ManyBabies New Project Proposal Submission Form

<u>OVERVIEW</u>

ManyBabies is a collaborative project for replication and best practices in developmental psychology research. Our goal is to bring labs together to address outstanding theoretical and methodological questions about the nature of early development and how it is studied.

ManyBabies projects are typically replications, in the sense that they investigate a construct or phenomenon that has already been investigated in the literature (and often is central to theory in that area). On the other hand, our projects have never been what is termed "direct replications" where the procedure of an existing study is maintained for the purpose of evaluating the relation of the new results to the original. This is because the stimuli and design of the existing study usually need at least minor modifications to make them appropriate for use with a large network of collaborators. In particular, once group meetings begin with interested collaborators, opinions emerge quickly about optimal experiment designs.

Thus, ManyBabies projects are typically what we might call "conceptual replications." But they are not *just* replications. In order for a project to be worth doing, typically it should also create opportunities for more precise measurement of important theoretical quantities; measurement of variability across labs, populations, and individuals; and a chance to standardize methodological decision-making and create a best-practices template.

Any sufficiently motivated team can do a collaborative study. The ManyBabies "value proposition" – why teams should consider joining us – is that the group as a whole has built both soft and hard expertise in how to make such projects run more smoothly and more effectively (for example, lessons about coordinating decision-making, analytic planning, data processing, etc.). Further, we will help new projects leverage the existing network (as well as future additions in the form of personnel and grant support) to do the best study possible.

This form is designed for groups of researchers interested in leading and launching a new ManyBabies project - either a main project or a spin-off that would involve data collection across multiple labs. Researchers are referred to the ManyBabies <u>documentation</u>, the <u>Theory Paper</u>, and the ManyBabies <u>Lessons Learned</u> paper for guidance in terms of how to think about and begin to plan a ManyBabies project.

<u>APPLICATION</u>

Phenomenon: What phenomenon do you plan to investigate, including a description of the general methodology, and reference to key/seminal studies?

[add text here]

Narrative project history: How did you come to propose this project? Please share anything that could contextualize this proposal (ongoing controversies in the literature, discussions at events or between a small group of researchers, etc).

[add text here]

Community buy-in: Why do you think the infant research community will be interested in this project? How do you plan to communicate your project to that community (e.g., conferences, journals, other outreach)?

[add text here]

Project leadership team: In the past, leadership teams have had 2-4 members, although more leads are also possible, and they can have any academic level. Who will be on the team, what is their academic level, and what will their role be (e.g., who will run meetings, lead stimulus development, lead writing, lead data analysis, etc.)? We find that it is very useful for there to be a range of levels of seniority on a team, as early-career researchers often have more time and energy to advance the project, while senior researchers can contribute guidance, perspective on the field, and leadership experience.

Name and e-mail	Institution/ location	Academic Position	Role

Expertise: What are the leadership team's areas of expertise in relation to this project? Have any members of the team collaborated before?

[add text here]

Diversity: Please highlight how the team composition addresses issues related to inclusion and diversity (e.g., different levels of training, theoretical orientations, cultural/geographical diversity, gender balance, etc.).

[add text here]

Governing board liaison: To ensure seamless knowledge transfer and help in case the project hits a stumbling block, we recommend to liaise throughout the project with at least one governing board member. Do you have a preference? (If your leadership team already includes a governing board member, you can leave this field blank).

A current list of governing board members can be found here: http://manybabies.stanford.edu/about/

[add text here]

Involvement of original authors? ManyBabies projects have had a history of including (or even being led by) authors of the original work being replicated/extended. We find that this buy-in results in more sophisticated and sensitive discussions of the relation of new work to prior literature and engages the expertise in design and stimulus creation that the authors bring. If your project builds directly off of a previous publication or publications, how will you engage with the original authors?

[add text here]

Methodological feasibility: What kind of equipment is necessary for a lab to be able to participate? What kind of training would researchers / research assistants need? Keep in mind that there is a tradeoff: more complex procedures are likely to be more costly for participating labs and hence less likely to be able to recruit a large number of participating labs.

[add text here]

Participant diversity: Are there multiple between-participant conditions or age groups planned? How many participants would labs have to test per condition? What kinds of populations of infants are needed? E.g. do you have specific requirements regarding language background or culture?

[add text here]

Organizational skills: Leading a ManyBabies project requires regular updates to the contributors, scheduling and management of meetings, and a general commitment to continue pushing the project forward week in and week out. Failure to do this can lead to stalled projects and a perception of a lack of momentum. How will you ensure that your leadership team will keep on top of moving the project forward? (One possibility is to assign communication and [rare] executive decision making to specific team members).

[add text here]

Technical skills: We have found that one of the major blocks to speedy progress in project completion is insufficient collaborators with the technical background necessary to manage and analyze the large volume of data associated with ManyBabies projects using current Open Science tools. These tasks can take hundreds of hours. Who will lead the analysis team and what skills/experience do they have? What other individuals have been recruited to create data templates, do data cleaning, write analysis code, and create a reproducible manuscript (i.e., in R Markdown). Necessary skills include strong proficiency in R, RMarkdown or the statistical analysis tool of your choice (with a strong preference for free tools such as R, Python, etc), and git or equivalent distributed collaboration and version control system.

[add text here]

Possible spin-off/secondary projects. Spin-off or secondary projects can add value to a project and dataset with a smaller outlay of resources than the original project. Do you have any additional projects in mind that might be interesting, but fall outside the scope of the main project? (If not, or if this is a spin-off/secondary project, leave this field blank).

[add text here]

Funding. Specific ManyBabies projects can benefit from securing funding, for example to fund trainees working on the project, or to provide small re-grants to support data collection in labs with limited funds. Do you plan to apply to any grants to support this project, and if so what is the timeline? How can the governing board help?

[add text here]

Timeline. What is your anticipated timeline (e.g., for planning/discussions, stimulus preparation, piloting, lab recruitment, pre-registration, Stage 1 registered report, data collection, data cleaning/analysis, Stage 2 registered report, etc.)? At what time points do you plan to invite contributions from the larger research community? How flexible is this timeline (e.g., how would delays affect funding, availability of leadership team, etc.)?

[add text here]

Obstacles: What are the main obstacles you foresee in launching this project? Do you have questions or concerns the governing board can discuss with you?

[add text here]

PROCESS

Once you have filled out this form, send it to govboard@manybabies.org. The governing board will discuss the proposal. In many cases, this will lead to a conversation between several GB

members and the proposed leadership team. The GB will then vote on the proposal and provide a formal decision by email. Decisions will not necessarily be a simple yes/no, but could also include recommendations for improving the proposal, adjusting the proposed timeline (e.g., if the proposal is interesting but exceeds current capacity given other ongoing projects).