

## Project Selection Criteria

Project applications for ultra-high resolution (mesoscale) fMRI research and related projects on the next generation (NexGen) 7T scanner will be reviewed by the Mesoscale Project Committee (MPC), and scored based on the following four (4) criteria. Each criteria are weighted equally and will be given a score between 1 (best) to 5 (worst). The best scoring projects will be selected for data collection on the NexGen 7T.

- Alignment with BRAIN 2.0 goals
  - Does the proposed project address the Priority Areas in BRAIN ACD WG 2.0, including addressing activity at multiple scales (Area 2), elucidating directional flow (Area 5) and leveraging multiple domains as described in (Area 7).
  - <https://braininitiative.nih.gov/vision/nih-brain-initiative-reports/brain-20-report-cells-circuits-toward-cures#Heading0>
- Quality and feasibility of the proposed scientific investigations.
  - Is the research strategy outlined logically and does it bear an acceptable level of rigor? Are the aims achievable within the project period and with the requested number of scan hours? If methods/services are proposed which are not currently available through the U24, does the proposal describe a feasible way to obtain them? Does the project stand to significantly benefit from the NexGen 7T; and have the limitations of existing scanners been demonstrated?
- Potential to lead to funded research or public engagement
  - Does the proposed project have potential to lead to additional funded research (e.g through NIH R01 funding, or similar funding mechanisms), to perform experiments on the NexGen 7T.
  - Is the project likely to lead to engagement within the field, and also within the wider public sphere?
- Geographical/background diversity.
  - Would the applying lab and institution increase the geographic range represented and offer diverse perspectives and backgrounds for the U24 project, as laid out in the Plan for Enhancing Diverse Perspectives (PEDP).

## Eligibility Criteria

- To maximize the number and geographic diversity of project PIs, U24 funded projects will be limited to 1 year in duration and each PI will be eligible for only one U24 funded project per 2 year period. Investigators from Berkeley and institutions local to the NexGen 7T are eligible to submit applications for a U24 project but will need to fund their own scan time, and alternatively can apply directly to the BIC for access to the scanner.
- Ethical and MR safety: The research must be compatible with the local IRB regulations, and with the IRB regulations local to the researchers. In case of experiments that go beyond the scope of the UC Berkeley U24 IRB protocol, the researcher is required to work with U24 project staff to obtain ethical and MR safety approval (e.g, pediatric scanning, emotional or physically distressing stimuli, breathing manipulations, metal in the scanner).