Best practices guide for diversity in science

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Preamble

Serrapilheira is a private institution that promotes science in Brazil.

It supports science outreach and basic research in the pursuit of answers to fundamental questions in the natural sciences, mathematics, and computer science. As the institute understands it, the natural sciences include all the sciences that examine nature, trying to understand it in the broadest and most essential senses. This category includes, above all: life sciences, physics, geosciences, and chemistry.

Serrapilheira upholds that major results be the purpose of science that is developed from grappling with uncertainty and taking risks without fearing the possibility of failure.

This type of science is possible when there is freedom of thought, unique projects and a variety of points of view.

Principles

In order to make our initiative relevant to scientific production and promotion, we set out the principles below, which uphold a diverse science and act as a guide for our actions:

- We firmly believe that new and creative ideas that give rise to fundamental questions and foster excellence in research are better cultivated via multiple perspectives;

- We believe that formulating major questions and the approaches to answer them are optimized through the collaboration of scientists from different fields and backgrounds. In our opinion, the more varied the make-up of the group, the richer the science;

- We consider diversity to be a cornerstone of the excellent research that we aim to support;

- We value scientific environments guided by collaboration, respect, tolerance, and equity;

- We encourage open access to research data;

- We encourage diversity through acts of inclusion, especially focusing on race, ethnicity and gender;

Principles

- We seek to understand the significance of diversity in its broadest sense, considering all combinations of ethnicity, race, gender, disability, socioeconomic status, and regionality;

- We understand inclusion as an initiative that reaches beyond simply hiring people from under-represented groups. In our opinion, inclusion is about cultivating and learning how to be welcoming and available, how to listen and engage in dialogue. The effectiveness of inclusion depends on involving team members;

- We prize information that is clear, and thus we make all stages of our scientific promotion process public, including the system for selecting projects, the funding amounts and their allocations.

What are underrepresented groups?

If representativity in science does not somehow reflect the diversity of the general population, like women, people with disabilities, or black people or those of other ethnicities, it is possible to say that some groups are underrepresented.

Commitment

Choosing the researchers we support depends on the quality and excellence of the proposals put forward. When researchers are funded by the institute they state that they agree with the importance of the policy for promoting diversity and they offer to incorporate the principles of this charter into their daily practice.

New and creative ideas are better cultivated via multiple perspectives.

Policies and processes

Putting together a diverse team is a unique experience that is closely connected to the group's training process and research findings. There is no specific method for composing a diverse group. Just like the science we are investing in, this is a practice that requires trusting in difference and taking risks.

The procedures we suggest be followed were based on experiences already underway.

1. Building diverse teams

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- **Knowing your team members is the first step. In that sense, we suggest:**

  I. mapping out the group by gender, ethnic and racial origin, socioeconomic status, disabilities and regionality;

  II. comparing this information with the overall figures in your field of knowledge. Finding reliable information on this topic is possible using data such as that provided by research funding agencies (http://www.generonumero.media/grafico-genero-e-raca-na-cienciabrasileira/). Avoid making assessments based on your surroundings and experience;

  III. be critical in examining the data and seek to understand how imbalances and under-represented groups are presented.

- **Always err on the side of more diversity in the group;**

1. Building diverse teams

- **Seek people who graduated from programs with racial quotas and socioeconomic inclusion programs with the affirmative action center at your institution. Leaders of these centers may even be partners in your selection process;**

- **Ensure that requests for proposals, public announcements and job postings clearly explain the opportunity for people of different races and ethnicities, as well as women and people from socioeconomic inclusion programs;**

Composing a diverse group is a practice that requires trusting in difference and taking risks.

Announcement examples:

I. The Energy Research Group encourages applications from black people;

II. The Immunology Lab encourages applications from women;

III. We encourage applications from candidates coming from socioeconomic inclusion programs;

IV. The Oceanography Lab encourages applications from people from different ethnicities.

1. Building diverse teams

- Avoid having just one person in charge of the selection process. In an effort to neutralize implicit biases, it is preferable to create a selection committee made up of a diversity of ethnic backgrounds, genders and socioeconomic statuses, ideally people who are already familiar with diversity and inclusion policies;

- Consider the different backgrounds and educational opportunities for that often do not cover learning other languages or experience abroad;

- In analyzing women's scientific production, be considerate regarding gaps in their careers due to maternity leave;

- Exclude discriminatory questions in the selection process. It is inappropriate to ask about a candidate's desire to have children, their family, marital status and term of their steady union or marriage.

2. Actions for inclusion after hiring

2.1 Continuous education and additional resources

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- In addition to scholarships, offer additional training resources, such as access to courses on foreign languages and specific skills;

- Consider offering additional funding to scholarship holders who live in underserved neighborhoods;

- Offer additional funds for travel during breast-feeding periods, thus facilitating the company of an assistant, for example;

- Guarantee babysitting and childcare support during events;

- Make plans for hiring temporary staff during maternity and paternity leave;

- Be flexible regarding work schedules and planning meetings (even if there is a time bank for compensation later), considering group members who are mothers and fathers of young children and people who live in distant locations.

Aim for balanced gender and ethnic/racial representation in selection committees and scientific events.

Inclusion reaches beyond simply hiring people from under-represented groups: it is about welcoming, availability, listening and dialogue.

2.2 Actions for raising the team's awareness of cultural change

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- Publicly show your interest in supporting a diverse environment in science. Make a point of showing your commitment to the cause on websites and promotion materials, and include content about diversity in your talks;

- Make texts, tests and guides about inclusion for your team;

- Promote periodic debates on topics connected to diversity, including the personal discomfort that the actions for committing to diversity may cause;

- Use the code of conduct as a permanent discussion forum, fostering critical thinking and reflection on successes and failures in the pursuit of cultural change;

2.2 Actions for raising the team's awareness of cultural change

- Encourage the group to map out and share best practices from other groups in the same field of research;

- Identify someone on the team with talent worth integrating and investing in their training and fostering. It is not unusual for segregation of black people and women to occur in a diverse group. It will be up to the leadership to correct any problems that may occur, optimize other people's reception and guarantee equal spaces and opportunities for team members;

- Propose a mentoring dynamic between members of different backgrounds in the same field of work to equalize experiences and adjust for disadvantages resulting from systematic under-representation.

3. Monitoring and follow-up on actions for inclusion and diversity policy

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- Value the story of how the group came to be;

- Instead of reports, publish narratives about how the actions for diversity in the team developed, describing individual achievements such as participation in events, major collective results such as publications and initiatives that worked out;

- Broaden the discussion about diversity and propose events in partnership with other institutions and laboratories to expose the other groups' practices and discuss the possibility of adopting more effective policies;

- Encourage the creation and integration of committees that promote diversity.

The more varied the make-up of the group, the richer the Science.

Actions adopted
by Serrapilheira for
encouraging diversity

Actions adopted by Serrapilheira for encouraging diversity

- In our calls for proposals, we extended the deadline for completing doctoral studies by two years for applicants who are mothers;

- We created a support mechanism for women grantees who become pregnant or who give birth during the lifetime of their grant at the institute. They receive a maternity grant worth BRL 10,000 that can be used in the way that best suits their needs;

- We cover the costs of nursing age children (up to 2 years old) and the mother's companion at events organized by the institute;

- We set up a bonus mechanism for inclusion actions. Researchers whose Serrapilheira grant is renewed can receive as much as BRL 700,000 conferred on an unconditional basis with a bonus of BRL 300,000, which must be used for integrating and training people from under-represented groups into the research teams. Adhering to this mechanism is voluntary, in other words, researchers can choose whether to accept the funding aimed at practices for encouraging diversity.

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