details on the application form will be entered directly into the Fluxx Grant Management System, and will include the following:

- Primary Investigator and co-Investigators.
- Category of Drug Development Grant
- Name of the Institution where the project work will be undertaken.

- Other collaborators (not listed as Investigators).
- Administering institution information.
- A lay summary of the project suitable for media release if the application is successful (300 characters).
- A lay summary of the project suitable for publication on the FightMND website and newsletter if the application is successful (1500 characters).
 - Provide background information necessary for readers without scientific or medical training to understand the rationale and feasibility of the proposed Drug Development project. It should also clearly describe the scientific objective the project is designed to achieve.
 - Describe the ultimate applicability of the research (in lay terms):
 - i. What type of MND patients (e.g. Sporadic vs. Familial) will it help and how it will help them (e.g. symptom control vs. disease progression)?

ii. What are the potential clinical applications, benefits, and risks?

iii. What is the projected time to achieve a patient-related outcome?

iv. What are the likely contributions of this study in advancing the development of a therapy for MND?

- A Statement on the potential impact of the Drug Development project (1250 characters).
- A summary of how you will engage with people living with MND about this research (750 characters).

Project Proposals

Proposals must be uploaded as a single pdf file onto Fluxx (max. 5MB) and contain the following details:

Research Plan and Background

(STAGE 1 Drug Development Grant - 5 Pages Max.)

(STAGE 2 Drug Development Grant - 7 Pages Max.)

Provide a well-developed, well-integrated, and detailed research plan that supports the translational feasibility and promise of the project, including:

- Aims of the project stating clearly and concisely which hypotheses are being tested, and the applicability of results to the further development of a potential treatment for MND;
- · Background;
- **Preliminary and supporting data** relevant to the phase(s) of the preclinical development as required;
- Research plan:

i. Provide a detailed outline of the research for the full period of performance, including clear go/no-go milestones with justifications.

ii. For animal studies:

- Explain how and why the animal species, strain, and model(s) being used can address the scientific objectives, and where appropriate, the study's relevance to sporadic human MND biology;
- Summarise the procedures to be conducted and describe how the study will be controlled;
- To further support the advancement of a particular therapeutic candidate, studies should aim to demonstrate beneficial effects across a range of outcomes, including motor or cognitive function, neurophysiology, histopathology, and survival when using *in vivo* models of MND;
- Describe the randomisation and blinding procedures for the study, and any other measures to be taken to minimise the effects of subjective bias during animal treatment and assessment of results. Provide justification if randomisation and/or blinding will not be utilised;
- Provide a sample size estimate for each arm and the method by which it was derived, including power analysis calculations; and

 Describe how data will be handled – including rules for stopping data collection, criteria for inclusion and exclusion of data, how outliers will be defined and handled, statistical methods for data analysis, and identification of the primary endpoint(s).

iii. In studies utilising iPSC lines, investigators should:

- Incorporate uniform differentiation protocols to improve reproducibility;
- Use cell lines from a sufficient number of participants per group for studies comparing disease and control;
- Use genetically matched (isogenic) mutationcorrected lines when applicable (with rigorous quality control including karyotyping) to control for variability due to intrinsic genetic background of subjects;
- Address the limitations of and issues related to the immature/foetal nature of the derived experimental tissue and how/if these will be addressed; and
- Ensure the lines clearly display hallmark MND pathology.

iv. Address potential pitfalls and problem areas within the scope of the proposed project and present alternative methods and approaches.

References

(2 pages max.)

Timeline

(1 page max.)

- Include a detailed timeline for the project in Gantt chart format. Explanations relating to the timeline of the project, order of experiments and feasibility may be included.
- An extension of the body of the 'Project Plan and Background' into the timeline page will make the application ineligible.
- The timeline should ALSO be uploaded as a separate file directly into Fluxx.

Impact Statement

(1 page max.)

Describe:

- How the project will make an important contribution to MND therapeutic development; and
- In general terms, how the outcomes of the project, if successful, will be translated to the clinic and made available to MND patients.
- A summary detailing how you will engage with people living with MND about this research.

Transition Plan

(3 pages max.)

The applicant:

- Must demonstrate that they have access to all intellectual property rights necessary for development and commercialisation.
- Where possible, should describe/discuss the methods and strategies proposed to move the lead compound(s) into the next phase of development (e.g. clinical trials, commercialisation, and/or delivery to the patient population) after successful completion of this project.

The transition plan should include components listed below (where relevant):

- The development and/or commercialisation strategy;
- Details of the funding strategy to transition to the next level of development and/or commercialisation (e.g. partners, pharma, internal/ external funding opportunities to be applied for);
- A schedule and milestones for transitioning to the next phase of development, including a Gantt chart; and
- A risk analysis for cost, schedule, manufacturability, and sustainability moving forward.

Budget

(1 page max.)

Provide an itemised budget with justification and breakdown of annual expenditure.

Where the application is to support a budget that exceeds the FightMND grant, applicants should include budget details of the entire study, including:

- The overall budget and cost of the study;
- The component of the study that this application will fund;
- Whether the TOTAL amount of funding required for the entire study has been secured, and the TOTAL funding amount so far secured for the study;
- If the TOTAL amount of funding required for the study has not been secured (other than the amount requested in this application), indicate the:
 - Approach that is being made by the applicants to secure the additional funding; and
 - Anticipated timeframe to secure the additional funding.

Budget items can include:

- Salaries for team members.
 Salaries, where justified, will be supported up to a level equivalent to the 'Personnel Support Package 4' outlined by the NHMRC of Australia.
 See https://www.nhmrc.gov.au/funding/manageyour-funding/personnel-and-salary-supportpackages.;
- Salary oncosts if itemised (e.g. superannuation, payroll tax, work cover). Salary oncosts may be included above the PSP4 limit where justified.
- Direct research costs (e.g. reagents and consumables etc.);
- Travel for attendance at relevant ALS/MND scientific meetings, to present the findings of the project each year for the duration of the grant (max. \$5,000 per year); and
- Costs to enable open access for publications within 6 months of publication can be included in the project budget (but no other publication costs).

Budget items cannot include:

- Salaries for Primary Investigators or co-Investigators (unless they are an early-career researcher within 7 years of PhD being awarded);
- Equipment items;
- Capital equipment, depreciation, or maintenance of equipment;
- · Computers; and
- · Indirect, overhead or oncosts of the Institution.

Milestones

(1/2 page max. - Phase I Clinical Trials Only)

Phase I clinical trial applications must include Project/Study Milestones that align with the proposed budget (see Additional Details section on page 7).

Note: Continuity of funding for Phase I clinical trials is dependent on milestone achievement, and future payment instalments will not be made until the relevant milestone has been achieved. Please consider this when planning your study, milestones and budget.

Declaration of Research Funding from Other Sources

Declaration and details of research funding from other sources (actual or proposed) that relate to the Drug Development Grant's hypothesis, aims and research plan must be stated and include:

- Investigator, and Title of other Application;
- Funding Source/Organisation and Application ID;
- · Role of Investigator on other Application;
- Duration of other funding;
- · Total amount requested;
- Status i.e. funded/under consideration.

Curriculum Vitae of all Investigators

(3 pages max. per Investigator)

Include:

- · Academic background;
- · Present and past employment positions;
- · Awards and Prizes;
- · Research grants support (past 5 years); and
- Peer reviewed publications (do not include publications "in preparation" or "under review"). Please provide a DOI number for papers recently accepted.

Collaboration Plan

(2 pages max.)

- Name(s) of the Department(s) and Institution(s) where the Drug Development project will be carried out, and nomination of the Primary Department/Institution.
- Suitability of the Department and Institution for supporting the Drug Development Grant and outlined projects should be clearly outlined.
- Describe the specific role(s) of each collaborator in the proposed project and evidence that they are equipped to fulfil the role.
- If the project involves a multi-organisational collaboration, participating organisations will ensure the success of the collaboration by resolving potential intellectual and material property issues and by removing organisational barriers that might interfere with achieving high levels of cooperation. Details on these processes should be included in the application, including all details of intellectual property ownership, and a description of any appropriate intellectual and material property plans amongst collaborating organisations.

Letter of Support from the Administering Institution(s)

(1 page max.)

Include a letter of support from the Administering/ Sponsoring Institution stating their suitability and role in advancing the Drug Development Project's progress and success, and confirming that appropriate infrastructure, equipment, consumables and laboratory space will be provided for the duration of the project.

THE FOLLOWING COMPONENTS ARE TO BE UPLOADED INTO THE FLUXX APPLICATION FORM SEPARATELY TO THE PROJECT PROPOSAL:

Timeline

(1 page max.)

• Upload a copy of the Gantt chart timeline page as a separate file directly into Fluxx.

Budget

Provide a high-level budget summary of total expenditure (in AUD) per year, entered directly into Fluxx (see page 10 of instruction manual, or instruction video at 4:13)

Note that this should be the same expenditure as presented in the 1 page budget within the PDF proposal, but entered separately in Fluxx as high-level line items.

How to Submit

All applications are to be submitted through the FightMND Grant Management System Fluxx (https://fightmnd.fluxx.io).

- Select "Drug Development Grants" in the Fluxx Grant Managment System to access the Drug Development application form;
- The PROJECT PROPOSAL should be submitted as a single PDF (minimum size 12 font – calibri preferred, minimum 1 cm page margins), uploaded onto the Application form on the Fluxx Grant Managment System (pdf size not to exceed 5MB);

The PROJECT PROPOSAL should include the following components:

- Research Plan and Background;
- References;
- Timeline;
- Impact Statement;
- Transition Plan;
- Budget;
- Milestones (if applicable);
- Declaration of research funding from other sources;
- Curriculum Vitae of All Investigators;
- Collaboration Plan;
- Letter of support from Administering Institution.

- The TIMELINE should be uploaded separately into the Application form on the Fluxx Grant Managment System.
- Where the application is to support a budget that exceeds the value of the FightMND grant, applicants should include budget details of the entire study in the Project Proposal pdf (1 page max.), as outlined in the Budget section of these guidelines.

Applicants are limited to four (4) submissions as an Investigator, of which a maximum of two (2) can be as Primary Investigator, across all schemes (excluding Fellowships).

Application deadlines are described in this guideline.

Applications will NOT be accepted if submitted via email.



Reporting

Funding recipients will be required to submit reports on a regular basis via the Fluxx Grant Management System (details will be provided to successful applicants). The reporting schedule is outlined in the following table.

REPORT	REPORTING FREQUENCY	DUE
Progress against pre-determined milestones and/or targets *	6-monthly	Every 6 months from receipt of funds
Financial Reports (to be included in progress report) *	Annually	Every 12 months from the receipt of funds
Final Report	Once Only	At project completion, or within 12 weeks after project completion
Milestone Notification for Phase I Clinical Trials	As agreed to in Grant Agreement	When Milestone is achieved
Ad hoc reports *	As requested by FightMND	On request with a negotiable time frame not greater than six weeks
FightMND Research Symposium Presentation	Biennially	During FightMND Research Symposium

* These reports will be used to assess whether the project is proceeding satisfactorily, whether funds are being acquitted in accordance with the original application goals, and to ascertain the ongoing value of FightMND funding.

Funding may be suspended if progress is considered unsatisfactory, or if funds have not been utilised in accordance with the Drug Development Grant Agreement.

Terms and Conditions

FightMND Grants

Terms and Conditions

All communication concerning FightMND Grant applications and administration should be addressed to the FightMND Cure team, by email to researchgrants@fightmnd.org.au.

1. Funding Arrangements

1.1. FightMND Research Grants are time-limited, and applicants should ensure that proper consideration is given to this in the proposal. When the project is approved in principle, the initial sum awarded by FightMND will be for the first six (6) months only. Approval of funding for subsequent invoices at six (6) monthly intervals will be subject to availability of funds and the receipt, from the grantee and/ or Administering Institution, of satisfactory project progress and financial reports, and achievement of agreed milestones if the Grant awarded is for a Phase I clinical trial. Members of the FightMND team and Board will review progress reports to decide outcomes.

1.2. If the applicant under-spends in any year, FightMND can, at its discretion, give approval for the balance to be carried into the following year. Expenditure beyond the end date will only be permitted if authorised by FightMND in advance. Requests must be made by contacting FightMND at least eight weeks prior to the original completion date, by email to the FightMND Cure team at researchgrants@fightmnd.org.au.

1.3. The value of FightMND Drug Development Grants is up to a total of \$550,000 AUD for Stage 1 and \$1,200,000 AUD for Stage 2 Drug Development Grants, for project performance of up to three (3) years. 1.4. FightMND will not meet indirect or overhead costs or on-costs of the Administering Institution, such as: general travel, finance services, staff facilities, staff development, public relations, institutional libraries, routine secretarial work, personnel services, stationery or contributions to general departmental costs, and publication costs (except for those necessary to enable open access for publications).

1.5. Conference attendance: FightMND will allow up to \$5,000 (AUD) per annum towards the cost of relevant conference attendance and participation by the Primary Investigator to be drawn from the total sum awarded. This may be used during the life of the project towards the costs of registration fees and travel, but not to cover separate hotel accommodation or other subsistence costs. Invoices, receipts or other evidence of spending must be provided. The investigators are encouraged to present their work. The Primary Investigator is expected to attend at least one relevant meeting per year.

1.6. Payment of instalments is conditional on receipt and approval of satisfactory project progress and financial reports, and achievement of agreed milestones if the Grant awarded is for a Phase I clinical trial (see condition 1.1 and 15.1).

1.7. Funding from other sources: financial support for clearly defined aspects of a project from separate funding sources is permitted under FightMND grants. Such supplementary funding must be disclosed at the time of the grant application or at the time such funding is received.

2. Equipment

2.1. FightMND will not fund any equipment purchased as part of a FightMND Grant.

3. Ethical Considerations

3.1. It is the responsibility of the Applicants to have ethical committee approval for all or part of the planned research. This should ideally be in place at the time of applying for funding.

3.2. Approvals must be received, and copies provided to FightMND upon request, prior to the Grant commencing.

4. Personal Direction of the Project

4.1. It is expected that the Primary Investigator will be actively engaged in directing the project. Continued use of FightMND funds during a prolonged absence of the Primary Investigator requires written agreement to continue the research under the direction of another qualified Investigator, ideally obtained prior to the absence. The grantee or an approved representative of the Administering Institution must apply to and notify FightMND by email to the FightMND Cure team at researchgrants@ fightmnd.org.au, with an explanation of the situation, providing details of the arrangements for conducting the research during their absence (see Terms and Conditions 11.2).

5. Recruitment and Employment of Staff

5.1. FightMND does not act as an employer and, therefore, in all cases where financial support is provided for the employment of staff, the Administering Institution undertakes to issue a contract of employment in accordance with any other relevant Act relating to the conditions of employment.

5.2. FightMND will not be responsible for claims under statute or at common law, nor will they indemnify the Administering Institution against a claim for compensation or against any claims for which the Institution may be liable as an employer or otherwise.

6. Staff Management Responsibility

The Administering Institution must accept full responsibility for:

6.1. The management, monitoring and control for all staff (permanent, temporary and students) employed or involved in any research funded by a FightMND grant;

6.2. The management, monitoring and control of all research work funded as a result of a FightMND grant.

7. Termination of Employment

7.1. If the tenure of the appointment of staff recruited to work on the FightMND-supported project continues beyond the defined period of the Grant, the Administering Institution will be solely responsible for all costs beyond the period of the Grant. FightMND accepts no liability for contracts and costs extending beyond the defined grant period.

8. Employment Term Contracts

8.1. Where members of staff have been under contract to the Administering Institution prior to the activation of the FightMND Grant, FightMND will not reimburse costs attributed to any prior commitment. This includes any redundancy payments due for service prior to the grant period.

8.2. The contract of employment offered must not extend beyond the termination of the Grant (unless the Administering Institution wishes to extend the contract at its own expense).

9. Parental and Other Long-Term Leave

9.1. The Administering Institution will meet the cost of any long-term leave, other than holiday, and will ensure that all annual leave entitlement is taken within the Grant period. Long-term leave may include maternity, parental or long-term sick leave.

9.2. Parental leave is the responsibility of the Administering Institution employing staff undertaking a FightMND-funded project. Leave will be provided according to the Administering Institution's local terms and conditions of employment. The costs of such leave are the responsibility of the Administering Institution and are not provided for by FightMND.

9.3. If a FightMND funded employee is due to take any planned long-term leave, the Grant Primary Investigator should inform FightMND of the dates in advance. This will enable discussion to decide whether the Grant should be suspended for the period of absence until full-time employment can be resumed (see Terms and Conditions 4 and 11.2). If unplanned long-term leave occurs, the Grant Primary Investigator or an approved representative of the Administering Institution should contact FightMND by email to researchgrants@fightmnd.org.au as soon as possible to discuss the situation.

10. Activation of an Awarded FightMND Grant

10.1. FightMND Grants are activated on receipt of a signed Grant Agreement and receipt of the first invoice. If, for any reason, the start date of the project is delayed after the Grant Agreement has been returned, FightMND must be informed at once, a Grant Agreement Deed of Variation form completed, and a new start date agreed (see Terms and Conditions 11.2). If necessary, a revised Grant Agreement will need to be completed and returned.

10.2. If the project does not start within three (3) months of the original agreed start date, FightMND may withdraw the Grant offer. The grantee and/ or Administering Institution will have to reapply for funding in a future grant round, in competition with other applicants at the time.

10.3. Ethical Approval: FightMND must receive evidence that ethical approval (if required) is in place prior to the project starting. Payment of invoices will be delayed until evidence has been provided. It is the responsibility of the Primary Investigator to have ethical approval for the proposed research and this should ideally be in place at the time of applying for funding.

11. Change of Terms of an Awarded FightMND Grant

11.1. Reallocation of funds from one expense heading of the approved budget to another, as detailed in the Grant Agreement, requires written permission from FightMND.

11.2. Grantees will be required to submit a letter to FightMND detailing any and all proposed changes to the project and complete a Grant Agreement Deed of Variation. Letters/Deeds of Variation must be submitted at least eight weeks prior to the changes taking place and submitted for approval to FightMND by email to the FightMND Cure team at researchgrants@fightmnd.org.au. FightMND must be kept informed at all times of any changes to the original grant funded and the Grant Agreement.

11.3. Any request for major changes in the terms of the Grant, e.g. for additional staff or budget items, must be made in the form of a new and separate grant application, which will be considered in competition with all other new applications.

12. Changes to Conditions of an Awarded FightMND Grant

12.1. FightMND reserves the right to change the Terms and Conditions of FightMND Grants at any time. If this occurs during the lifetime of a Grant, the revised Terms and Conditions may be applied in place of those issued at the commencement of the Grant.

12.2. Successful applicants will be given at least 8 weeks' notice of any change to conditions of the Grant.

13. Early Termination of an Awarded FightMND Grant

13.1. FightMND reserves the right to terminate an awarded Grant at any time. Circumstances which might lead to termination include:

- Any breach in the Terms and Conditions under which the Grant was awarded;
- If the project has not started within three months of the agreed start date;
- The work is diverging markedly from the original approved project. The Grant Primary Investigator or an approved representative of the Administering Institution must inform FightMND immediately when they are aware of a change of direction (see Terms and Conditions 11.2). There may, however, be circumstances in which the change is acceptable on scientific grounds;
- Failure to submit adequate progress reports, or serious and unresolvable problems identified by a site visit; and/or
- Work has ceased on the Grant, or the Primary Investigator has ceased to be actively involved in the project. FightMND must be informed immediately if this situation arises (see Terms and Conditions 11.2).

FightMND will endeavour to give 60 days prior notice before termination of an awarded Grant.

13.2. If a Grant is terminated, FightMND will meet costs properly and necessarily incurred under the Grant Agreement up to the termination date. However, payments will not, in aggregate, exceed the amount of the Grant remaining to be paid at the time of its termination.

13.3. In the event of work being discontinued by the Administering Institution, written notification must be sent to FightMND, together with a report on the work carried out to date, setting out reasons for the termination.

14. Extension to an Awarded FightMND Grant

14.1. It is the responsibility of the Primary Investigator to apply for further support before the end of the Grant period, if this is required. Applications for an extension of support may be considered in isolation or as a new application in competition with other applications at the time of applying (see Terms and Conditions 11.2).

14.2. Adequate time (at least eight weeks), should be allowed for an application to be processed and FightMND accepts no responsibility for any costs incurred due to the failure of a grantee to make such an application in good time.

15. Reports

15.1. The Primary Investigator is required to submit the following reports:

- Annual progress reports: due every 12 months from the Grant start date, as stated on the executed Grant Agreement (see Terms and Conditions 1.1). A short summary in language intelligible to the lay reader should also be submitted for possible use in FightMND publications and on our website;
- Interim reports: brief six-monthly reports of no more than three pages on project progress;
- **Final report:** required within twelve weeks after completion of the Grant project. A detailed final report covering the whole project will be substituted for the annual report. In addition, a summary should also be provided in language intelligible to the lay reader. Researchers must avoid the use of jargon and technical language and should pitch the summary at the level of a science feature in a broadsheet newspaper. The summary may be used in FightMND publications;
- FightMND Research Symposium: the Primary Investigator is required to present progress of the project annually, and at the FightMND Research Symposium.
- Notification of Milestone achievement (Phase I Clinical Trial Grants only): FightMND should be notified and supporting documents provided when the Clinical Trial has achieved agreed milestones, by email to the FightMND Cure team at researchgrants@fightmnd.org.au.

15.2. Instalments for the Grant will be paid only after receipt of progress reports and their approval by FightMND. Payment may be delayed if reports are not submitted on time and/or if clarification is required. For Clinical Trials, instalments of the Grant will be paid only after receipt of relevant and agreed milestone achievement.

15.3. Feedback to people living with MND and/ or Carers. All grantees are encouraged to provide regular information on their research to be circulated by FightMND for patients and carers. Where volunteers are involved in research, grantees are required to provide regular feedback to the participants and FightMND, in addition to annual reports and publications.

16. Site Visits and Progress Meetings

16.1. FightMND reserves the right to visit the grantee's laboratory during the period of the Grant to discuss project progress, and welcomes invitations to do so.

16.2. Grantees may be asked to attend six monthly progress meetings to discuss progress with FightMND representatives and donors. These may be arranged in conjunction with site visits.

16.3. Grantees may be asked to take part in FightMND communication projects such as video content to help facilitate feedback to FightMND's donors on outcomes related to the Grant.

17. Publications, Presentations, Acknowledgments and Publicity

17.1. Grantees are expected to seek publication of findings in refereed journals during and as soon as possible during and after conclusion of the Grant project (subject to Term and Condition 18). FightMND and the grantee and/or Administering Institution jointly undertake to notify each other before published reference is made to the findings of the project, and to discuss and reach agreement on the form of publication wherever possible.

17.2. Grantees and/or the Administering Institution must inform FightMND immediately when results from FightMND-funded research are accepted for publication or presentation. The grantee and/or Administering Institution must provide FightMND with reprints, photocopies or electronic copies of the final version of any such publications. 17.3. **Open Access Policy:** Grantees are mandated to make their peer-reviewed papers, directly arising from the Grant, available through open access. These research papers should be available within the PubMed Central repository as soon as possible, but definitely within six months of publication. Costs to enable open access for publications can be included in the project budget.

17.4. **Posters – costs and accessibility:** If FightMND-funded research is accepted for presentation as a poster, the costs of poster production may be claimed as part of the consumables budget (to a maximum of \$500 per Grant). The poster must acknowledge FightMND as a source of funding and should include FightMND's logo. FightMND should be provided with an electronic copy of the poster for use on our website and social media.

17.5. To ensure the long-term sustainability of income for research and to reflect and maintain our reputation for funding research of the highest scientific excellence and of greatest relevance to MND, all opportunities to promote FightMND must be pursued. The grantee and the Administering Institution are obliged to co-operate with FightMND over any publicity or fundraising activity arising from research funded by FightMND. Where it is the main funder of the research, FightMND reserves the right to lead on publicity.

17.6. Grantees and/or the Administering Institution must notify the FightMND Cure Research and Programs Director, Dr Bec Sheean, by email to bec.sheean@fightmnd.org.au, the FightMND Cure team at researchgrants@fightmnd.org.au, and the Marketing and Communications team at marketing@fightmnd.org.au, at least five working days in advance of any publicity arising from research wholly or co-funded by a FightMND Grant. FightMND must be given at least 24 hours' notice of any media release in connection with the funded project. Any press release or other material including reference to FightMND-funded research must be approved by our team before it is released to the media.

17.7. In any oral or written report or poster presentation relating to FightMND-funded research, the grantee and/or author must acknowledge FightMND's support and display the FightMND logo where practical. All references to FightMND-funded work placed on websites, electronic bulletin boards and similar platforms must state clearly that the work is funded by "FightMND" and ideally a link should be included to the FightMND website: www.fightmnd. org.au. 17.8. Grantees must ensure that FightMND's support is acknowledged in all publications, presentations and similar communications. It is essential for grantees to acknowledge that their research has been supported wholly or in part by FightMND, either in the text or in a footnote. The Grant reference/ID must also be provided.

17.9. When speaking publicly and to representatives of the media about FightMND-funded research, grantees and researchers should ensure they make it clear to the media and others that they should be presented as a "FightMND-funded scientist". Researchers should consult with FightMND's Cure Research and Programs Director, Dr Bec Sheean, at bec.sheean@fightmnd.org.au and Marketing and Communications team at marketing@fightmnd. org.au, before speaking to the media.

17.10. There is a subtle but important difference between speaking as a "FightMND-funded scientist" and acting as a spokesperson for FightMND. Representatives of the media may not always be aware of this difference. Grantees and Researchers who speak to the media must ensure that their personal views are not misrepresented as being attributable to FightMND.

18. Patents, Copyright and Other Intellectual Property

18.1. If ideas, processes or products of potential commercial value are generated as a result of the project, the Grantee and/or Administering Institution must obtain the written consent of FightMND before taking any steps to exploit the results commercially. The Grantee and Administering Institution accept that FightMND may require a share of financial gain in return for its consent. This restriction shall continue to bind the parties notwithstanding any termination of the Grant. For further detail, please see Appendix 1 - Intellectual Property rights and commercial activities.

19. FightMND Meetings and Events

19.1. Grantees are asked to make themselves or other appropriate research team members available to report on the Grant project at FightMND meetings, fundraising events and occasionally at other times by invitation.

19.2. There may be occasions where the grantee or other appropriate research team members will be asked to present their work relating to the Grant project at scientific and/or health care professionals' meetings.

19.3. When speaking and presenting at FightMND events, grantees or other appropriate research team members are expected to make it clear in the presentation their funding connection with FightMND.

20. FightMND Case Studies

20.1. Grantees are asked to make themselves available as case studies reflecting the work of FightMND for its wide-ranging communications and fundraising activities.

21. Scientific Integrity

21.1. In the rare event of scientific fraud occurring, FightMND wishes to make it clear that it is the responsibility of the employing authority to investigate any suspected case of fraudulent activity. FightMND agrees to provide funding providing the employing authority can produce evidence of a procedure for dealing with scientific fraud. If fraud should be proven the Grant must be repaid in full to FightMND forthwith.

22. Indemnity

22.1 FightMND does not provide cover for negligent or non-negligent harm for participants in FightMNDfunded studies. The Administering Institution should ensure that local arrangements are in place should claims arise.



Appendix 1

Intellectual Property Rights and Commercial Activities

As a charity, FightMND is obliged to ensure that the outcomes of its funded research are applied for the public benefit. In some circumstances, this obligation may be best achieved through the protection of Intellectual Property resulting from the research and the facilitation of commercial exploitation of this Intellectual Property.

The term 'Intellectual Property' (IP) describes any work or invention that results from original creative thought.

IP falls into different categories:

- Copyright: protects written, dramatic and artistic work, software, films, sound recordings and broadcasts.
- Patents: protects technical inventions, novel products or processes.
- Trademarks: distinguish the goods and services of one organisation from another.
- Design rights: protects the visual appearance of products.

Some of these protections need to be registered (trademarks, patents) and some do not (copyright, design rights). If the IP is not protected, another individual or organisation may copy the design or commercialise and sell the invention without consent or payment.

Therefore, for grants where FightMND funding may lead to the generation of Intellectual Property, the following additional conditions shall apply:

1.1. Any Intellectual Property developed during the course of conducting research supported by FightMND Grants under this agreement (Project IP) shall be owned by the Administering Institution.

1.2. The Administering Institution must comply with the National Principles of Intellectual Property Management for Publicly Funded Research by having in place strategies, policies, and procedures for the identification, protection, management, and exploitation of Intellectual Property, including that resulting from funding by charities such as FightMND.

http://www.arc.gov.au/national-principlesintellectual-property-management-publicly-fundedresearch

1.3. The Administering Institution should ensure that all persons in receipt of funding from FightMND, or working on funded activity (including employees, students, visiting staff and sub-contractors), are employed or retained on terms that vest in the Institution all Intellectual Property arising from funding by FightMND.

1.4. The Administering Institution, grant holders and co-Investigators should inform FightMND of any pre-existing arrangements of which they are aware, and which could lead to a breach of FightMND-funded standard conditions. The Institution should take reasonable endeavours to ensure that no consultancies, third party restrictions or arrangements which might impact on a FightMND-funded grant are entered into in relation to any FightMND-funded person or activity without prior agreement of FightMND. FightMND-funded Investigators or individuals involved in a FightMND-funded project should not use materials or compounds (other than those obtained commercially), on terms which would place restrictions on the publication of the results. Institutions should take reasonable endeavours to ensure that "reach-through claims" have not been granted on any FightMND-funded IP in favour of commercial organisations providing materials or compounds to FightMND-funded individuals for research purposes. However, FightMND recognises that companies providing materials may often require exclusive rights to any Intellectual Property arising from use of that material, and that this requirement is often non-negotiable. Where Intellectual Property arises from research linked indirectly to the use of material provided under such agreement, the provider should be offered a time-limited opportunity to take out a revenue generating licence.

1.5. The Administering Institution and the Grant holders are bound to notify FightMND promptly in writing when new Project IP arises from the Grant and take reasonable steps to ensure that such IP is protected and not published or otherwise disclosed publicly prior to protection (whilst at the same time ensuring that potential delays in publication are minimised).

1.6. The Administering Institution should seek FightMND's consent to commercially exploit the results of any research it has funded. Consent will not be unreasonably withheld, and FightMND will only refuse an Administering Institution's request where it considers that the proposed commercial exploitation would run counter to its interests and charitable objectives. In the event that FightMND does not provide a response to the Administering Institution's request within thirty (30) business days, the Institution or its technology transfer subsidiary will automatically have the right to proceed with such commercial exploitation. The Administering Institution is not required to seek FightMND's consent in assigning Intellectual Property to its technology transfer company.

1.7. Within thirty (30) business days of receiving the notification from the Administering Institution, and prior to the Administering Institution applying for registration of any Project IP, FightMND will advise the Administering Institution in writing which one of the following financial arrangements will apply in relation to commercialisation of the Project IP:

I. All of the costs associated with commercialising of the Project IP (including patent and legal costs) will be paid by the Administering Institution. Out of any net proceeds received by the Administering Institution from commercialising the Project IP (after all of the Administering Institution's costs associated with commercialising the Project IP have first been deducted), the Administering Institution will pay 10% of all net commercialisation proceeds to FightMND until such time as FightMND has received an amount equal to the amount of the Grant funding provided under this agreement multiplied by five (5). II. Ten per cent (10%) of the costs associated with commercialising the Project IP (including patent and legal costs) will be paid by FightMND as and when the costs fall due, and the remaining 90% of the commercialisation costs will be paid by the Administering Institution. Out of any net proceeds received by the Administering Institution from commercialising the Project IP (after all the Administering Institution's costs associated with commercialising the Project IP have first been deducted and FightMND's costs have been reimbursed), the Administering Institution will pay 10% of all net commercialisation proceeds to FightMND in perpetuity.

III. FightMND will not seek any payment from the net commercialisation proceeds arising from commercialisation of the Project IP.

1.8. If the Administering Institution does not wish to protect, manage or exploit the IP, or fails to comply with the agreed strategy, FightMND may direct the Administering Institution to take steps to protect the IP at the Administering Institution's expense or to transfer the IP to FightMND.

1.9. If the Administering Institution wishes to use any third party (other than its recognised technology transfer company) to carry out its obligations with respect to IP, it must notify and provide details to FightMND.

Appendix 2

Scoring Descriptors for Drug Development Grants

The following descriptors should aid in assessing and scoring individual grant applications. The descriptors are indicative rather than exhaustive.

EXCEPTIONAL SCORE - 7

RESEARCH PROJECT ASSESSMENT DESCRIPTORS

RESEARCH STRATEGY & FEASIBILITY

The proposal has a research plan that:

- has objectives that are *exceptionally well-defined, exceptionally* coherent, strongly developed, and justified *exceptionally*.
- has a *flawless* experimental design, methods, and proposed statistical analyses.
- is without question, *highly feasible* given that the team has access to all of the required expertise and research tools, resources, and techniques.
- has a sound scientific basis with exceptionally coherent and robust background/preliminary data, and exceptionally justified rationale.
- clearly outlines potential problems, limitations, risks and pitfalls, and identifies alternative approaches in an *exceptional* manner.
- has an exceptional research environment, demonstrable by existing infrastructure, mentoring and collaboration, and an exceptionally appropriate balance of cross-disciplinary approaches with researchers, clinicians, consumers, and/ or industry that specifically targets all aspects of the proposed research.

IMPACT AND TRANSITION POTENTIAL

The planned research:

- will result in *exceptionally significant* advances in knowledge in the MND research field and MND therapeutic development (such as in reducing disease progression or symptom control).
- will *without question* be the subject of invited presentations at *leading* national and international scientific/clinical and MND/ALS meetings.
- will lead to exceptionally significant research outputs, including exceptionally influential publications in world-leading multidisciplinary peer-reviewed journals, intellectual property and/or licensing.
- is *exceptionally* innovative and introduces exceptional advances in concept(s).
- has an *exceptionally well*-defined next level of development with a realistic and achievable schedule and milestones.
- will develop compound(s) that are extremely likely to result in early phase human trials within the next 24 to 36 months.
- has an exceptionally strong and extremely well-defined plan to engage with people living with MND about the proposed research and outcomes.

PERSONNEL AND BUDGET

- has exceptionally strong and extremely appropriate expertise that specifically targets the proposed research both in terms of its depth and breadth.
- involves several senior members with exceptionally strong national and international reputations in the MND/ALS research field and/or techniques relevant to the application.
- (may) involve(s) junior members whose contributions to the overall team and research program are extremely welldefined and provide strong expertise targeted towards specific aims of the project.
- has demonstrated a multidisciplinary and *exceptionally strong* collaborative approach to research.
- Clearly defines proposed collaborations and addresses intellectual property ownership issues *exceptionally* well.
- has an *exceptionally well* defined, considered and justified budget relevant to the proposal.

RESEARCH PROJECT ASSESSMENT DESCRIPTORS

RESEARCH STRATEGY & FEASIBILITY

The proposal has a research plan that:

- has objectives that are defined in an outstanding manner, are very highly coherent and strongly developed, and justified very well.
- has an *outstanding near flawless* experimental design, methods, and proposed statistical analyses, with only a *few negligible* weaknesses.
- is *highly feasible* given the experience, skills and readiness of the team.
- has a sound scientific basis with very highly coherent and robust background/ preliminary data and a rationale that is justified very well.
- clearly outlines potential problems, limitations, risks and pitfalls, and identifies alternative approaches *very well*, with only a *few trivial* weaknesses.
- has an outstanding research environment demonstrable by existing infrastructure, mentoring and collaboration, and a highly appropriate balance of cross-disciplinary approaches with researchers, clinicians, consumers, and/or industry that is targeted towards most aspects of the proposed research.

IMPACT AND TRANSITION POTENTIAL

The planned research:

- will result in very highly substantial advances in knowledge in the MND research field and MND therapeutic development (such as in reducing disease progression or symptom control).
- will very likely be the subject of invited presentations at leading national and international scientific/clinical and MND/ ALS meetings.
- will lead to very highly significant research outputs, including highly influential publications in leading multidisciplinary peer-reviewed journals, intellectual property and/or licensing.
- is very highly innovative and introduces outstanding advances in concept(s).
- has a very well-defined next level of development with a realistic and achievable schedule and milestones, with only a small number of *minor concerns*.
- will develop compound(s) that are very highly likely to result in early phase human trials within the next 24 to 36 months.
- has an outstanding and very well-defined plan to engage with people living with MND about the proposed research and outcomes.

PERSONNEL AND BUDGET

Relative to opportunity, the applicant team:

- has outstanding and very highly appropriate expertise that is very highly relevant to targeting the proposed research both in terms of its depth and breadth.
- involves several senior members with outstanding national and international reputations in the MND/ALS research field and/or techniques relevant to the application.
- (may) involve(s) junior members whose contributions to the overall team and research program are very well-defined and provide appropriate expertise targeted towards the project's aims.
- has demonstrated a multidisciplinary and very strong collaborative approach to research.
- Clearly defines proposed collaborations and addresses intellectual property ownership issues *very well*.
- has a *very clearly* defined, considered and justified budget relevant to the proposal.

EXCELLENT SCORE - 5

RESEARCH PROJECT ASSESSMENT DESCRIPTORS

RESEARCH STRATEGY & FEASIBILITY

The proposal has a research plan that:

- has objectives that are defined in an *excellent* manner, are *highly* coherent and strongly developed, and justified *well*.
- has an excellent experimental design, methods, and proposed statistical analyses, that have several minor weaknesses.
- is *feasible* given the experience, skills and readiness of the team.
- has a scientific basis built on highly coherent and strong background/ preliminary data that is justified well.
- outlines some potential problems, limitations, risks and pitfalls, and identifies alternative approaches *well*, with a *few minor* concerns.
- has an excellent research environment demonstrated by existing infrastructure, mentoring and collaboration, and a highly appropriate balance of cross-disciplinary approaches with researchers, clinicians, consumers, and/or industry that is targeted towards relevant aspects of the proposed research.

IMPACT AND TRANSITION POTENTIAL

The planned research:

- will result in *highly substantial* advances in knowledge in the MND research field and MND therapeutic development (such as in reducing disease progression or symptom control).
- will *likely* be the subject of invited presentations at *leading* national and international scientific/clinical and MND/ ALS meetings.
- will likely lead to highly significant research outputs, including influential publications in leading specialised peerreviewed journals, intellectual property and/or licensing.
- is *highly* innovative and introduces *substantial* advances in concept(s).
- has a *well-defined* next level of development with realistic and achievable schedule and milestones, with *several minor* concerns.
- will develop compound(s) that are *highly likely* to result in early phase human trials within the next 24 to 36 months if this project is successful.
- has an *excellent and well*-defined plan to engage with people living with MND about the proposed research and outcomes.

PERSONNEL AND BUDGET

- has excellent and highly appropriate expertise that is highly relevant to the proposed research both in terms of its depth and breadth.
- has at least one senior member with an excellent national and international reputation in the MND/ALS research field and/or techniques relevant to the application.
- (may) involve(s) junior members whose contributors to the overall team and research program are *well-defined* and provide *some* expertise targeted towards the project aims.
- has demonstrated a multidisciplinary and *strong* collaborative approach to research.
- clearly defines proposed collaborations and addresses intellectual property ownership issues *well*, with a *few minor* concerns.
- has a *clearly* defined, considered and justified budget relevant to the proposal with only a *few minor* concerns.

RESEARCH PROJECT ASSESSMENT DESCRIPTORS

RESEARCH STRATEGY & FEASIBILITY

The proposal has a research plan that:

- has objectives that are defined very clearly, are coherent, logical and somewhat strongly developed and justified.
- has a *well-developed* experimental design, methods and statistical analyses

 with several concerns that overall should not impact on achievability of sound results.
- is *feasible*, given the experience, skills and readiness of the team.
- has a scientific basis built on coherent and very good and background/preliminary data that is justified.
- outlines some potential problems, limitations, risks and pitfalls, and identified alternative approaches have several minor concerns.
- has a very good research environment inclusive of existing infrastructure, mentoring and collaboration, and an appropriate balance of cross-disciplinary approaches with researchers, clinicians, consumers, and/or industry that is targeted towards some relevant aspects of the proposed research.

IMPACT AND TRANSITION POTENTIAL

The planned research:

- will *likely* result in *significant* advances in knowledge in the MND research field and MND therapeutic development (such as in reducing disease progression or symptom control).
- *may be* the subject of invited presentations at national and international MND/ALS meetings.
- will likely lead to some significant research outputs, including strong publications in specialised peer-reviewed journals, and possibly intellectual property and/or licensing.
- is innovative in its approach and introduces some advances in concept(s).
- has *defined* the next level of development, with *several* concerns.
- will develop compound(s) that are *likely* to result in early phase human trials within the next 36 to 48 months if this project is successful.
- has a *very good*, defined plan to engage with people living with MND about the proposed research and outcomes.

PERSONNEL AND BUDGET

Relative to opportunity, the applicant team:

- has very good expertise relevant to the proposed research both in terms of its depth and breadth, with a *few minor* concerns.
- All team members have *very good* and growing national and/or international reputations in the MND/ALS research field and/or techniques relevant to the application.
- may involve junior members whose contributions to the team and research program are *defined*.
- has outlined a *very good* collaborative approach to research.
- defines proposed collaborations and addresses intellectual property ownership issues, with *several minor* concerns.
- has a *defined* budget relevant to the proposal, with some concerns regarding justification.

GOOD SCORE - 3

RESEARCH PROJECT ASSESSMENT DESCRIPTORS

RESEARCH STRATEGY & FEASIBILITY

The proposal has a research plan that:

- has objectives that are logical and *generally clearly* defined, developed and justified.
- has a generally clear experimental design, methods and statistical analyses – with several concerns that may impact on achieving sound results.
- is *generally feasible*, given the experience, skills and readiness of the team.
- has a scientific basis built on *good* background and preliminary data.
- has outlined potential problems, pitfalls and risks in a limited manner, and identified alternative approaches have some major concerns.
- has a good research environment, inclusive of existing infrastructure, mentoring and collaboration, with some minor concerns.
- has good evidence of cross-disciplinary approaches with researchers, clinicians, consumers, and/or industry, with some minor concerns on balance and relevance towards proposed research.

IMPACT AND TRANSITION POTENTIAL

The planned research:

- addresses an issue of *some* importance to, and may *moderately* advance capacity in the MND research field and MND therapeutic development (such as in reducing disease progression or symptom control).
- *is unlikely to be* the subject of invited presentations at national and international MND/ALS meetings.
- may result in some moderately significant research outputs, including good but not excellent publications in specialised peerreviewed journals that may have moderate influence on the MND research field.
- is solid in its approach, but is *minimally* innovative and *may* introduce *some* advances in concept(s).
- has minimally discussed the next phase of development following completion of this project is, and *lacks clarity*.
- the projects lead compound is *unlikely to but may* lead directly to early phase human trials within 48 months if this project is successful.
- has a *good* plan to engage with people living with MND about the proposed research and outcomes.

PERSONNEL AND BUDGET

- members have track records in fields relevant to the proposed research but with some *potentially significant concerns* regarding the depth and breadth of expertise relevant to the project application.
- members have *established and growing* national reputations but do not yet have strong international profiles.
- has outlined a *good* collaborative approach to research.
- has a *defined* budget relevant to the proposal, but *lacks clarity and justification* in several areas.

RESEARCH PROJECT ASSESSMENT DESCRIPTORS

RESEARCH STRATEGY & FEASIBILITY

The proposal has a research plan that:

- has objectives that are *adequate*, but *may lack clarity* in some aspects of their definition and justification.
- contains some major weaknesses and raises several significant concerns with respect to the experimental design, methods, or statistical analyses, which may impact the likelihood of the completion of the project.
- has a scientific basis built on *reasonable* background and preliminary data.
- has an adequate research environment, inclusive of existing infrastructure, mentoring and collaboration, but there are notable concerns.
- has some evidence of cross-disciplinary approaches with researchers, clinicians, consumers, and/or industry, but relevance to the proposed research is unclear.

IMPACT AND TRANSITION POTENTIAL

The planned research:

- addresses an issue of *marginal* importance for MND research and MND therapeutic development (such as in reducing disease progression or symptom control).
- may result in *some* research outputs, including publications in specialised peerreviewed journals that may have *some* influence on the MND research field.
- has some minimally innovative and novel aspects.
- The next phase of development following completion of this project is *not discussed or lacks clarity.*
- The project and lead compound(s) are highly unlikely to lead directly to early phase human trials within 48 months if this project is successful (however the possibility beyond this timeframe exists with appropriate follow-up research).
- has *somewhat* defined a plan on how the team will engage with people living with MND about the proposed research and outcomes, but is *lacking in clarity*.

PERSONNEL AND BUDGET

Relative to opportunity, the applicant team:

- members have made contributions to the MND research field but there are several significant concerns regarding the depth and breadth of expertise relevant to this project application.
- members have national reputations that are *beginning to emerge* and only *limited* international profiles.
- has little evidence of collaboration.
- has a budget that is *unclear* and *not well justified*.

UNSATISFACTORY SCORE - 1

RESEARCH PROJECT ASSESSMENT DESCRIPTORS

RESEARCH STRATEGY & FEASIBILITY

The proposal has a research plan that:

- has objectives that are *unclear*.
- contains several significant flaws in the experimental design, methods or statistical analyses.
- has a scientific basis built on a *weak* background and preliminary data.
- raises several major concerns about feasibility and thus the likelihood of successful project completion.
- has a limited research environment, without access to the necessary infrastructure, mentoring and collaboration.
- does *not have* any evidence of crossdisciplinary approaches with researchers, clinicians, consumers, and/or industry.

IMPACT AND TRANSITION POTENTIAL

The planned research:

- does *not address* an issue of importance for MND research and MND therapeutic development.
- provides a program of research which will not significantly advance current knowledge in the MND research field and/or MND therapeutic development, or deliver research outputs.
- The next phase of development following completion of this project is *not discussed*.
- The project and lead compound(s) are *highly unlikely* to lead directly to early phase human trials.
- *does not* have a plan to engage with people living with MND about the proposed research and outcomes.

PERSONNEL AND BUDGET

- is *deficient* in some areas of expertise required to successfully complete the proposed research.
- members are *not well known* nationally or internationally in the MND research field, or relevant research field, and *little or no evidence* is provided to demonstrate emerging track records.
- has *little or no evidence* of collaboration.
- has a budget that is *unclear* and/or *not relevant* to the proposal.