



Request for Applications
CERN and Robert Connor Dawes Scientific Fellowship
awarded by the National Brain Tumor Society

August 7, 2023

BACKGROUND

Immunotherapy is starting to revolutionize cancer treatment. Success with leukemia has provided hope for other cancer types. Translating this approach into brain cancer has its own specific challenges, but even more so for pediatrics. Unlike many adult cancers, pediatric brain tumors have relatively few changes in their DNA and so are adept at hiding from the immune system. Consequently, pediatric brain tumors are poorly infiltrated by T-cells, and this is thought to be the underlying reason for the poor responses to immunotherapies.

National Brain Tumor Society invites applications for the 2024 CERN and Robert Connor Dawes Scientific Fellowship. Unlike other rounds, this round has been uniquely designed to help accelerate the formation of a new ependymoma research team being formed at the [Children's Brain Cancer Centre \(CBCC\)](#) within the University of Queensland, Australia, to develop an RNA vaccine against pediatric brain cancer. The position will also work closely with colleagues in the University's [Ian Frazer Centre for Children's Immunotherapy Research](#). The Fellowship is fully funded for two years, and the successful applicant would begin work in approximately March 2024. This Fellowship also involves 1-2 months in the [Holland Laboratory](#) at the Fred Hutchinson Cancer Center in the United States to acquire skills generating and using unique fusion tumor mouse models.

SCOPE

This multidisciplinary project spans RNA biology, immunology, and brain cancer. The Fellow will be supported by world experts in ependymoma research, pediatric brain cancer, and vaccine development. As part of a new dynamic team solely focused on ependymoma research in Australia, this is a chance to establish or further a career in the pediatric brain cancer field. In addition to joining the University, this position will work collaboratively with the Ian Frazer

Centre, and the Fellow will have access to overseas networks of leaders in ependymoma research.

The rationale for this project is that in pediatric brain tumors the body already makes a weak and ineffective immune response but by using an RNA vaccine generated for each individual patient the existing immune response can be boosted and made effective against the tumor. This project will focus on ependymoma tumors, which do not respond to any known chemotherapy, but for which a combination of surgery and radiation therapy can be effective in some patients. However, when these tumors reappear there is no effective therapy, and it is inevitably fatal. The project will use validated mouse models and tumor tissue and has all the translational capabilities to eventually move it into a clinical trial.

GRANT TERMS

This Fellowship is a 2-year award with a salary of AU\$100,000 per year. The fellowship will be primarily located at the University of Queensland in Brisbane, Australia, with a term of approximately 1-2 months at Fred Hutchinson Cancer Center in Seattle, Washington, USA. Funding will be provided to the Fellow by the University of Queensland, Australia. A travel stipend of up to US\$10,000 for travel to work at Fred Hutchinson Cancer Center will be provided to the chosen researcher directly by National Brain Tumor Society.¹ If required, University of Queensland may provide some assistance with obtaining work visas from the host institutions.

CANDIDATE QUALIFICATIONS

Eligible applicants must:

- Hold a PhD and have research experience in any of the following fields: immunology, cancer research, or RNA biology

Candidates who demonstrate some of the following criteria will be prioritized:

- Brain cancer research (especially pediatric and ependymoma)
- Generating tumor mouse models
- Establishing brain organoids or culturing primary cells
- Vaccine development
- Immunotherapy research
- Bioinformatics expertise

¹ Travel stipend of US\$5,000 per month for up to 2 months.

Of particular interest are candidates who demonstrate a passion in establishing careers in pediatric brain cancer research and translating findings into the clinic.

KEY DATES AND DEADLINES

- August 7, 2023 - Request for Applications Announced
- October 1, 2023 - Applications Due
- December 1, 2023–January 15, 2024 - Interview period
- January 31, 2024 - Funding Awarded

APPLICATION PROCESS

All interested candidates must submit an application to the National Brain Tumor Society no later than October 1, 2023 (11:59 pm ET). Applications should be submitted by email to National Brain Tumor Society, research@braintumor.org. Chosen applicants will participate in a teleconference-based interview.

Applicant Specifications

- 1-2 page cover letter detailing the candidate's interest in the position and providing an overview of relevant experience
- 2 letters of recommendation
- Biographical sketch (NIH format may be submitted)

GENERAL ELIGIBILITY REQUIREMENTS

National Brain Tumor Society welcomes early and mid-career scientists to apply. This award is open to international researchers. Applicants must hold a clinical doctoral degree (e.g., MD, DVM, DO) or doctoral degree (e.g., PhD, MD, DPh) from an accredited institution.

Actual and perceived conflicts of interest will be identified and handled on a case-by-case basis. All applicants are asked to provide disclosures about their relationships to for-profit entities.

Applicants must be eligible to work in Australia and the United States.

REVIEW/FUNDING PROCESS

Applications will be reviewed by National Brain Tumor Society and Robert Connor Dawes Foundation staff and a Scientific Review Committee with specific expertise relevant to the project. All applicants will be informed of the final decision about the status of their

application. The start date will be dependent on the hiring process at the University of Queensland.

REPORTING

The grant awardees are expected to share the progress of their work with National Brain Tumor Society and Robert Connor Dawes Foundation staff via teleconference meeting at the end of each year of the fellowship. A detailed written Progress Report listing accomplishments and a financial report are required at the end of each year in the granting cycle. A final report must be submitted at the end of the grant.

Should grant recipients generate publishable results, they are expected to publish their results in peer reviewed scientific journals and present their findings at scientific conferences. It is mandatory that proper reference be made to the National Brain Tumor Society and Robert Connor Dawes Foundation in all manuscripts, poster presentations, news releases or institutional publications resulting from this grant-supported work.

QUESTIONS

Please direct all questions to research@braintumor.org.

ABOUT US

NATIONAL BRAIN TUMOR SOCIETY MISSION

Unrelentingly invests in, mobilizes, and unites the brain tumor community to discover a cure, deliver effective treatments, and advocate for patients and caregivers.

CERN MISSION

Committed to improving the care and outcome of people with ependymoma through community support and research efforts.

RCD FOUNDATION MISSION

We are battling paediatric brain tumours and supporting brain matters in the areas of research, care and development – to fund the science to end brain cancer and support patients in the meantime.

