# 2023 Call for Macroscopes

## Background and Goals

| IMPORTANT DATES | |
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| Submissions due: | Feb 15, 2023 |
| Mapmakers notified: | Apr 1, 2023 |
| Submit final entries: | May 30, 2023 |
| Ready for display: | Aug 31, 2023 |

The *Places & Spaces: Mapping Science* exhibit is designed to open people's minds and hearts to the value, complexity, and beauty of science and technology. We are inviting authors of interactive data visualizations, also called macroscopes, to submit their work for inclusion in the *Places & Spaces: Mapping Science* exhibit.

Macroscopes are software tools that help us focus on patterns in data that are too large or complex to see with the naked eye. The term "macroscope" was explored in 1979 by Joël de Rosnay in a book titled *The Macroscope: A New World Scientific System* [1]. To meet the challenges posed by the rapidly increasing abundance, diversity, and complexity of information, de Rosnay proposes the "macroscope," a tool for observing "what is at once too great, too slow, and too complex for our eyes."

Macroscopes can also function as digital atlases, particularly in the broad field of medical practice and research. An atlas can serve as an indispensable learning tool for beginning students and a trusted reference for the seasoned practitioner. This year's call for macroscopes is looking for digital collections of annotated and spatially organized information on biomedical subjects (which could include approaches from the fields of anatomy and physiology, bioinformatics, epidemiology, health care, and others). These macroscopes should serve as digital atlases—collections of maps, charts, and other graphical representations that attempt a global view of a scientific subject. They may also include reference maps where data is placed within a coordinate system to visualize spatial relationships between entities. Like the best cartographic and anatomical atlases, these macroscopes should be engaging, well organized, easy to use, and support both informed query and broad exploration.

*Places & Spaces* is a traveling exhibit that currently features 100 maps and 32 interactive macroscopes from a wide range of disciplines. Since 2005, the exhibit has traveled to 30 countries and appeared in various formats at over 458 venues and events, including the Davos Economic Forum, National Academy of Sciences, and the New York Public Library. News coverage has appeared in *Nature*, *Science*, *USA Today*, and *Wired*.

**References**

[1] de Rosnay, Joël. 1979. *The Macroscope: A New World Scientific System*. New York: Harper & Row.

# Submission Details

Interactive data visualizations designed for desktop, mobile, touch-enabled, and/or large (e.g., tiled wall) devices are all welcome. To be incorporated into our exhibit kiosk, macroscopes must be 1) web-based, 2) touch-enabled, 3) allowed to run inside an iframe element, 4) have CORS enabled for http://idemo.cns.iu.edu/macroscope-kiosk/#/, and 5) served over HTTPS. Macroscopes will be deployed on a 46" multi-touch display running Ubuntu 20.04 LTS and Chrome 91. Each macroscope should be fully functional for at least two years. Macroscopes might be deployed using other hardware; please contact the curatorial team to discuss options. Macroscope authors should be available to work with the exhibit staff over a period of three months to prepare the macroscopes for public display and travel.

Each entry must be submitted by February 15, 2023, and needs to include:

- Title of macroscope
- Author(s) name, email address, affiliation, mailing address
- Link to online site that features the macroscope tool or to executable code
- Macroscope tool description (300 words max): user group and needs served, data used, data analysis
  performed, visualization techniques applied, and main insights gained
- References to relevant publications or online sites that should be cited, links to related projects or works
- Describe the impact your data visualization has had on public awareness, social policy, or political action
- Submit entries via the following link: https://forms.gle/rNqq6nDG8YfvNg3MA

# Review Process

Submissions will be reviewed and evaluated by the exhibit advisory board (listed below) in terms of their:

- Scientific rigor
- Value as a tool for data exploration
- Ability to provide new, actionable insights
- Relevance for a general audience

## Final Submission

Authors of winning entries will be contacted by April 1, 2023 and invited to submit final entries by May 30, 2023. Each final entry consists of:

- Link to online site that features the macroscope tool or link to executable code. This must be a fully self-contained version of the macroscope that can operate without any outside links and without opening new windows.
- Biographies for all authors (100 words each)
- High resolution author portraits that are no smaller than 360 x 450 pixels, or 1.2” x 1.5” at 300 dpi.
- Signed copyright and reproduction agreement

Authors are welcome to use the expertise and resources of the exhibit curators and designers.
The macroscopes are expected to be ready for display by August 31, 2023.

## Exhibit Advisory Board

- **Gary Berg-Cross,** SUNY–Stony Brook
- **Kevin W. Boyack,** SciTech Strategies, Inc.
- **Donna J. Cox**, Advanced Visualization Laboratory, University of Illinois at Urbana-Champaign
- **Bonnie DeVarco**, Media X, Stanford University
- **Ingo Günther**, Karlsruhe University of Art and Design
- **Francis Harvey**, Cartography and Visual Communication, Leipzig University
- **Peter A. Hook**, Associate Law Librarian, University of Notre Dame
- **Vincent Lariviére,** Universitè de Montrèal
- **Lev Manovich**, The Graduate Center, City University of New York
- **Elijah Meeks**, Noteable
- **André Skupin**, San Diego State University
- **Olga Subirós**, Big Bang Data, Olga Subirós Studio
- **Stephen Uzzo**, New York Hall of Science
- **Caroline S. Wagner,** The Ohio State University
- **Benjamin Wiederkehr**, Interactive Things

Please feel free to send any questions you might have regarding the judging process to cnscntr@indiana.edu and use the subject heading “Macroscope Inquiry.”