Sustainability Award

> The Organization for Human Brain Mapping **Sustainability award** recognizes an **individual** or **team**'s impactful **efforts** in adopting sustainable, environmentally friendly practices in their research activities, and raising the consciousness within the OHBM community on the environmental issues.

1. Award Criteria

1. The applicant(s) must demonstrate efforts to develop and implement practices for **reducing the environmental impact** of their work in one or more of the following areas:

MEETINGS & TRAVEL

- ❏ Choose sustainable transport when available
- ❏ Optimize travel plans to minimize air-travel - e.g. bundle trips
- ❏ Organize hybrid events / watch-parties for in-person research events

IMAGING & COMPUTING

- ❏ Assess carbon footprint of your research
- ❏ Choose greener HPCs and clouds
- ❏ Recycle-reuse and reduce e-waste
- ❏ Develop and implement open science practices to reduce carbon-expensive computation
- ❏ Develop hardware or software tools that increase the sustainability of neuroimaging

EDUCATION & OUTREACH

- ❏ Conduct research on the impact of climate change on the brain
- ❏ Raise awareness in the neuroimaging community about sustainable practices one can adopt
- ❏ Communicate with the wider public on how neuroscience can inform sustainable behaviour

2. The individual applicant or group lead must be an OHBM member in good standing.

Note: Current OHBM elected leadership are ineligible to receive OHBM Awards. Nominations that are missing required documents will not be considered.

2. Nomination Process

Nominations may be made by any member of the OHBM. Self-nomination is encouraged. The process for nomination is as follows:

- ☐ Clearly identify the nominator and the nominee(s) (individual or team).
- ☐ Provide a copy of the nominee(s)'s current CV or Biosketch
- ☐ Fill out a short application and survey form (example below)
- ☐ Provide a brief statement (<500 words) articulating the efforts of the applicant(s) sustainable, environmentally friendly research practices.

2.1 Sustainability Award Application Form and Survey

We kindly invite the nominators to fill in the following survey* that would help estimate the environmental practices of the nominee(s).

* Subject to revision based on further deliberation and feedback

How often do nominees implement the following practices in their research?
Please tick the appropriate value. Time-span suggestions in the brackets are just an approximate guide.

1 - Never	2 - Rarely	3 - Sometimes	4 - Always
	(*a couple of times per year*)	(*a couple of times per month*)	

COMPUTING/ANALYSIS PRACTICES	1	2	3	4	N/A
Demonstrably reduce the carbon footprint of your research (e.g. implement -carbontrack option in [fMRIprep](#)).					
When purchasing, choose energy-efficient hardware.					
Choose greener HPCs / clouds.					
Try to minimise electronic waste (by reducing, reusing, recycling).					
Adopt/develop open science practices to reduce computation effort.					
Schedule jobs to run at less carbon-intensive times (e.g. avoid times of peak demand on energy grids).					

	1	2	3	4	N/A
Ensure a helium recycling tank is installed for MEG scanners.					
Other:					
SUSTAINABLE RESEARCH-TRAVEL PRACTICES	**1**	**2**	**3**	**4**	**N/A**
Use remote communication tools to minimize carbon-costly traveling.					
Organize and/or participate in local watch party (online or hybrid) events to replace traveling to conferences.					
When traveling, use less carbon-intensive transport options if available.					
Purchase effective carbon-offset options when traveling by aviation and no other transport options are available.					
When organizing scientific events, consider sustainable practices (e.g., plant-based food options, zero-waste/recycling options, etc.),					
Other:					
EDUCATION AND RAISING AWARENESS	**1**	**2**	**3**	**4**	**N/A**
Provide educational/awareness-raising content on sustainability topics for the academic community.					
Communicate with the wider public on how neuroscience can inform sustainable behavior.					
Conduct research on sustainability and brain-related topics.					
Other:					

Are there any other sustainability-related areas/practices that the applicants engage in? Please provide examples and any other relevant information that should be considered during the review process.

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How long do nominees engage in sustainable actions for?

OHBM Sustainability &
Environmental Action
Special Interest Group

Organization for
Human Brain Mapping
Advancing Understanding of the Human Brain

☐ **< 1 year**

☐ **1-2 years**

☐ **3-4 years**

☐ **5+ years**

Are they engaged in any environmental group?

☐ **Yes**

☐ **No**

☐ **I don't know**

Scoring:

General score: sum of scores from all the items.

Range of action score: Separate sums of 3 areas.

Bonus points for additional actions, and longer duration of nominees' implementation of practices.

3. Review Process

The OHBM Awards Committee is in charge of reviewing all nominations and formulating a recommendation for the Council's review and final selection of the Sustainability Award recipient. SEA-SIG (with the possible inclusion of Open science SIG and Diversity & Inclusivity Committee) will share their expertise during evaluations as needed.

The following elements will be considered when reviewing the nomination package to determine the nominee(s)' merits:

- **Impact of the actions taken**: What are the approximate estimations of the carbon "savings" according to nominee(s)' practices? SEA-SIG can advise on measurements (e.g., environmentally responsible computation and storage practices, research-related travel, etc.).
- **Duration of actions implemented**: What is the time span of applicants' engagement in sustainable actions? (e.g., Have they started recently, or have they been implementing actions for some years/decades?)

- **Range of actions taken**: Considering different possible areas of sustainable research practices (e.g., environmentally responsible computing and analysis, travel policy & sustainable organization of scientific events, education and awareness raising), do applicants engage in one or more areas of action?
- **The commitment to the advocacy** of promoting environmentally conscious behaviors in the OHBM and/or the broader community. How visible is the applicant's engagement in raising awareness of environment-related topics in the scientific community and/or broader? (e.g., communication via social media, organizing educational courses, membership in environmental organizations, etc.)

An unequal position of applicants with regard to certain areas of environmentally responsible actions (e.g., scientific travel opportunities) has to be considered. ***Higher weight can be therefore given to computation/analysis practices, minimizing energy and other resources waste, and conscious advocacy of such practices in the community.***

Final selections are based on a consensus of the entire Awards Committee and are sent to the OHBM Council for final approval. The Committee will encourage nominators of highly ranked, but unsuccessful, nominees to resubmit their application in subsequent years.

4. Award

A cash award of $2,500 USD will be presented to the individual or will be divided among the members of the team. When the applicant is a team, there must be one individual in the team identified as the lead, with whom correspondence can take place. The award money will be delivered to the lead and they will be responsible for distribution to the individual team members. Both are presented to the recipient at the Annual Meeting. The awardee will be provided with the opportunity to make brief remarks as they receive the award.

Supplementary material

Slides on 🟨 Sustainability award

References

ETH Zürich (2023, January 28). Sustainability report.
https://ethz.ch/en/the-eth-zurich/sustainability/eth-sustainability/sustainability-report.html

Gerhards, J., Eichhorn, A., Fischer, J., Frevert, U., & Markschies, C. (2022). *Klimaschutz und akademische Dienstreisen. Empfehlungen für ein umweltschonendes Reiseverhalten in der Wissenschaft.* [Climate protection and academic business travel. Recommendations for environmentally friendly travel behavior in science]. Berlin-Brandenburgische Akademie der Wissenschaften. pp. 1–33.

OHBM (2023, January 28) Awards.
https://www.humanbrainmapping.org/i4a/pages/index.cfm?pageID=3287

Lannelongue, L., Grealey, J., Bateman, A., & Inouye, M. (2021). Ten simple rules to make your computing more environmentally sustainable. *PLoS computational biology*, *17*(9), e1009324.
https://doi.org/10.1371/journal.pcbi.1009324

McGill University (2023, January 28). Sustainability Events Certification.
https://www.mcgill.ca/sustainability/engage/sustainable-events

McGill University (2023, January 28). Sustainable Travel Guide.
https://www.mcgill.ca/sustainability/files/sustainability/2022_sustainable_travel_guide.pdf

Rae, C.L., Farley, M., Jeffery, K., & Urai, A. E. (2022). Climate crisis and ecological emergency: why they concern (neuro)scientists, and what we can do. *Brain and Neuroscience Advances*, 6, 1-11.
https://doi.org/10.1177/23982128221075430

fMRIPrep with carbon-tracker