



SUBCONTRACT EXECUTIVE SUMMARY

Inducible SMN Mouse Model¹

Children's Research Institute

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Children's Research Institute will furnish the SMA Project with a tamoxifen-inducible SMN transgenic mouse that allows for temporally-controlled SMN expression. The tamoxifen-inducible mice can be used to determine the therapeutic window for SMN replacement in available SMA mouse models by crossing the available models to the inducible transgenic mice.

The objectives of this project are to:

- 1) Create a tamoxifen-inducible SMN mouse model. This will involve the following sub-tasks:
 - Obtain transgenic vector
 - Verify probe and blotting strategy
 - Prove integration at single site
 - Prove expression of *geo* reporter
 - Demonstrate chimerism
 - Authenticate germline transmission
 - Substantiate homozygosity of SMN transgene
- 2) Ascertain CRE activity in inducible mice (optional task)

The mice generated in this project will serve as necessary reagents for the future analysis of potential SMA therapies. Additionally, the mice can be used to further unravel the molecular events and processes regulated by the SMN genes.

¹ A proposal to support this subcontract was submitted to the SMA Project's RFP JL-32903-001, "An Inducible Mouse Model of Spinal Muscular Atrophy." SAIC provides management support for The SMA Project to the NINDS through contract N01-NS-3-2356.