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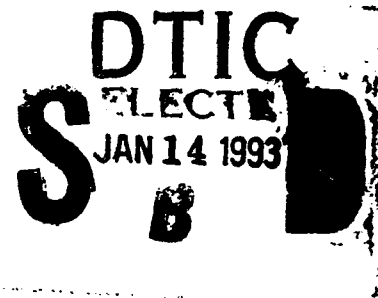


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MIPR NO. 92MM2505

**TITLE: RIGID SKELETAL FIXATION OF THE IMMATURE  
CRANIOFACIAL SKELETON**



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| 13. ABSTRACT (Maximum 200 words)<br>This project is presently in progress. Two cynomolgus macques (Macacca fascicularis) have undergone craniotomy and rigid fixation of the frontal bone and supraorbital bar of the skull. Ten more non-human primates have been in quarantine and will be released for surgery in Oct 92. The remainder of the non-human primates will be arriving intermittently and undergo quarantine prior to surgery. The initial two non-human primates underwent general anesthesia and surgery and presently are doing very well, gaining weight, and maturing appropriately. |                                                             |                                                            |                                         |                                                                         |  |
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 30SEP92  
Principal Investigator's Signature Date

The purpose of this study is to evaluate the effects of rigid skeletal fixation on skull growth and bone repair in both osteotomized and non-osteotomized immature non-human primate species' (Macacca fascicularis) calvaria.

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The study has only just been started - two cynomolgus macques have undergone surgery. Thirty-four (34) more non-human primates have yet to undergo surgery, some of which will be observed for at least one year. The hypothesis is that the use of rigid skeletal fixation does not impede the subsequent growth in the maturing NHPS' calvaria. Furthermore, if growth inhibition occurs in the osteotomized animals, which are rigidly fixed, that inhibition will not occur in the animals which undergo fronto-orbital advancement as it is performed in actual patients with craniosynostosis. The two non-human primates which have undergone surgery continue to do well.

No conclusions or results are available at this time.