Breakthrough Seed Funding Grant Cycle 1
Request for Proposals

Andy Hill Cancer Research Endowment
Created in 2015, the Andy Hill Cancer Research Endowment (CARE) Fund enables Washington State to fund cancer research initiatives. The CARE Fund is built on a public-private partnership model and incentivizes additional investment by requiring private or other non-state resources to match state funds. With the establishment of the CARE Fund, the state is making a commitment to enrich the cancer research ecosystem with sustained investment to promote cancer research, aimed at improving the quality of life of the people of Washington.

The objectives of the Andy Hill CARE Fund (from RCW 43.348.005) include the following:

- Optimize the use of public funds by giving priority to research utilizing the best science and technology with the greatest potential to improve health outcomes;
- Increase the value of our public investments by leveraging our state’s existing cancer research facilities and talent, as well as clinical and therapeutic resources;
- Incentivize additional investment by requiring private or other non-state resources to match public funds;
- Create jobs and encourage investments that will generate new tax revenues in our state; and
- Advance the biotech, medical device, and health care information technology industries in Washington.

Breakthrough Seed Funding Grant Overview
The purpose of the CARE Fund’s Breakthrough Seed Funding grant is to encourage and support life science companies, entrepreneurs, innovators, and researchers who seek to explore and develop innovative ideas and strategies to substantially advance cancer research and care from etiology to survivorship. Such projects may be high risk but must have the potential for high impact breakthroughs in cancer research and care that will extend understanding or uncover new pathways beyond the span of the project. The CARE Fund intends to provide seed funding, up to $500,000 per award over two years, to support early-stage research projects that are pursuing promising areas of cancer research.

Program Objectives
The primary aims of the Breakthrough Seed grant are to:

- Support early-stage research projects to explore major new insights into the etiology, diagnosis, treatment, or prevention of cancers.

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1 All awards must have a minimum one-to-one (1:1) match from non-state of Washington funds.
• Help bridge the funding gap between early discoveries and commercialization of therapeutics, devices, and tools to lessen the burden of cancer.

CARE Fund Priorities and Considerations
In addition to the CARE Fund objectives stated above, when making award decisions, the CARE Board may give additional consideration to proposals that advance CARE Board goals, including but not limited to proposals that demonstrate the following:
• A focus on cancers that disproportionately burden populations in Washington State;
• Efforts to address cancer disparities (e.g., cancer care access, treatment outcomes, etc.); or
• Evidence of collaborative, cross-disciplinary, or multi-sector approach.

The CARE Board may also take into consideration allowable grantmaking portfolio factors of the Endowment, including but not limited to, the variety in cancer research disciplines represented within Washington State, the type of cancer being studied, or geographic distribution of grantee organizations.

Estimated Timeline

<table>
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<tr>
<th>Event</th>
<th>Date</th>
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<tbody>
<tr>
<td>Request for Proposals Announced</td>
<td>November 8, 2022</td>
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<tr>
<td>Letter of Intent Deadline</td>
<td>December 6, 2022</td>
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<tr>
<td>Full Application Deadline</td>
<td>February 1, 2023</td>
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<tr>
<td>Award Decision</td>
<td>May 2023</td>
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<tr>
<td>Earliest Project Start Date</td>
<td>July 1, 2023</td>
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Eligibility Requirements
• Organizations in Washington State, including companies, universities, research institutions, local health jurisdictions, tribal governments, tribal entities, and Urban Indian Organizations are eligible to apply. Applicants must have a substantial presence in Washington, as determined by the CARE Board based on factors including, but not limited to the following: number and type of staff in Washington; state of incorporation; location of headquarters, research, or manufacturing facilities in Washington; or any combination of factors.
• Organizations may submit up to a maximum of three applications per funding cycle.
• This announcement is open to all cancer-related research proposals.

Grant Matching Fund Requirements
• Applicants must have a minimum one-to-one (1:1) match of non-state of Washington funds to requested grant funds or submit a plan to secure the 1:1 match to the requested grant in the application. The required matching funds must be secured at the time of award agreement execution. (Federal grants and sponsored research agreements are examples of eligible non-state match sources.)
Grant Award
- Up to two-year grant period
- Up to $500,000 per award ($250,000 per year); this amount includes both direct and indirect costs
- Grants are awarded to organizations in Washington State
- Projects with collaborations outside of Washington State are allowed; however, the principal investigator and the primary research activities must be located in Washington State and the majority of the CARE Fund grant award and non-state match funds must be allocated to recipients conducting research in Washington State
- All grants will be made in accordance with the CARE Fund’s policies and applicable laws, including the CARE Fund statute (Chapter 43.348 Revised Code of Washington).

Timeline and Application Process
Organizations that intend to submit a full application must submit a letter of intent (LOI) for each research project through the CARE Fund online grants management system. The Breakthrough Seed Funding LOI can be accessed via the Breakthrough Seed Funding page on the CARE Fund website. The LOI must be submitted by Tuesday, December 6, 2022, 5:00 p.m. (PT).

After the LOI is reviewed by the CARE Fund and/or contractors, selected applicants will be invited to submit a full application online via the CARE Fund grants management system. The full Breakthrough Seed Funding grant application will be available to applicants after they are invited. The full application must be submitted by Wednesday, February 1, 2023, 5:00 p.m. (PT).

The LOI and full application prompts and questions are available below.

Award decisions for this cycle are anticipated to be made in May 2023. Applicants will be notified of award decisions via email.

Application Review Process
Stage 1: Letter of Intent (LOI) Review
The CARE Fund and/or contractors will review LOIs to assess the following:
1. Does the LOI contain all required elements?
2. Is the applicant eligible to apply under the Breakthrough Seed Funding grant opportunity?
3. Is the proposed project appropriate for the Breakthrough Seed Funding grant opportunity?
4. The potential of the proposed project to help the CARE Fund meet its objectives and priorities.

CARE Fund will then invite selected applicants to submit a full application. The full online application will be available to applicants after they are invited.

**Stage 2: Full Application Eligibility Screening**

CARE Fund and/or contractors will screen submitted applications for eligibility and completeness according to the following questions:

1. Is the applicant organization eligible to apply under this grant opportunity (per the eligibility requirements listed in the RFP)?
2. Is the application responsive to the Breakthrough Seed Funding grant opportunity?
3. Does the proposal contain all required elements of the application?
4. Does the application appear to meet the non-state funding matching requirements?

If all questions above are answered “Yes,” the application will move to Stage 3: Peer Review. An application may be returned to the Applicant for completion or clarification, then re-submitted, per the judgment of the CARE Fund Executive Director.

**Stage 3: Peer Review**

Independent peer review will be conducted by the American Institute of Biological Sciences (AIBS), or a comparable organization. AIBS, or a comparable organization, will recruit a panel of independent, expert, scientific reviewers with expertise in relevant areas of cancer research. Reviewers will evaluate the merit of the applications against the review criteria listed below. The review panel will then discuss the initial review findings, taking into consideration the CARE Fund program objectives and priorities, to arrive at final scores and ratings for each application. Reviewers will summarize the review results for each application in a final review, which will include a justification of the final scoring, rating, and ranking (when applications are ranked) of the applications in the cohort.

The CARE Board will be provided with the final reviews, the cohort’s ranked scores (when available) and associated ratings, and a narrative summary of the review panel’s funding recommendations.

**Stage 4: CARE Board Assessment and Award Decision**

The CARE Board will make award decisions based on the scores and recommendations made by the independent scientific reviewers and will ensure that reviews align with the CARE Fund objectives and priorities. When deciding between applications of similar merit, the CARE Board may also consider program objectives and priorities, including but not limited to, cancer research discipline, type of cancer or geographic distribution of grantee organizations. The CARE Board will act in accordance with its Conflict-of-Interest Policy as well as Chapter 42.52 RCW (Ethics in Public Service) to avoid actual, potential, or perceived conflict of interest.
Review Criteria
Eligible applications will be evaluated against each of the following criteria:

Criterion 1: Significance and Impact (15 points)
- Significance of the proposed research as it relates to critical problems and persistent barriers in cancer research
- Degree to which successful completion of the project will have an extended impact on the selected area of cancer research and cancer care
- Potential of the proposed research to drive economic growth in Washington State related to cancer research (e.g., project potential for commercialization, stimulation of employment in the state, life science industry growth, etc.)

Criterion 2: Innovation (15 points)
- Degree to which the proposed research and approach is original or innovative (e.g., utilization of novel theoretical concepts, approaches or methodologies, instrumentation, or interventions to shift current research or clinical practice paradigms)
- Potential of the project to result in transformational research that will extend understanding or open new pathways in the cancer research field

Criterion 3: Scientific and Technical Merit of Approach (20 points)
- Strength and merit of the proposed scientific approach
- Degree to which the research methodologies and interventions are appropriate to meet the specific aims of the project
- Suitability of the technical plan and milestones to maximize the research success, including the degree to which potential problems, alternative strategies, and benchmarks for success are addressed
- Quality of the scientific, technical, and supporting resources, including instrumentation and core facilities
- For projects in the early stages of development, the degree to which the approach will establish feasibility and manage particularly risky aspects
- Clear and appropriate strategy for adhering to any applicable regulations, including protection for human and animal subjects

Criterion 4: Investigators and the Research Environment (10 points)
- Capability of the team of investigators to provide the appropriate expertise and uniquely combined perspectives to accomplish the proposed research
- Quality and scope of the Principal Investigator’s technical capability and management capacity to lead the project
  - For early-stage investigators, the degree to which their experience and training are appropriate to lead the project
  - For established investigators, the degree to which their ongoing record of accomplishments have advance their field
  - For collaborative or multi-PI projects, the degree to which they have complementary and integrated expertise
• Whether the percent efforts proposed by the investigators are appropriate for accomplishing the research project during the grant period
• Commitment of the participating organization(s) to support the research project to contribute to the probability of success (e.g., access to facilities, financial support, and other aspects of the institution research environment)

**Criterion 5: Budget (Required element, but unscored)**

In addition to the criteria listed above, the review panel will take into consideration:
• Whether the proposed budget is justified and cost-effective
• Whether the proposed budget is aligned with the milestones and timeline and sufficient to support completion of the research aims
• Whether the proposed matching funds plan is reasonable

In addition to the criteria listed above, reviewers may take into consideration the CARE Fund objectives and priorities when assigning final scores and ratings to each application ranking the applications within a cohort (when applications are ranked).

**Review Scores and Ratings**
The following table summarizes the review criteria and scores.

<table>
<thead>
<tr>
<th>Review Criteria</th>
<th>Maximum Score</th>
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<tbody>
<tr>
<td>Significance and Impact</td>
<td>15</td>
</tr>
<tr>
<td>Innovation</td>
<td>15</td>
</tr>
<tr>
<td>Scientific and Technical Merit</td>
<td>20</td>
</tr>
<tr>
<td>Investigators and Research Environment</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total Score</strong></td>
<td><strong>60</strong></td>
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Applications will be rated using the rating rubric shown below. The rating will concur with the total score and will reflect the review panel’s overall funding recommendation.

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description of Rating</th>
<th>Total Score</th>
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<tbody>
<tr>
<td>Highly Recommended</td>
<td>Demonstrates high potential to accomplish a breakthrough in cancer research or cancer care, excellent scientific merit, and a strong approach. Meets the stated goals and objectives of the CARE Fund. Extremely well-organized and well-constructed Proposal.</td>
<td>50–60</td>
</tr>
<tr>
<td>Recommended</td>
<td>Demonstrates high potential to impact the field of cancer research or cancer care and strong scientific merit and approach. Meets the stated goals and objectives of the CARE Fund. Well-constructed Proposal.</td>
<td>40–49</td>
</tr>
<tr>
<td>Worthy of Consideration</td>
<td>Demonstrates good scientific merit and some potential to impact the field of cancer research or cancer care and meet the stated goals and objectives of the CARE Fund. Sufficiently constructed Proposal.</td>
<td>30–39</td>
</tr>
<tr>
<td>Not Recommended</td>
<td>Demonstrates major weaknesses that will likely decrease the potential for successful completion of the proposed project and impact in the field of cancer research or cancer care. Limited potential to meet the stated goals and objectives of the CARE Fund. Poorly constructed Proposal.</td>
<td>0–29</td>
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Overall Application Ranking
Applications within the cohort may be ranked numerically (1 = highest ranked) based on the (i) final score, (ii) rating, and (iii) the CARE Fund objectives and priorities for funding decisions. When applications are ranked, rankings will concur with the ratings assigned to all applications and will reflect the review panel’s funding recommendations.

Intellectual Property
Grantees must report all inventions developed through CARE grant-funded activities or research projects to the CARE Fund. The CARE Fund does not intend to assert ownership of any invention that is derived from CARE funded research. However, if the grantee organization, or any subcontractor, decides not to take title and file an application for intellectual property protection, the CARE Fund would then have the option to take title. The grantee must notify the CARE Fund prior to any publication of the invention so as to allow the CARE Fund to take title and pursue or maintain intellectual property protection.

The CARE Fund does not expect to require payback of grants awarded based on income generated from sale or commercialization of any inventions resulting from CARE grant-funded activities or research. This approach is intended to minimize intellectual property-related barriers for potential applicants and encourage pursuit of transformational research. Successful projects will stimulate economic development through job creation and infusion of additional research funds to Washington. Products derived from these inventions will then be available to the public, with the expectation that it will improve health outcomes for the people of Washington and globally.

The CARE Fund must be listed as a funder in all presentations, publications, and patent applications. Please contact the CARE Fund for specific guidelines.

Confidentiality
Information in grant LOIs and applications is received by the CARE Fund with the understanding that it shall be used or disclosed for the evaluation of applications or as required by law. The CARE Fund holds all applications confidential in accordance with its confidentiality procedures and subject to the public disclosure laws of the state of Washington. All applicants are advised that information provided to the CARE Fund, including an applicant’s proprietary and confidential information, are considered public records under Washington’s Public Records Act, Chapter 42.56 RCW. Generally, public records are subject to disclosure unless an exemption to disclosure applies. Certain
information provided to the CARE Fund may be protected from potential Public Records request disclosure to the extent provided under RCW 42.56.270(29).

The CARE Fund may make use of information contained in applications for purposes of transparency and publicity, including, but not limited to: applicant name; applicant organization; project title; funding amount requested; and applicant profile. For unfunded applications, the CARE Fund will not publicly release the abstract or narrative of the proposed work, budget details, or any identifiers regarding co-applicant organizations, to the extent disclosure of this information might reasonably be expected to result in private loss to the applicant organizations, and as is consistent with public disclosure laws of the state of Washington. If a proposal is funded, the CARE Fund may make public additional information from the application, including, but not limited to: project abstract; funding amount; names and profiles of the investigators or collaborating organizations.

The CARE Fund reserves the right to publicly disseminate information about a grantee’s activities through public reports, its website, press releases, speaking engagements, and other public venues. To the extent allowable under Washington State law, the CARE Fund shall not publicly disclose information that has been marked as proprietary or confidential if such information has not been previously disclosed to the public, or other information to the extent that provision of such information would reasonably be expected to result in private loss to the providers of such information.

Contact Information
Please contact Peter Choi (peter@wacarefund.org) for questions regarding this announcement.
Breakthrough Seed Funding Grant Cycle 1 – Letter of Intent and Full Application Prompts

All applicants to CARE Fund Grant Programs are advised that information provided to the CARE Fund, including an applicant’s proprietary and confidential information, are considered public records under Washington’s Public Records Act, Chapter 42.56 RCW. Generally, public records are subject to disclosure unless an exemption to disclosure applies. Certain information provided to the CARE Fund may be protected from potential Public Records request disclosure to the extent provided under RCW 42.56.270(29). RCW 42.56.270(29) is an exemption in the Public Records Act that may apply to “Financial, commercial, operations, and technical and research information and data submitted to or obtained by the Andy Hill Cancer Research Endowment program in applications for, or delivery of, grants under Chapter 43.348 RCW, to the extent that such information, if revealed, would reasonably be expected to result in private loss to providers of this information.” However, applicants should be aware that their information will be subject to disclosure unless this or another exemption applies.

The applicant may be notified of any public records request regarding their application and be given an opportunity to provide further information specifying why the information should be exempt from disclosure, and an opportunity to assert objections to disclosure and seek a protective order. The CARE Fund will determine, in its sole discretion, whether to assert RCW 42.56.270(29) or any other available public records exemption.

Letter of Intent (Required)

Organizations that intend to submit a full application must submit a Letter of Intent (LOI) for each research project through the CARE Fund online grants management system. The Breakthrough Seed Funding LOI can be accessed via the Breakthrough Seed Funding page on the CARE Fund website. The LOI must be submitted by Tuesday, December 6, 2022, 5:00 p.m. (PT). The online LOI form will include the following prompts. [Note: Applicants should consider protecting any potential intellectual property or confidential information before disclosing it in the LOI. Proprietary, privileged, confidential commercial, patentable ideas, trade secrets, etc. should only be included in the LOI to the extent necessary to convey an understanding of the project proposal. Such information should be clearly marked in the LOI materials as confidential, proprietary, or privileged information.]

1. Applicant Organization Type
2. Applicant Organization Corporate Status
3. WA State OMWBE Certified Business. Is the applicant organization a Washington State certified minority-, women-, or veteran-owned business?
4. Does the Applicant Organization have a substantial presence in Washington State?
5. Contact Person for the LOI (First Name), (Last Name)
6. **LOI Contact Person (Position)**
7. **LOI Contact Person (Email)**
8. **Project Title:** Enter a descriptive title for the proposed project. (250 characters or less)
9. **Principal Investigator (First Name), (Last Name)**
10. **Principal Investigator (Position)**
11. **Principal Investigator (Email)**
12. **Key Project Personnel.** Provide a complete list of the key personnel for the project, including any independent researcher associated with the proposed project (even as a consultant). For each person, include their name, project role, and organization. [Note: This list will be used to avoid potential conflicts of interest in identifying the peer review panel. Personnel listed in the full application but that are not included in the LOI may result in a delay in application review.]
13. **Project Performance Site(s).** Provide the primary performance site for this proposal and any other performance sites. For each site, list the organization name and location (city and state).
14. **Project Key Words** (200 characters or less)
15. **Project Summary.** Provide a brief summary of the proposed project, including but not limited to the overall goal(s) of the project, and how the project responds to the funding opportunity. (2000 characters or less)
16. **CARE Fund Grant** amount to be requested
Full Application (Required, After Invitation)

Applicants must submit a full application through the CARE Fund’s online grants system. The Breakthrough Seed Funding grant application will be available to applicants after they are invited. The full application must be submitted by Wednesday, February 1, 2023, 5:00 p.m. (PT). The online application form will include the prompts and questions listed below. [Note: Applicants should consider protecting any potential intellectual property or confidential information before disclosing it in the application. Proprietary, privileged, confidential commercial, patentable ideas, trade secrets, etc. should only be included in the application to the extent necessary to convey an understanding of the project proposal. Such information should be clearly marked in the application materials as confidential, proprietary, or privileged information.]

Please respond to the following prompts and questions in the online application. (Application uploads should follow NIH font, line spacing, paper size, and margin guidelines. https://grants.nih.gov/grants/how-to-apply-application-guide/format-and-write/format-attachments.htm#font)

1. Applicant Organization Type
2. Applicant Organization Corporate Status
3. WA State OMWBE Certified Business. Is the applicant organization a Washington State certified minority-, women-, or veteran-owned business?
4. WA State Presence. Does the Applicant Organization have a substantial presence in Washington State?
5. Project Title. (250 characters or less)
6. Contact Person for this Application (Enter First Name, Last Name, Position, Email)
7. Principal Investigator (Enter First Name, Last Name, Title, Institution, Email)
8. Project Summary. Provide a brief summary of the proposed project, including but not limited to the overall goal of the project, the area of cancer research or care, and how the project responds to the funding opportunity. (2000 characters or less)
9. Project Performance Site(s). Provide the primary performance site for this proposal, and any other performance site(s). For each site, provide the organization’s legal name and location (city and state).
10. Proprietary/Privileged Information. Applicants should consider protecting any potential intellectual property or confidential information before disclosing it in the application. Proprietary, privileged, confidential commercial, patentable ideas, trade secrets, etc. should only be included in the application to the extent necessary to convey an understanding of the project proposal. Such information should be clearly marked in the application materials as confidential, proprietary, or privileged information.
11. Human Subjects. Does the proposed project involve Human Subjects?
   a. If yes, Institutional Review Board (IRB) status. (Approved/Pending/Exempt/Not Applicable)
   b. IRB Approval Date
   c. Human Subjects Assurance Number
d. Human Subjects Assurance. If applicable, describe the strategy for protection of human subjects (2000 characters or less)

12. **Project Work Plan.** The project proposal should address the Review Criteria as outlined in the Funding Opportunity and include: (Upload, Limit 8 pages, including figures. References not included in page limit.)
   - **Significance and Impact.** Identify the significance and feasibility of the proposed project. Identify the anticipated short-and long-term impacts including the potential to drive economic growth.
   - **Innovation.** Discuss the degree to which the proposed project is innovative and the potential to be transformational in the cancer research field.
   - **Scientific and Technical Merit of Approach.** Discuss the scientific premise, approach, methodologies, and potential barriers to success.
   - **Investigators and Environment.** Discuss key collaborations and those that may need to be developed.

13. **Facilities and Other Resources.** Describe how the applicant organization’s infrastructure (e.g., instrumentation, facilities, financial support, and other resources) and environment will contribute to the success of the proposed project. (Upload, Limit 1 page)

14. **Project Milestones and Timeline.** Use the Project Milestones and Timeline Guidance as a template to describe the project’s milestones, deliverables/outcomes, and completion dates. (Upload, Limit 4 page)

15. **Key Project Personnel.** Use the Project Key Personnel Form to upload a list of key personnel including each person’s project role, name, position, and organization name.

16. **Biosketches** for Principal Investigator and Key Personnel (Upload. NIH format, Limit 5 pages per biosketch)

17. **Project Support Period** (Enter Start and End Dates). The earliest start date may not be before July 1, 2023. The end date may not be more than 24 months after the project support start date.

18. **Budget Narrative Justification.** Use the Project Budget Narrative Justification Guidance as a template to create the budget narrative justification. (Upload, Limit 4 pages)

19. **Project Budget Direct Costs.** For each budget category, enter the direct costs for the project across the entire project period into the table (i.e., months 1–12, months 13–24, and total). Please see the Project Budget Narrative Justification Guidance for a description of the direct cost budget categories.

20. **Project Budget Summary.** Enter total direct, indirect and project costs across the entire project period, regardless of funding source into the table.

21. **Project Funding by Source.** Enter the amounts of all funds from all sources for the entire project period into the table.

22. **Financial Commitment (Other Sources).** Submit proof and/or commitment of the additional sources of funding (non-state funds or other funds) that have been secured. If these funds have not yet been secured at the time of application, provide the plan for securing the other funds prior to the project start. [Note: Proof of matching contributions may be accomplished by providing a written, binding, enforceable agreement from the contributor that commits an amount of non-state of Washington or
private contributions. The document must include a definitive statement that a non-state or private contribution is committed, including the amount, AND acknowledge that the CARE Fund grant award is contingent upon this contribution.] (Upload)

23. **Project Team Interaction with End Users.** Will the principal investigator or the project team interact with end-users (as defined by the researcher) of their research, resource, or product before, during, or after the proposed project?
   a. Select all that apply
      i. Before project commencement
      ii. During the project
      iii. After project completion
   b. If yes to any of the above, please describe. (1500 characters or less)

24. **Other Supporting Information** (Optional). Previous results, letters of commitment, and other documents to strengthen the application may be submitted. (Upload, Limit 5 pages, not including cover page)

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