

We are **1iders**



# **ROS1+ Cancer Innovation Award**

## **Request for Applications**

**February 23, 2023**

The **ROS1**iders

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## About The ROS1ders

The ROS1ders, Inc.<sup>1</sup> is a non-profit public benefit corporation bringing together an international group of patients and family members living with ROS1-positive (ROS1+) cancer. As of January 2022, their private Facebook group has nearly 1000 members in 30+ countries. The organization is internationally recognized in the oncology and patient advocacy communities as experts in their disease.<sup>2,3,4,5,6</sup>

ROS1+ cancer is any cancer that tests positive for a fusion in the *ROS1* gene. It is sometimes called *ROS1* fusion or *ROS1*-rearranged cancer. ROS1+ cancer occurs in 1%-2% of non-small cell lung cancers (NSCLC) and has also been found in multiple other cancer types.<sup>7</sup> ROS1+ cancer occurs when a gene called *ROS1* swaps pieces of DNA with a nearby gene; thus far over 20 different genes have been found to fuse with *ROS1* and drive ROS1+ cancer. The resulting protein expressed by the fusion gene exhibits abnormal functions and signaling. ROS1+ cancer tends to be aggressive and spread to the bones and brain.

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<sup>1</sup> The ROS1ders. <http://theros1ders.org>. Accessed September 1, 2022.

<sup>2</sup> National Cancer Institute Center for Cancer Genomics. ROS1+ Cancer Patients Partner to Increase Research. <https://www.cancer.gov/about-nci/organization/ccg/blog/2017/ros1-patient-driven-research>. Accessed September 1, 2022.

<sup>3</sup> University of Colorado Cancer Center School of Medicine. Global ROS1 Initiative combines patient experience with researcher expertise to target ROS1 cancer wherever it grows. <https://coloradocancerblogs.org/global-ros1-initiative-combines-patient-experience-with-researcher-expertise-to-target-ros1-cancer-wherever-it-grows/>. Accessed September 1, 2022.

<sup>4</sup> Anderson, A. ROS1 Cancer Model Project Demonstrates Power of Patient Advocacy. <https://www.precisiononcologynews.com/cancer/ros1-cancer-model-project-demonstrates-power-patient-advocacy#.YDQoT-hKjyE>. Accessed September 1, 2022.

<sup>5</sup> Camidge D. Motivated, Engaged, and Organized: The New Molecular Cohorts of Lung Cancer, <https://www.iaslc.org/iaslc-news/ilcn/motivated-engaged-and-organized-new-molecular-cohorts-lung-cancer>. Accessed September 1, 2022.

<sup>6</sup> D'Iaria I. Pazienti con la mutazione Ros-1, supereroi in cerca di una cura, [https://www.repubblica.it/oncologia/news/2018/05/21/news/i\\_pazienti\\_con\\_la\\_mutazione\\_ros-1\\_supereroi\\_della\\_ricerca-196973309/](https://www.repubblica.it/oncologia/news/2018/05/21/news/i_pazienti_con_la_mutazione_ros-1_supereroi_della_ricerca-196973309/). Accessed September 1, 2022.

<sup>7</sup> Drilon A, Jenkins C, Iyer S, Schoenfeld A, Keddy C, Davare MA. ROS1-dependent cancers - biology, diagnostics and therapeutics. *Nat Rev Clin Oncol*. 2021 Jan;18(1):35-55. doi: 10.1038/s41571-020-0408-9. Epub 2020 Aug 5. PMID: 32760015; PMCID: PMC8830365.

# Request for Applications to Study ROS1+ Cancers

The ROS1ders are delighted to announce the inaugural Request for Applications to Study ROS1+ cancers.

## Name of the Program

ROS1+ Cancer Innovation Award

## Goal of the Program

To provide seed grants for high-risk, high-reward projects focused on ROS1+ cancers

## Scientific Scope of the Program

Projects focused on pre-clinical, translational, or clinical research of ROS1+ cancers will be considered under this Request for Applications. Research topics might include but are not limited to those listed below (which have been prioritized by The ROS1ders):

- Understanding the biology of the *ROS1* gene (normal gene expression, gene rearrangements, fusion partners, co-occurring mutations, tumor microenvironment and immune system interactions)
- Novel applications of liquid and tissue biopsies (and/or other methodologies) to improve understanding of ROS1 TKI resistance and/or tailor therapy
- Validating mechanisms of intrinsic and/or acquired resistance to ROS1+ cancer in lung cancer and other adult or pediatric solid tumors
- Novel drugs, drug combinations, or drug repurposing to prevent and/or overcome intrinsic and/or acquired resistance to ROS1 TKIs, including best TKI and treatment sequencing strategies for brain metastases and extracranial ROS1+ tumors.
- Role, timing and toxicity management of neoadjuvant, adjuvant and consolidation immune checkpoint inhibitors and TKIs in Stage 3 ROS1+ cancer
- Improving effectiveness of immunotherapy treatments for ROS1+ cancers at various stages of disease, including utility of immune checkpoint inhibitors (ICIs), chimeric antigen receptor T cell therapy (CAR T), tumor-infiltrating lymphocyte (TIL) therapy, vaccines
- Interrogation of the tumor biology and effective clinical management strategies in long-term responders to ROS1 TKIs
- Discovery of novel targetable ROS1 aberrations in cancer

## Eligibility

The ROS1ders makes awards to individuals only; awards are not made to institutions.

At the start of and throughout the award period, the applicant must be a principal investigator (PI) for the proposed research and must hold a doctorate degree as well as faculty appointment (or equivalent) with an academic institution, including research institutions that are not formally associated with a university. The applicant must be an independent, self-directed researcher for whom his/her institution must provide space and other resources customary for independent investigators. The application must convey the commitment of the institution to the applicant and the proposed research activities. The RFA is open to investigators affiliated with an academic or non-profit research institution anywhere in the world, regardless of citizenship.

### Award Structure

The award period is one year. The award amount is a maximum of \$75,000 regardless of the number of PIs. At the end of the award period, awardees will be required to submit a progress report and financial report. The reports will be reviewed by members of The ROS1ders and their Scientific Advisory Board. The awardee will also give a scientific presentation to the ROS1ders study section and Scientific Advisory Board, and a patient-friendly presentation to the broader ROS1+ cancer community.

### Award Payment Schedule

The ROS1ders will issue the award payment no earlier than **October 1, 2023**, following receipt of the fully executed agreement documents.

### Selection Criteria

Final selection of project(s) receiving award will be contingent on scientific review and availability of funds. Some criteria considered when reviewing applications include:

- Project’s relevance to the diagnosis and treatment of ROS1+ cancers
- Scientific and technical merit, innovation, and **feasibility** of the research plan
- Research environment
- Qualifications of the principal investigator(s) and team
- Appropriateness of the requested budget and timeline to complete the proposed research project **within the award timeline (1 year) and budget (\$75k)**

### Important Dates

All deadlines occur at 11:59 pm Eastern Time on the stated dates.

RFA issued	February 23, 2023
LOI deadline	March 31, 2023
Successful LOIs invited to submit full application	April 28, 2023
Full application deadline	June 15, 2023
Successful awardees notified	Aug 31, 2023

## OTHER TERMS AND CONDITIONS

Below are some of terms and conditions that apply to the ROS1+ Cancer Innovation Award. A more detailed set of terms and conditions will be included in the agreement document for funded projects.

### Authorized Award Holders

No award may be held by or transferred to another individual without explicit permission from The ROS1ders.

### Allowed Use of Funds

- Salary and fringe benefits: No more than 25% of the requested budget may be used for an awardee's salary and/or fringe benefits. Award funds may also be used for the salary and fringe benefit costs of personnel other than the applicant.
- Publication costs: The ROS1ders strongly encourage open access publications of all findings from the project. All publication costs must directly relate to The ROS1ders project.
- Travel: A maximum of \$1,500 per year per investigator may be spent on travel to attend one conference at which findings from the funded project will be presented.
- Unallowed use of funds: No award funds may be used for expenses listed below.
  - Overhead or indirect costs
  - Purchase of furniture or computers
  - Repair or service contract costs for institutional equipment
  - Construction or renovation of facilities
  - Honoraria
  - Membership dues
  - Tuition for either the awardee or other project personnel
  - Textbooks or periodicals
  - Secretarial support
- Duplication of work that is supported by other funding agencies is strictly prohibited.

### Final Report

At the conclusion of the award period, the awardee will deliver a written final report as well as final financial report to The ROS1ders. The final report will include information about any filings for intellectual property rights. The financial report must reflect the award expenditures as approved by The ROS1ders. All unused funds and funds used for unauthorized expenditures must be returned to The ROS1ders at the end of the award period.

## **Carryover of Funding**

Carryover of funding beyond the one-year award period requires prior approval by The ROS1ders. All requests must be in writing and received by The ROS1ders 60 days prior to the end of the award. When making the request, the awardee must indicate the amount and from what budget-line and to what budget-line the carryover monies are being applied.

## **Change in Budget**

Requests for a change in budget that is 20% or more for a budget line requires prior approval by The ROS1ders. All requests must be in writing and received by The ROS1ders at least 60 days prior to the end of the funding year. When requesting a change in budget, the awardee must indicate the amount to be transferred, the budget line the funds are currently included in, and the budget line to where they would be transferred. All expenses for purchasing supplies or equipment must be itemized.

## **Change of Institution**

If the awardee relocates to a new institution, the awardee cannot transfer this award to their new institution without prior approval by The ROS1ders. All requests must be in writing and made as soon as the awardee officially knows of the relocation. An award can only be transferred to a tax-exempt, not-for-profit institution. All unexpended funds must be returned to The ROS1ders within 60 days of transfer approval. An award agreement must then be executed by the new institution. After The ROS1ders receives the unexpended funds from the original institution and the award agreement has been executed with the new institution, the funds will be reissued to the new institution.

## **No-cost Extension**

A no-cost award extension requires prior approval by The ROS1ders. All requests must be in writing and received by The ROS1ders at least 60 days prior to the award's official termination date. When making the request, the awardee must provide a detailed rationale for the extension, project expenses to date, and a detailed revised budget. Awardees may request a no-cost extension only once per award. Approval of the no-cost extension is not automatic and will only be granted in exceptional circumstances.

## **Data Management and Sharing**

The ROS1ders believe research and genomic data for rare diseases like ROS1+ cancer should be shared rapidly and openly to accelerate research and improved outcomes for patients, with appropriate safeguards to protect patient privacy. Projects that include an actionable data management and sharing plan which achieves these goals will be viewed favorably. For guidance, please see the following National Institutes of Health (NIH) policies (more information at <https://datascience.cancer.gov/data-sharing/policies>) :

- Policy for Data Management and Sharing (<https://sharing.nih.gov/data-management-and-sharing-policy/about-data-management-and-sharing-policies/data-management-and-sharing-policy-overview>)
- Genomic Data Sharing (GDS) Policy ([https://osp.od.nih.gov/wp-content/uploads/NIH\\_GDS\\_Policy.pdf](https://osp.od.nih.gov/wp-content/uploads/NIH_GDS_Policy.pdf))

## **Publications and Public Access**

All publications and/or presentations at scientific conferences and meetings based on research conducted from this award must include a citation stating “This study was supported by an award from The ROS1ders.” Reprints of abstracts, manuscripts, or other articles related to research supported by this award must be submitted to The ROS1ders. At a minimum, all publications resulting from this award must conform to the NIH Public Access Policy (<https://publicaccess.nih.gov/policy.htm>); however, The ROS1ders strongly prefer all publications to be open access.

## **Tobacco-Funded Research**

The ROS1ders will not provide research or other funding to investigators who have received direct funding or funding from agencies of the tobacco industry.

# Application Instructions

ROS1+ Cancer Innovation Award uses a two-step application process: a Letter of Intent followed by a Full Application. Templates and detailed instructions for required information/materials can be found at <https://proposalcentral.com>. Be sure to read those instructions in case any instructions were changed, added, or deleted after this RFA was issued.

## Letter of Intent (LOI)

**Your LOI will not be considered if these instructions are not followed.** The letter of intent must include the following:

**1. A narrative** that contains:

- Rationale/Background for the project.
- Planned specific aims (these may be modified slightly if invited to submit a full application).
- Impact of the project on the diagnosis, treatment, and outcomes of ROS1+ cancers (brief statement).
- Experimental approach(es) to be used (brief statement).
- Metrics of success (brief statement).
- A few key references.

The narrative should be entered in Arial 11-point font, single-spaced, with 0.5” margins. Identifying information, per the template, must be included at the top of each page. The narrative should not exceed a total of **two pages** (excluding references).

**2. An NIH biosketch** (OMB No. 0923-0001 and 0925-0002) for each of the PIs only.

Biosketches should be limited to five pages. Note that in the section on research support, you must **include the dollar value of all awards**. If a non-USA citizen working in the United States applies as a PI, **attach their proof of visa immigration status** (a scan of the visa is sufficient) to the end of the biosketch. Double-check that all information included is current and thorough. We will not be contacting you to clarify any information.

No budget information or other supporting materials should be included with the LOI. A sponsoring institution signature is not required.

**Letters of Intent must be submitted via <https://proposalCENTRAL.com> by March 31, 2023 (11:59pm EST).** Extensions will not be given. Once an LOI has been submitted it cannot be changed. Applicants will be notified by email no earlier than April 28, 2023, whether they are invited to submit a full application. Feedback on LOIs will not be provided.



## Full Application

Only invited applicants may prepare and submit a full application. Instructions for how to proceed will accompany the invitation. Among other materials, the full application must include:

### 1. Abstracts (1500 character limit each)

- Lay Abstract: explains your project completely in lay terms that will be clear to individuals who do not have a scientific background.
- Scientific Abstract: explains project in words appropriate for a journal peer reviewer.

### 2. A narrative that contains:

- Background: Present the ideas and reasoning behind the proposed research, to include relevant literature citations. Describe previous experience most pertinent to this application.
- Relevance to ROS1+ cancers: Describe how the project will impact the diagnosis, treatment, and outcomes of ROS1+ cancers.
- Hypothesis or Objective: State the hypothesis to be tested or the objective to be reached.
- Specific Aims: Concisely explain the project's specific aims.
- Research Strategy: Describe the experimental design, methods, and analyses, including appropriate controls, in sufficient detail for analysis. Address potential problem areas and present alternative methods and approaches.
- References

The narrative should be entered in Arial 11-point font, single-spaced, with 0.5" margins and should not exceed **six pages**, excluding references. Identifying information, per the template, must be included at the top of each page.

- ### 3. NIH biosketches
- (OMB No. 0925-0001 and 0925-0002) of the PI(s) and key personnel, per the biosketch instructions in the LOI section. If any PI or key personnel is non-USA citizen working in the United States, attach **proof of their visa immigration status** (a scan of the visa is sufficient) to the end of the biosketch.
- ### 4. Budget information
- , along with a justification.
- ### 5. Plan for managing and sharing data
- (see section on "Data Management and Sharing"). This should not exceed **one page** and does not count towards the narrative page limit. While this section is **optional**, we highly recommend including a plan to data sharing even if it is not finalized.

Do **not** include reprints of your previous publications.

**Full applications must be submitted via <https://proposalCENTRAL.com> by June 15, 2023 at 11:59pm EST.** Extensions will not be granted. Once a full application has been submitted, it cannot be changed. Applicants will be notified of award decisions by email on **August 31, 2023**. Review comments will be provided for full applications only.

### **Formal Agreement and Release of Funds**

Awardees will receive a formal agreement document at the time of or soon after award notification. This must be signed by both the awardee and an authorized representative of the sponsoring institution and then returned before any funds will be released. Funds will be released no earlier than **October 1, 2023**.

### **Application Assistance**

Templates and more detailed instructions for all above materials and any other materials that must be included can be found at <https://proposalCENTRAL.com>. Be sure to read those instructions in case any were changed, added, or deleted after this RFA was issued.

For questions regarding programs, eligibility, policies, terms and conditions, or instructions for the letter of intent or full application, please contact:

The ROS1ders Janet Freeman-Daily <a href="mailto:research@theros1ders.org">research@theros1ders.org</a> +1 779-707-1337	For help with proposalCENTRAL, please contact: proposalCENTRAL Help Desk <a href="mailto:pcsupport@altum.com">pcsupport@altum.com</a> 800-875-2562
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