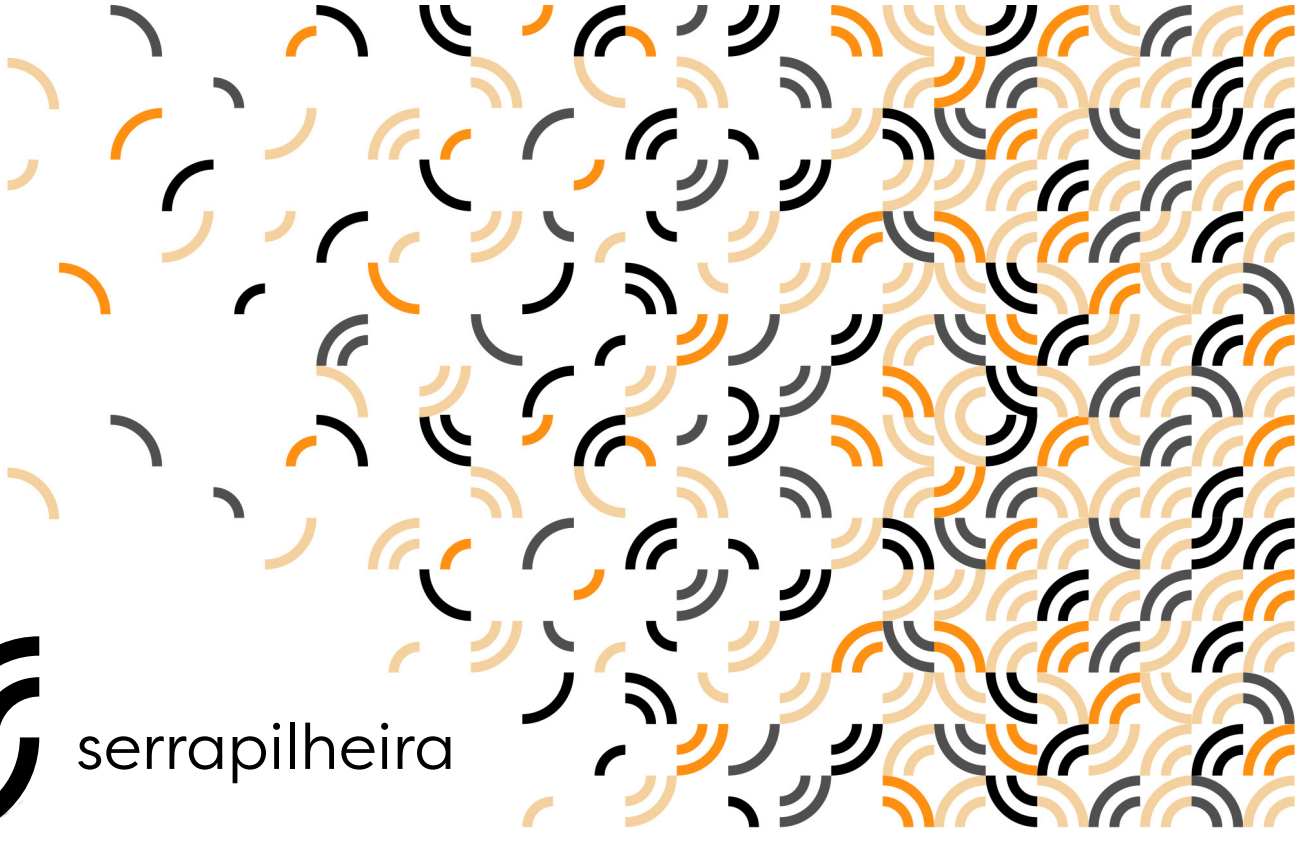

CALL FOR PROPOSALS #1 (2017)

DEADLINE FOR SUBMISSIONS:
SEPTEMBER 15, 2017
15H – BRASILIA TIME (BRT)

www.serrapilheira.org

CALL FOR PROPOSALS #1 (2017)

THE DEADLINE FOR SUBMISSIONS IS SEPTEMBER 15TH, 2017, 15H BRASILIA TIME (BRT).

how to apply

about us

Instituto Serrapilheira is a nonprofit grantmaking organization committed to promoting science and science outreach.

fields of research we support

Serrapilheira's focus is on supporting research in the fields of Chemistry, Computer Science, Earth Sciences, Engineering, Life Sciences, Mathematics, and Physics. Proposals for interdisciplinary projects are also welcome. We support both basic and applied research.

serrapilheira awards grants to independent researchers based on scientific excellence

In this Call, Serrapilheira will fund outstanding projects from young researchers (those with PhDs received after January 1st 2007 – see details below) seeking to establish or consolidate their own independent research agendas. We welcome high-gain research demonstrating long-term vision, even if it implies risky strategies.

the role of host institutions in serrapilheira grants

Serrapilheira grants will be awarded to researchers affiliated with Brazilian host institutions and will be portable to other institutions in Brazil. Grantees will have the freedom to negotiate the overhead paid to their host institutions; this amount may range from 2% to 5%. This aspect of the grant is designed to underwrite the operating costs and basic infrastructure provided by host institutions. Our grants are awarded to researchers and will not be managed by the researchers' host institutions. We encourage host institutions to offer Serrapilheira grantees ease of access to appropriate space and facilities.

funding (see timeline)

Serrapilheira will fund up to seventy young researchers with grants of up to R$ 100.000 for one year.

At the end of the initial year, all projects will be re-evaluated by members of the Scientific Committee. This second evaluation will be based **on ideas and data produced during the previous twelve months**. Details of this secondary evaluation will be provided to candidates at a later stage.

Why do we do it this way?
Because our goal is to invest in young scientists, we believe that what they are capable of doing is more relevant than what they have done in the past. Thus, our selection process will also focus on the quality of the research candidates are able to develop.

During this second evaluation process, ten to twelve candidates will be selected and funded for an additional three years and up to R$ 1.000.000. A portion of these funds is contingent upon the inclusion of underrepresented groups through hiring and training. Inclusion and diversity requirements will be presented in detail to the selected grantees after the first year, prior to embarking on their three-year projects. At the end of our second evaluation, we will select the best candidates, regardless of their fields.

It should be clear to all candidates that administrative fees will be directly paid from their grants. We estimate that the net amount allotted to researchers will be over 85% of the gross amount of the grant.

reviewing process (see timeline and appendix I)

Candidates must submit two proposals as part of the application process: a short, anonymous proposal (5 pages) and a longer, more detailed proposal (from 10 to 15 pages).

After the submission deadline, members of the Scientific Committee will distribute all short proposals to external reviewers. The best short proposals across all fields of research will be selected. At this stage, external reviewers will not know the identities of candidates.

The selected projects will then be reviewed in greater depth, using both short and long proposals. At this stage, members of the Scientific Committee will be assisted by additional international reviewers. For this reason, all projects must be written in English.

The Scientific Committee will select up to seventy grantees from all fields. These applicants will be awarded one-year grants of up to R$ 100.000.

After one year, the grantees will be re-evaluated by members of the Scientific Committee based on their ability to generate groundbreaking ideas and data during the first year. At this point ten to twelve candidates will be selected for an additional three years of funding, regardless of their field of study. Grants at this second stage will be up to R$ 1.000.000.

We will exclude from the review process any reviewer who may have a conflict of interest in relation to a specific proposal.

Grantees will be required to sign a Terms and Conditions agreement on acceptance of their grants.

eligibility criteria for this call

eligible proposals

All proposals should be written in English and must be submitted by the deadline indicated. A proposal will be considered complete only when all required fields or sections of the application form have been completed and submitted. Incomplete proposals will be declared ineligible.

eligible researchers

This Call is directed to young researchers (as defined below) working in Brazil, regardless of their nationality. Our eligibility criteria are as follows:

1 Candidates must hold a **PhD degree awarded after January 1, 2007. This requirement may be adjusted by up to two years for women with children. Thus, a woman with one child should have received her PhD after January 1, 2006. Women with two or more children should have received their PhDs after January 1, 2005**.

Why did we choose this date?

Our aim is to support scientists who are building/consolidating their research agendas. For the time being, we will focus on researchers employed in stable positions to ensure that research projects will be properly conducted.

2 Candidates **must hold a permanent position at a Brazilian university, research institute or entity (public or private) conducting scientific research**. This includes professors (concursados) and researchers. This Call excludes post-docs, lecturers (professores substitutos) and graduate students.

eligible host institutions

Brazilian universities, research institutes and private entities conducting scientific research are eligible. It is expected that the research projects will be implemented in Brazil, although part of the work, including fieldwork or work conducted within the frame of collaborative research, may take place in other countries. Foreign researchers will not be directly eligible for funding by Serrapilheira, and our grants are not portable to other countries.

proposal submission

THE DEADLINE FOR SUBMISSIONS IS SEPTEMBER 15TH, 2017, 15H BRASILIA TIME (BRT).

All project components must be submitted at the same time, but will not be reviewed simultaneously. Please see the review process section and our timeline for more details.

Candidates must submit their proposals online. The submissions portal will be available at www.serrapilheira.org from August 15th. Eligibility for this Call will be based on the following criteria:

- **year of PhD**
- **type of affiliation to a brazilian host institution**
- **location in which the research will be conducted**

If you fulfill the eligibility criteria, you will be invited to enter the following information:

- **name/e-mail.** **This information will be available to the executive team, but not to the reviewers in the initial selection process.**

Why is some information not disclosed?

We want to ensure our review process is as fair as possible. Your identity will only be disclosed when your project is sent out to the Scientific Committee.

- address/city/state/zip code
- gender
- ethnicity
- **link to curriculum vitae.**

Why do we ask for this information?
This information will not affect the selection process, as it is used only to compile records of gender, ethnicity and geographical location for submitted proposals. In future, we may launch more tightly directed programs based on the data we collect.

Once you have provided this information, you will then be directed to the application section. Here you will need to enter the following information:

- **themes**. This choice must tell us about your core research question. Each candidate **must select one or more of the following** themes:

  - energy
  - form
  - identity
  - information
  - matter
  - space
  - time

Why do we use these themes?
We believe that scientists should be able to explain what they do using one or several of these terms. Thinking about your science in terms of these concepts provides a way to put your work into a broader perspective. In other words, we ask scientists to explain the "big questions" their projects are addressing. These terms also create a link between science and people's everyday experience. We will ask you to elaborate on your choice as part of your short proposal.

ex 1: Researchers working on topics related to evolutionary biology may select both the themes of **time** and **form** or **time** and **information** to describe their projects.

ex 2: Researchers working on topics related to nuclear physics may select **energy** to describe their projects.

- **project title**.

- **fields**. One or more fields may be selected. In the case of multiple selections, candidates should be aware that a proposal may be reviewed by specialists

in all of the fields they have indicated.

- chemistry
- computer science
- earth sciences
- engineering
- life sciences
- mathematics
- physics

• **selection of a subfield**. This information will only be used to sort projects so that we can send them to appropriate reviewers, and will NOT be used for selection purposes. The list of subfields will be listed at the submissions portal.

Why include subfields?
Subfields are for internal use only. The use of subfields just helps us sort projects into relevant categories. If you don't feel that any of the categories are appropriate for your project, select Other; if you think your subfield is misplaced, don't worry, this will not affect your review process.

• Finally, **a complete proposal** will include **two documents**:

1 **short proposal** (5 pages, excluding references)

2 **long proposal** (10 to 15 pages, excluding references)

Why two proposals?
The Short Proposal is the document that gets you through the first phase of our selection. It is therefore a very important document. The Long Proposal is a more detailed description of your proposed research. Both proposals will be used by internal and external reviewers to evaluate whether your project is well conceived.

1 short proposal (5 pages)

The short proposal must be fully anonymous. Neither your name nor the name of the institution where you work should be mentioned. You may cite work you have published without identifying it as your own. The short proposal is composed of the following items:

1.1 anonymous professional narrative (1 page)

This document is meant to be an **anonymous** professional narrative (bio narrative). We ask candidates to describe their careers in an anonymous way. Be

sure to clearly describe your scientific achievements, but **do not state your name or any identifying features**. Instead of indicating the details of specific published papers, we ask that candidates pinpoint their major contributions and achievements, putting their accomplishments into perspective.

Our evaluation will be based on concrete accomplishments, not vague statements. Detailed bio narratives providing sufficient description will be **favorably** considered

example:
I was the first author on two papers published in Plant Science and Nature. In my first paper, my research team demonstrated that the tropical serrapilheira are by far the largest nitrogen producers in the world. This was unknown prior to publication of this article and led to the idea that tropical serrapilheira could be imported to Europe to improve nitrogen production in northern forests. In my second paper, we demonstrated that North American serrapilheira are derived from the original Alaskan serrapilheira. I was an invited speaker at the Annual Meeting of the Royal Academy in London in 2008, where I delivered a lecture on the importance of serrapilheira for nitrogen fixation in both tropical and northern forests.

Bio narratives lacking significant detail will **not be favorably** considered.

example:
I published two papers in international journals and attended three international conferences.

In this short biographical narrative, please highlight all of the information you feel will be relevant for our evaluation. Since one page is a very short summary, take time to carefully consider what makes your accomplishments stand out. We will give greater consideration to the nature of your achievements than any other parameters.

1.2 science outreach page (1 page)

You should explain why you chose one or more of the seven themes to describe your project, using the simplest possible terms. In other words, how does your research relate to the theme(s) you chose? This descrip-

tion may require careful consideration and a certain level of abstraction. You are free to determine the style in which you present your choice. We suggest that you start with the big picture and zoom in to describe your project in greater detail – particularly in ways that non-scientists can understand. This part must also be anonymous. More importantly, if your proposal is judged to be scientifically excellent (our first selection criterion) and is in competition with other excellent projects, your ability to explain what you do in easy-to-understand terms may make a difference.

1.3 **scientific summary** (1/2 page)

This section will be critical in the first evaluation of your proposal. We encourage candidates to devote significant time and consideration to crafting this summary.

Candidates should summarize their proposals and, importantly, your writing should be geared towards researchers in your field, but not necessarily experts in your particular sub-field.

In your summary, briefly describe the state of the art in your field, explaining why your project is original and what key question(s) you propose to tackle. Then outline all of the elements of your project that stand out and make your proposal attractive. You should clearly describe how you intend to conduct your research and demonstrate that your project is well structured.

1.4 **scientific project** (2.5 pages)

In the Scientific Project section, you will describe your proposed research in greater detail. Your project will need to

a) demonstrate the scientific relevance of the problems you propose to address;
b) clearly define your project and its intended outcomes during the first year of work, the intended outcomes over the duration of the entire project cycle (four years), and the way the proposed research integrates into your long term/career plans;
c) demonstrate your ability to tackle the big questions of your project; and
d) show that you have sufficient experience to produce high-impact research.

Although we offer flexibility in terms of how you spend your grant, your funding may only be used to cover project-related expenses. It is important at this stage that you propose a grant amount that matches your proposed project, and that you indicate how the funds will be used. You will be asked to estimate the percentage of your budget that will be allocated to salaries/stipends, laboratory products, traveling expenses, equipment and other types of outlays during the year. How you choose to use your grant will not affect our evaluation of your project, and you will be able to adjust this in the future. However, part of our evaluation will be based on how reasonable your financial request appears to be. If you are selected for an additional three years of funding, we will ask for further details about your future budget.

2 **long proposal** (10 to 15 pages – see appendix II)

The long proposal should be a highly detailed description of your proposed research project. Your project should include the following:

a) a broad introduction that describes the state-of-the-art in your field and your objectives;
b) the preliminary data;
c) the sub-aims of your project;
d) a statement of how you intend to reach each of your goals;
e) the level of risk that each sub-aim represents;
f) the methodology you will use to reach your goals (and potential alternative methodologies);
g) the expected outcome and significance of each sub-aim;
h) a detailed timeline in the form of a Gantt diagram; and
i) an indicative budget relative to a 3-year project.

A model of a typical grant proposal is available below, at the end of this Call.

technical notes (applies to short and long proposals)

Page Format: **A4**
Font Type: **Times New Roman**
Font Size: **12 pt**
Line Spacing: **1,5**
Margins: **2 cm right and left side; 2 cm top; 1,5 cm bottom**

public access to data

Serrapilheira requires data generated during the course of a grant to be disclosed through repositories offering public access. This includes publication of peer-reviewed articles, monographs and computer codes, among other types of data produced. Our grantees may publish their work in open access journals or pay additional fees to make their research findings freely available. Publication costs will be covered by the grant. It is important to emphasize that we will consider only papers published through *bona fide* peer-review processes when evaluating candidate research. Consequently, bioRxiv and arXiv will not be considered publications. Should researchers decide to patent the data generated in their projects, we assume publication of research findings will occur following the award of a patent. In the event that a patent is filed, Serrapilheira will not claim intellectual property rights.

code of conduct

Proposed research activities must comply with ethical principles and regulations in effect in Brazil. It is the responsibility of Serrapilheira grantees to comply with these rules and regulations. We require our grantees to respect rights related to privacy, physical integrity, data protection, non-discrimination and protection of human health. Failure to respect these considerations may result in the cancellation of our grant.

research integrity

Serrapilheira maintains a strong stand in support of research integrity. We are committed to

a) excluding members of our Scientific Committee from the evaluation process where conflicts of interest are disclosed;
b) ensuring that appropriate reviewers are selected to review each proposal;
c) ensuring that each proposal is reviewed by at least two reviewers.

In cases of proven scientific misconduct such as plagiarism, or the fabrication or falsification of results during the course of a Serrapilheira-funded project, funding shall be withdrawn.

legal disclaimer

Serrapilheira has the right to cancel, suspend, modify or delay this Call for Proposals ("Call"), at any time and without cause, by issuing a notice in the same channels used to publicize this Call. In case this Call is canceled, suspended, modified or de-

layed, no payment or reimbursement will be due, of any nature, to any person or entity, including but not limited to a- potential candidates, b- candidates who have already applied to a grant, c- institutions with which the abovementioned candidates are affiliated or d- anyone who, by any reason, would be positioned to benefit from a Serrapilheira grant. Candidates who take the decision to prepare and submit proposals in the context of this Call agree to bear all costs associated with such preparation and submission and must take into consideration that, subject to the procedures described in this Call, Serrapilheira has total discretion over the selection process and, therefore, no complaints, review requests, cost reimbursements or indemnification will be allowed or due in case your proposal is not selected in this Call.

timeline

SELECTION 1

JULY 2017	**Call for proposals**
AUGUST 2017	**Proposals submission**
SEPTEMBER 2017	**Deadline for submissions (15th, 15h BRT)**
OCTOBER 2017	**First review of proposals (anonymous)**
NOVEMBER 2017	**Second review of proposals**
DECEMBER 2017	**Final selection by the Scientific Committee** **Announcement of up to 70 selected grantees** **[One-year grants of up to 100,000 reais]**

SELECTION 2

NOVEMBER 2018	**Review of the work produced by the 70 grantees**
DECEMBER 2018	**Announcement of 10 to 12 grantees approved in the 2nd selection** **[Three-year grants of up to 1 million reais]**
DECEMBER 2021	**End**

appendix I
key review criteria for serrapilheira grants

- **ground-breaking nature and potential impact of the research project**
  Does the proposed research address relevant challenges / "big questions"?

  Supposing your project is successful, how will it impact its field?

  Is this project sufficiently high-gain?

- **scientific approach**
  Is the project feasible in the amount of time proposed?

  Is the research methodology proposed in agreement with the goals of the project?

  Are the proposed timescales and resources asked for justified?

- **principal investigator (PI)**
  Has the PI demonstrated the ability to conduct ground-breaking research?

  Is the PI creative and does he/she exhibit independent thinking?

- **grades**
  Outstanding / Excellent / Good / Non-competitive
  The reviewers will need to provide the rationale behind their grades.

appendix II
long proposal guide

This is a guide to help you structure your long project. Candidates may diverge from it, but there are certain elements that must be present: information about state-of-the-art in your field, preliminary data, methodology, expected outcomes, a detailed timeline in the form of a Gantt diagram, and indicative budget (for the 3 years).

section a

1 INTRODUCTION

State-of-the-art and objectives

Preliminary data

section b

2 METHODOLOGY

aim 1

aim 1.1

Working hypothesis

Rationale

Methodology:

Expected outcomes

Risk assessment

Significance

aim 1.2

Working hypothesis

Rationale

Methodology:

Expected outcomes

Risk assessment

Significance

aim 1.3

Working hypothesis

Rationale

Methodology:

Expected outcomes

Risk assessment

Significance

aim 2

aim 2.1

Working hypothesis

Rationale

Methodology:

Expected outcomes

- Risk assessment
- Significance

aim 2.2

- Working hypothesis
- Rationale
- Methodology:
- Expected outcomes
- Risk assessment
- Significance

aim 2.3

- Working hypothesis
- Rationale
- Methodology:
- Expected outcomes
- Risk assessment
- Significance

aim 3

aim 3.1

- Working hypothesis
- Rationale
- Methodology:
- Expected outcomes
- Risk assessment
- Significance

aim 3.2

- Working hypothesis
- Rationale
- Methodology:
- Expected outcomes
- Risk assessment
- Significance

aim 3.3

- Working hypothesis
- Rationale
- Methodology:
- Expected outcomes

Risk assessment
Significance

3 WORK-FLOW AND TIMING (Gantt diagram)

section c

4 RESOURCES (indicative budget relative to a 3-year project)

- 4.1 Size and nature of the team
- 4.2 Infrastructure and equipment
- 4.3 Consumables
- 4.4 Subcontracting
- 4.5 Travel and subsistence costs
- 4.6 Publication costs

5 REFERENCES