Study Title: Visual Neuronal Motif Analysis Case Study

Researcher: Jakob Troidl

Faculty Advisor: Hanspeter Pfister

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#### **Key Information**

The following is a summary of this study to help you decide whether or not to be a part of this study. More detailed information is listed later on in this form.

# Why am I being invited to take part in a research study?

We invite you to take part in a research study because you are a domain expert in Drosophila connectomics and this expertise is valuable in terms of evaluating our visual neuronal motif analysis tool and providing feedback regarding the future development of this system.

# What should I know about a research study?

- Someone will explain this research study to you.
- Whether or not you take part is up to you.
- Your participation is completely voluntary.
- You can choose not to take part.
- You can agree to take part and later change your mind.
- Your decision will not be held against you.
- Your refusal to participate will not result in any consequences or any loss of benefits that you are otherwise entitled to receive.
- You can ask all the questions you want before you decide.

#### Why is this research being done?

This research is being done to help develop better methods and interfaces to analyze complex neuronal connectivity motifs of nanoscale neuron reconstructions, with the goal of building systems that experts such as yourself can use to help further your research.

## How long will the research last and what will I need to do?

We expect that you will be in this research study for 90 minutes.

You will be asked to use our visual motif analysis tool to perform analysis on a partially reconstructed Drosophila connectome.

# Is there any way being in this study could be bad for me?

We don't believe there are any risks from participating in this research.

#### Will being in this study help me in any way?

We cannot promise any benefits to you or others from your taking part in this research. However, possible benefits include the further development of a system that can help you with your research. Any

feedback given will be incorporated into this system, which will be open-source and can thus benefit a broader biomedical community.

#### **Detailed Information**

The following is more detailed information about this study in addition to the information listed above.

#### What is the purpose of this research?

The purpose of this research is to apply interactive queries and visual analysis to neuronal connectivity analysis in large connectomics datasets.

### How long will I take part in this research?

One 90-minute long session and optional input on the written description of this session.

#### What can I expect if I take part in this research?

This session will take about 90 minutes. The participant will meet 1-on-1 with the researcher conducting the study, who will give a brief tutorial on how to use the system, before allowing the user to interact with the system. This will take place in an online meeting or at the Science & Engineering Complex of Harvard University. The participants will be using a preloaded dataset. The session will be recorded. After completing this session, the participant can optionally fill out a quick survey about the utility and intuition of the features of the system.

### What happens if I say yes, but I change my mind later?

You can leave the research at any time; it will not be held against you.

# If I take part in this research, how will my privacy be protected? What happens to the information you collect?

Efforts will be made to limit the use and disclosure of your Personal Information, including research study records, to people who have a need to review this information. We cannot promise complete secrecy. Organizations that may inspect and copy your information include the IRB and other representatives of this organization.

Your information or samples that are collected as part of this research will not be used or distributed for future research studies, even if all of your identifiers are removed.

We will store the recordings this study until the related scientific paper is published. Afterwards, they will be deleted.

#### What else do I need to know?

This research is being funded by the NSF grant "Empowering Data-Driven Hypothesis Generation for Scalable Connectomics Analysis".

#### Who can I talk to?

If you have questions, concerns, complaints, or think the research has hurt you, talk to the research team at <a href="mailto:itroidl@g.harvard.edu">itroidl@g.harvard.edu</a>.

This research has been reviewed and approved by the Harvard University Area Institutional Review Board ("IRB"). You may talk to them at (617) 496-2847 or cuhs@harvard.edu if:

- Your questions, concerns, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You want to talk to someone besides the research team.
- You have questions about your rights as a research subject.
- You want to get information or provide input about this research.