

BIDS Steering Group slate information

* denotes chairperson for slate

Cyril Pernet*, Melanie Ganz, Camille Maumet, Russ Poldrack, Dale Zhou

Our group will work hard toward the long-term sustainability of BIDS, as already demonstrated by the long-standing engagement of our proposed committee members into open science, BIDS and other imaging standards. Our group is also dedicated to representing all BIDS users without discrimination, and we will make sure BEP encompasses the majority of user cases (80/20 rule), thanks to the diversity of our members (age, gender, academic level) and to our complementary expertise across all imaging modalities. Details on members @ <https://hackmd.io/@aNISoTd2SFOaFetAVI0E1A/SkOPOi7Ur>

Russ Poldrack*, Kirstie Whitaker, Angie Laird, Petra Ritter, Tom Nichols

This steering group team will cover an international and long-term vision for the Brain Imaging Data Structure community. Russ Poldrack hosted the initial meeting at Stanford which led to the creation of BIDS and has been involved throughout the project, Tom Nichols is a long term contributing developer to two major analysis toolboxes (SPM and FSL), and Petra Ritter will connect the BIDS community to neuroinformatics consortia such as the Virtual Brain platform (part of the EU Human Brain Project). Angie Laird and Kirstie Whitaker have “on the ground” experience developing and extending the specification and BIDS Apps. The whole committee are dedicated to consolidating and expanding the BIDS community. They will focus on 1) ensuring that BIDS specification is accessible and applicable for developmental and clinical neuroimagers who use multiple imaging modalities, 2) building a sustainable community by mentoring contributions and transitioning users to developers to maintainers, and 3) diversifying the BIDS community through outreach and training focused online and in-person events. The committee will be chaired in the first year by Russ Poldrack, with a vision to hand over the reins soon after that to balance the need for a stable transition and decentralising power in the BIDS community.

Tibor Auer*, Camille Maumet, Thomas Nichols, Guiomar Niso, Petra Ritter

Analysing and combining large amounts of rich data and various approaches raises the issues of description and integration of both data and approaches into the processing pipelines. BIDS Core provides a rich description of the raw data with a good balance between comprehensiveness and efficiency thus facilitating both the development and the implementation of approaches.

But there is much work needed to extend BIDS to rich derivatives and build model-building tools that ingest those derivatives and capture the complexity of the workflows and cognitive computational models.

Our combined experience includes various initiatives/standards (e.g. BIDS and NIDM), as well as a wide range of modalities including xMRI, M/EEG, and neurophysiological recordings. Apart from the required technical expertise, our panel also represent the strong interest in implementation by and interaction with end users of brain research and life sciences in general with direct link to international projects.

We would ensure the harmonisation and the generalisability of the standards by means of rich, yet highly controlled vocabulary of meta-data, while also focusing on implementation and supporting tools and apps. The joint focus could be the (further) development of BIDS Model and Derivatives with a special focus on multimodal workflows and computational integrative/multiscale modelling.

Christophe Phillips*, Jose David Lopez, Robert Welsh, Julia Stephen, Cyril Pernet

We feel that experience will be crucial to steer the BIDS effort and community. This does not mean conservative thinking but rather a knowledgeable open-mindedness on how to approach system design and how to consider options/input from out-of-the-box thinkers. Each member of this slate has been working for many years at the interface between data acquisition and data exploitation, from single PhD student projects up to multi-centric and multi-modal ones. We have also been involved in the development and application of BIDS concepts.

With this combined experience, we feel we will be able to guide future BIDS development to benefit the broad scientific community from single student users to multi-site consortia.

<https://hackmd.io/@rXo2nybjQjajueyv95Ua1Q/Bk2GnfbwS>

Derek Pisner*, Franco Pestilli, Melanie Ganz, Russ Poldrack, Thomas Nichols

To ensure that the next generation of specification is as successful as the first, our core platform is to ensure that newly proposed BEP's will be held to the highest standard, based on consensus expertise and wide community outreach. Our proposed committee brings a strong diversity of expertise, career levels, and perspectives that make us well-suited to the diverse needs of BIDS as it transitions into new modalities and derivatives. These needs include continued promotion of both intuitive naming structures and data organization conventions that are conscientious of each modality, BIDS application, and type of user. In support of these objectives, we intend to embrace democratic strategies whenever possible, harnessing the power of community consensus and crowdsourcing where appropriate. Given Derek's background working with a wide variety of multimodal BIDS data, as well as his current efforts to devise BEPs for derivative graph data in particular, he is enthusiastic about the possibility of leading this charge.

Guiomar Niso*, Melanie Ganz, Robert Oostenveld, Russ Poldrack, Kirstie Whitaker

Our diverse BIDS Steering Group gathers representation for all the imaging modalities currently available in BIDS (i.e. MRI, MEG, EEG, iEEG, PET). We aim to fully develop the multimodality approach of the standard. We cover a wide range of expertise, background skills and internationality (i.e. Denmark, Spain, The Netherlands, USA and UK). Melanie Ganz led the PET-BIDS and is working on a PET specific repository. Guiomar Niso led the MEG-BIDS and has contributed with open MEG data repositories (i.e. The OMEGA) and open software for electrophysiology and functional connectivity (i.e. Brainstorm, HERMES). Robert Oostenveld contributed to the MEG-BIDS, EEG-BIDS and iEEG-BIDS, and developed software for ephys data analysis shared with large research community (i.e. FieldTrip). Russell Poldrack was one of the founders of the BIDS, co-led the MRI-BIDS and develops informatics tools for the growing body of neuroimaging data (i.e. OpenNeuro and NeuroVault data sharing projects and Cognitive Atlas ontology). Kirstie Whitaker also co-led the MRI-BIDS, contributes to facilitating the access to the specification and to build open communities, and equity and diversity collaborative projects. We will put our efforts towards integrating modalities, implementing derivatives, sharing tools and apps, with focus on reproducibility and a long term vision. See: <https://bit.ly/2nDSzUF>