University of Texas at San Antonio

Institutional Biosafety Committee – Appendix A CRISPR / Cas9 Studies

This Appendix should be included with your IBC protocol and submitted by email as a MS Word Document to [ibc@utsa.edu](mailto:ibc@utsa.edu). Further information can be found on the [IBC webpage](http://research.utsa.edu/research-funding/institutional-biosafety-committee-ibcnew/) or by contacting the IBC office at 210-458-8515.

|  |  |
| --- | --- |
| Principal Investigator |  |
| IBC Protocol Number |  |

Please answer the following questions:

1. Which organism(s) do you plan to modify?

|  |
| --- |
|  |

1. Is the work in cell culture?

|  |  |
| --- | --- |
|  | YES (List the cell lines below) |
|  | NO |
|  | |

1. Is the work in a whole organism?

|  |  |
| --- | --- |
|  | YES (List the species below) |
|  | NO |
|  | |

1. What is the function of the gene(s) being modified?

|  |
| --- |
|  |

1. What will be the function of the gene(s) after modification?

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| --- |
|  |

1. Will the gene editing technology be used for human gene transfer research?

|  |  |
| --- | --- |
|  | YES |
|  | NO |

1. Are the guide RNA gene and the Cas 9 gene physically linked on the same DNA

|  |  |
| --- | --- |
|  | YES\* |
|  | NO |
| If YES, please describe | |
|  | |

1. Is the guide sequence specific to animals or humans or could it affect both?

|  |  |
| --- | --- |
|  | Animals |
|  | Humans |
|  | Both\* |
| \*If BOTH, describe any similarity between human and animal guide sequences | |
|  | |

1. How is the gene editing technology being delivered? (Check all that apply)

|  |  |
| --- | --- |
|  | Plasmid |
|  | Nanoparticle |
|  | Lentivirus |
|  | Adeno-associated virus |
|  | Other\* please give details below |
|  | |

1. For CRISPR research involving viral vectors, a Genome Target Scan (GT-Scan) for off target effects by your gRNA must be completed. This is necessary to determine if there is homology to human DNA and for assessing the risk of potential exposure in the event of an unanticipated incident. An off-target database is available at <http://www.rgenome.net/cas-offinder/>.

|  |  |
| --- | --- |
|  | Not Applicable (no viral vectors will be used) |
|  | Viral Vectors will be used (Discuss the homology below) |
|  | |

1. Will the genome editing technology target embryos or germ cell lines?

|  |  |
| --- | --- |
|  | YES |
|  | NO |

1. Will the research involve the creation of a gene drive experiment (i.e., a system that greatly increases the probability that a trait will be passed on to offspring?

|  |  |
| --- | --- |
|  | YES |
|  | NO |

# SAFETY CONSIDERATIONS

1. Are any special safety considerations required to perform this study?

|  |  |
| --- | --- |
|  | YES\* |
|  | NO |
| \*If YES provide details below. | |
|  | |

1. What should be done in the event of an accidental exposure (e.g. needlestick)

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| --- |
|  |