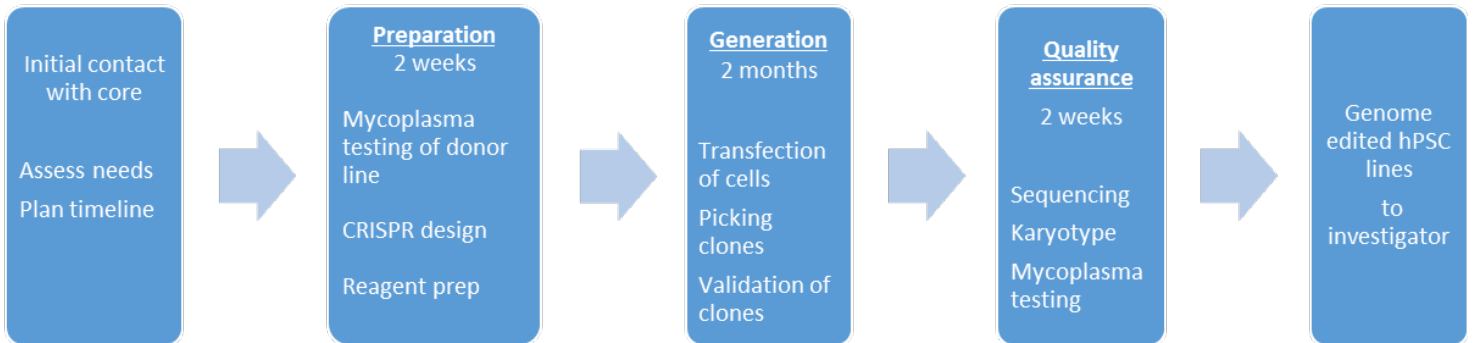


Gene editing via CRISPR/Cas9 in human embryonic or induced pluripotent stem cells will be completed by the Gene Editing Service of the Waisman Center under the direction of Drs. Su-Chun Zhang and Anita Bhattacharyya.



After initial contact with Dr. Bhattacharyya, preliminary steps include confirmation of donor human pluripotent stem cells as mycoplasma free and obtained with appropriate human subjects IRB and/or Stem Cell Oversight approvals. All project and funding information forms need to be completed before project is started.

An initial meeting with Dr. Andrew Petersen, the CRISPR gene editing scientist, will identify the best course of action for the desired genetic manipulation. Genetic manipulation will be carried out on hPSCs and clones will be isolated, tested for gene manipulation and distributed to investigator. Total time for process is approximately 3 months. A minimum of 3 individual clones will be selected for preservation, with 1 clone moving forward to analysis for off-target genome editing at a minimum of 4 sites per sgRNA used. UW investigators will also be given the opportunity to work with WiCell for hPSC characterization, banking and distribution. Some aspects of characterization are included in the quoted price (such as mycoplasma testing), but additional efforts such as karyotyping or additional Cas9 off-target analysis will result in additional fees.

1 –Investigator Information

Name: _____

Institute/Center: _____

Primary contact for these cells: _____

Phone: _____ Email: _____

2 – Research project details

Project Title: _____

Brief summary of research:

3- Funding

Grant/project number for billing: _____

Waisman Center Investigator? YES NO

If yes, is this grant/project on Waisman Center core grant? YES NO

UW SCRMC member? YES NO

4- Parental cell information

Cell line name: _____

Indicate genetic mutation, if any: _____

If induced pluripotent stem cells, please indicate source:

Cell repository/ bank, please specify source

Patient derived, please specify source and provide human subjects IRB approval documentation

If human embryonic stem cells,

Please specify source and provide Stem Cell Research Oversight approval documentation

Do the cells contain any known infectious agent(s)? YES NO I don't know

If YES list agent(s) and provide agent biosafety level using classifications as listed in "Biosafety in Microbiological and Biomedical Laboratories", US Department of Health and Human Services, 4th edition.

Is the sample negative for Mycoplasma? YES NO I don't know

ALL samples will be tested upon receipt. *Waisman Gene Editing Service will not process any samples that test positive for mycoplasma.*

Are there any intellectual property considerations or MTAs associated with the cells? (e.g. fluorescent proteins, other genetic modifications)

YES NO

If YES, please specific and provide MTA documentation

5-Human Pluripotent Stem Cell Responsibilities

By signing this form, you confirm that the human induced pluripotent stem cells **will not** be used for the following:

- Research in which human induced pluripotent stem cells are introduced into nonhuman primate blastocysts.
- Research involving the breeding of animals where the introduction of human induced pluripotent stem cells may contribute to the germ line.

6- Grant Acknowledgement

Please acknowledge the Waisman Center P30 Core grant and the UW2020 grant in any publications that result from projects performed by the Waisman Center Gene Editing service.

"This study was supported in part by a core grant to the Waisman Center from the National Institute of Child Health and Human Development (U54 HD090256) and by a UW2020 Grant awarded to Anita Bhattacharyya and Su-Chun Zhang by the University of Wisconsin and the Wisconsin Alumni Research Foundation."

INVESTIGATOR ACKNOWLEDGEMENT OF RESPONSIBILITY

Due to the experimental nature of the materials provided to the Waisman Center by the researchers, delays in performing the reprogramming services or the inability to complete the services, which are not unreasonable under comparable industry standards, shall not be the cause of any claim against the Waisman Center.

I certify that the information provided herein is correct. I ensure that my researchers are aware of and will conform to the policies listed above.

Signature (Principal Investigator)

Date