OLIGO NATION
UNITING FOR A CURE

A GRANT PROGRAM SUPPORTED JOINTLY BY
OLIGO NATION AND OPERATION OLIGO CURE

Oligo Nation and Operation Oligo Cure announce the 2017 Oligodendroglioma Challenge request for applications, seeking new avenues for oligodendroglioma research and to encourage investigators both within and outside of brain cancer research to apply new ideas and new technologies to the understanding of oligodendrogliomas and their potential treatment.

Approximately 1,500 Americans are diagnosed with oligodendroglioma annually with 15,000-20,000 Americans living with the disease today. No new treatments have been developed in the past 20 years, reflecting the fact that few efforts are specifically dedicated to this tumor type. However, in the past three years, the pace of oligodendroglioma research has accelerated, primarily through the efforts of families affected by the disease. Oligo Nation and Operation Oligo Cure were each founded and are driven by families of oligo survivors.

2017 Oligo Challenge Grants

In October 2016, Oligo Nation convened a group of researchers to discuss the unmet needs in oligodendroglioma research. This diverse group of current Oligo Nation and Operation Oligo Cure grantees, academic scientists and clinicians currently involved in oligodendroglioma treatment held a lively interchange which contributed to the criteria and potential focus areas for the 2017 Oligo Challenge.

The primary goal of Oligo Nation's and Operation Oligo Cure's research strategy is to accelerate the development of new treatments for oligodendroglioma, with a target of **bringing new treatments to the clinic in the next three to five years**. As such, grant requests that are translational in nature or which enhance the ability to perform pre-clinical work with greater speed and accuracy will be highly considered.

We are specifically interested in research that will be relevant to the vast majority of oligodendroglioma patients. Key identifiers of this group include:

- Chromosome 1p/19q co-deletion
- IDH1 R132H mutation
- TERT promoter mutation (G228A or G250A)

Given that oligodendroglioma research has been limited to date and that the clinical results from glioma research has been largely disappointing so far, we want to encourage investigators considering novel approaches. There are, however several areas that are potentially important to development of effective treatments:

1. Targeting DNA repair: Recent reports indicate that PARP inhibitors may be effective in IDH1 mutant cancers. Other approaches targeting DNA damage response may be effective as monotherapies or in combination with cytotoxic treatments.

2. Onco-immunology therapies: IDH1 mutations suppress the immune system, suggesting that immune modulation may hold benefit for patients.

3. Approaches that target the tumor niche: Stem cell-like tumor cells contribute to the genesis and growth of oligodendrogliomas. Targeting these cells where they live may render these cells sensitive to conventional therapies.

4. Synthetic lethality treatments with TERT promoter mutation: Approximately 70% of oligodendrogliomas harbor this mutation. As one of the most common mutations across all cancers, targeting the mutational process or discovering synthetically lethal approaches could be useful for oligodendroglioma therapy.

5. Improvement in drug delivery: A primary obstacle to treating brain cancer, in general, and oligodendroglioma, specifically, is the inability of drugs to penetrate the neurovascular unit. Nanoparticles, stem cells, or other drug development techniques to overcome this obstacle are of interest.

In addition to these five topic areas, Oligo Nation will accept/review any other proposal aimed at more clearly understanding the pathogenesis and progression of oligodendroglioma **that can be translated in the near future (3-5 years)**. All proposals received will be initially reviewed by Oligo Nation Scientific Advisors and then reviewed by a peer review panel selected for this RFA.

Criteria for Evaluation
Proposals will be evaluated against the following criteria:

- **Relevance to Primary Objective.** Accelerating the discovery and development of treatments in the next 3-5 years. All research proposals should be focused ***exclusively*** **on oligodendroglioma** and preclinical work should be based on cells lines and animal models that recapitulate this disease. (Cell lines are available through the Oligo Nation Cell Line Virtual Repository.)

  While research into disease prevention, prognosis tools and biomarkers, imaging, and broader consortiums are worthwhile, they are not the focus of this RFA.

- **Innovation.** We favor proposals designed to allow initial exploration of new ideas with the potential to open new avenues of investigation. Oligo Challenge grants are generally not intended to support the logical progression of previously established research projects, although research that, if successful, ultimately leads to breakthroughs in the treatment of patients with oligodendroglioma will be reviewed favorably.

- **Research Strategy and Feasibility.** Does the scientific rationale logically support the project and its feasibility? Are the aims, experimental design, methods, and analyses well developed and integrated into the project? Does the PI acknowledge potential problems and pitfalls? Is it a reasonable expectation that the studies will yield meaningful results during the grant period?

- **Collaboration.** Proposals that engage interdisciplinary teams and approaches may receive favorable attention, as will proposals made by collaborative teams, either within or across research institutions. Proposal reviewers will also be directed to identify opportunities to

repurpose existing resources (e.g., mouse models, other tools) rather than re-invent them; proposals that have already identified such collaborative possibilities will be reviewed favorably.

- **Access to Patient Samples**. Proposals should demonstrate access to any necessary reagents, including the appropriate number of cell lines and patient samples, to carry out the proposed experiments. This may be direct access, or access through other sources/collaborations, either which must be clearly demonstrated. It is acceptable to project future patient sample access, but this projection must be realistic. Higher scores will go to those applicants who demonstrate sufficient access to reagents and patient samples to immediately begin their experimentation.

- **Commitment to Information Sharing:** Oligo Nation and OligoCure believe that sharing data is critical for advancing the science as rapidly as possible. While understanding the confidential nature of the research process, it is our expectation that all data will be made public within a year of being generated. We encourage scientific papers, presentations at ASH or comparable venues, smaller meetings, and website publication.

Application Requirements

Please submit an application of no more than 10 pages that includes the following information:

- Title of Research Project
- Project Summary Statement – Briefly describe the idea for a translational research project and provide justification for the proposed research project with background information.
- Clinical Impact – Describe how your proposed research would result in rapid advancement in the treatment of oligodendroglioma and deliver near-term patient benefit.
- Approach – Describe the research approaches and identify key personnel, whose expertise would contribute to the success of the research project.
- Project Timeline and Milestones
- Budget and Budget Justification
- References—references to publications supporting the proposed research project may be included (does not count toward the 10-page limit).

Funding Information and Grant Term

Oligo Challenge awards are contingent upon the receipt of a sufficient number of applications of high scientific merit and potential patient impact. We are likely to fund up to five proposals for a total of approximately $600,000, with Oligo Nation and Operation Oligo Cure participating equally.

The maximum award will be grant for a total of $125,000 over a period of up to two-years. Depending on the results of the initial grant, additional funding will be considered. An extensive review of each project after completion of the first year will be aimed at optimizing overall progress through collaboration or resolution of any project obstacles. Towards the completion of the second year, an assessment of overall progress and potential next steps towards translation will be performed jointly by Oligo Nation scientific advisors and grantees.

Brock Greene | 415-254-1950 | brock@oligonation.org
19 Morningside Drive, San Anselmo, CA 94960 | www.oligonation.org

Key Dates
Call for proposals: August 13, 2017
Proposal due date: November 4, 2017
Scientific Peer Review Committee: November 2017
Notification of Awards: December 2017
Anticipated funding start date: January 2018

Provisions Related to Intellectual Property
Oligo Nation and Operation Oligo Cure are committed to moving the results of basic and translational research to oligodendroglioma patients. To that end, we include in our contracts with the institutions of our awardees Intellectual Property language meant to ensure that no critical results are left without productive follow-up. Should your proposal be selected for an award, we will provide you with this language and ask you to work with your grant office to achieve a timely agreement on these provisions.

Limitation on Contract Negotiation Period
Following award notification, Oligo Nation and Operation Oligo Cure will interact with each grantee's institutional grant office to establish a contract for each award. It is our experience that this process can be completed in a 2-month period, especially if the terms of the grant (including Intellectual Property as described above) are reviewed by the grant office prior to submission of the grant proposal. Therefore, in 2017 Oligo Nation reserves the right to cancel a grant if it is not possible to complete contract negotiations by January 31, 2018.

Contact
Brock Greene: brock@oligonation.org ; 415-254-1950