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NON-TECHNICAL SUMMARY

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Genetically Altered Strains with Validated Breeding and Maintenance of Genetic Techniques Used in Archiving, Rederivation and Creating Genetically Altered Mice

Project Reference: 13/0011 (001)

Project Start Date: 01/01/2013

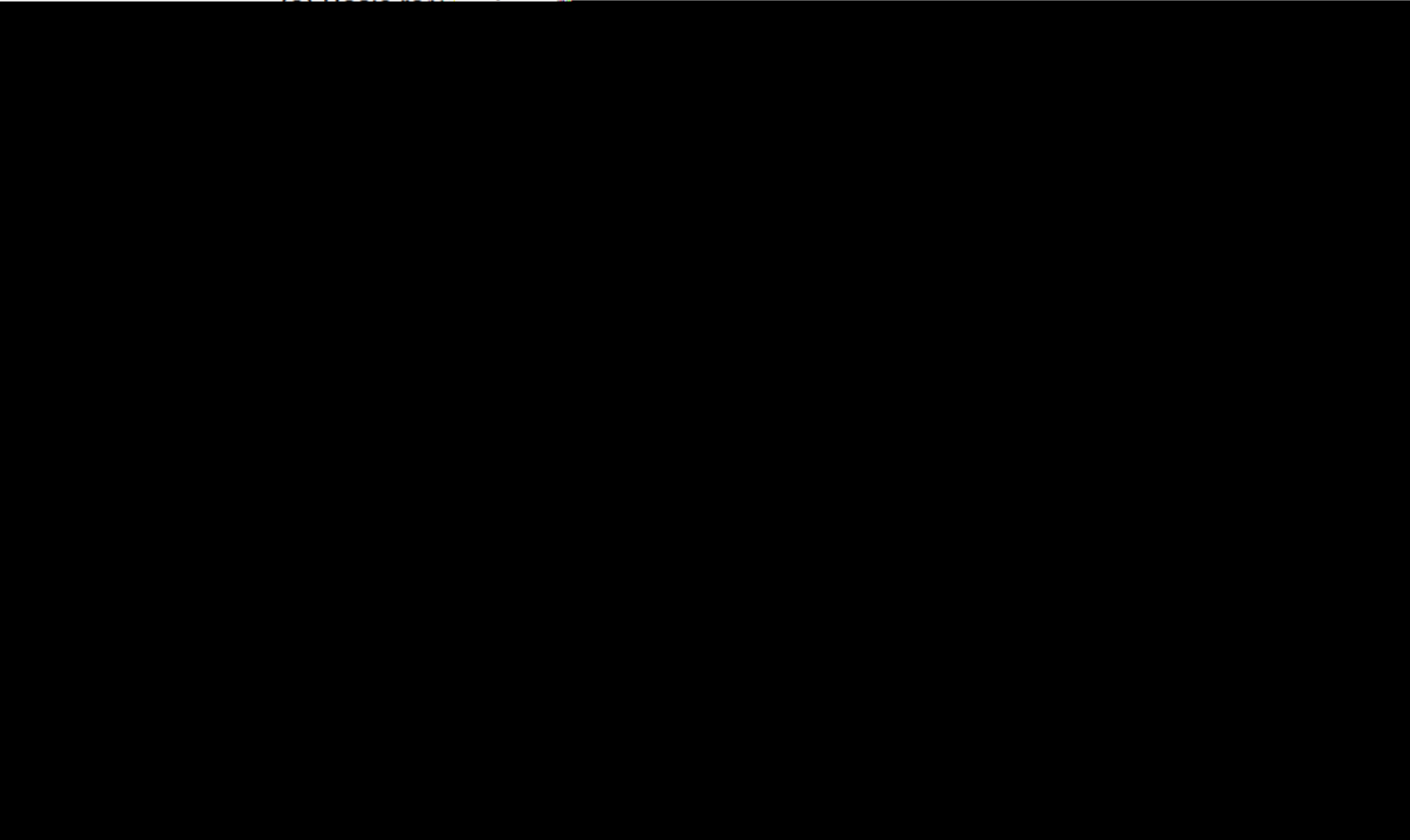
Project End Date: 31/03/2015

3 years 0 months

15 weeks @ month

Project purpose

(1) Background information



7KH 6HFUHWDU\ RI 6WDWH KDV GHWHUPLQHG WKDW D UHWU
UHTXLUHG

2EMHFWLYHV DQG EHQHILWV

'HVFULSWLRQ RI WKH SURMHFWV REMHFWLYHV IRU H[DPSOH
VFLHQWLILF QHHGV LW V DGGUHVVLQJ

:KDW V WKH DLP RI WKLV SURMHFW"

:H VXSSRUW UHVHDUFK LQWR LQFUHDVLQJ WKH KXPdq KHDO
DV D UHVRXUFH IRU DOO RXU UHVHDUFKHUV :H DSSO\ WKH
5HSODFHPHQW WR HQVXUH WKDW WKH VPDOOHVW QXPEHU RI
WR UHDFK UHVHDUFK JRDOV

3RWHQWLDO EHQHILWV OLNHO\ WR GHULYH IURP WKH SURMH
RU KRZ KXPdqV DQLPDOV RU WKH HQYLURQPHQW PLJKW EHC
ZLWKLQ WKH GXUDWLRQ RI WKH SURMHFW RU ORQJ WHUP EH

UHILQHPHQW RU PRUH HIILFLHQW WKDQ RXU FXUUHQW PHWK
,PSURYHPHQWV LQ DQLPDO ZHOIDUH DUH DFKLHYHG E\ EHLQ.
RU HPEU\RV WKHUHE\ DYRLGLQJ VWUHV FDXVHG E\ OLYH DG
7KLV LV RI SRWHQWLDO EHQHILW WR RWKHU UHVHDUFKHUV [IURJHQ VWRFN

3RWHQWLDOO\ DQLPDO ZHOIDUH FRXOG EH LPSURYHG E\ UHI
2WKHU SURMHFWV RU HVWpÀ ¥7\$™—RP2I'€&0 Pp;3HQ VpÀ@Vw `C
RU HPEðHV W•HPHQW™—R Q•RU HPEKHUV JHQ HPHQWHQ •ERUQ•
7RUVà T33Ap` KDQ '€I@•À

=HO SUR @U0 UðHVE0 UKHUQPHQW€ +°QLH@YpHVHEV DQ°PHSp2I™€ À
IEKHUV KDG D`UUSLPOO\ DSQ@0 €ESWUUHFRXOFV FT T`UQT`UW

GD\ V DSDUW \$IWHU WKL V WKH IHPDOHV PD\ EH PDWHG LI IH

:K\ GR \RX QHHG WR XVH DQLPDOV WR DFKLHYH WKH DLP RI \

7KLV LV D VHUYLFH OLFHQFH FRQFHUQHG ZDMXWKRUUEUHMBD
RQO\ EH DFKLHYHG E\ XVLQJ OLYH PLFH

:KLFK QRQ DQLPDO DOWHUQDWLYHV GLG \RX FRQVLGHU IRU :

:KHUHYHU SRVVLEOH QRQ UHJXODWHG RUJDQLVPV FHOO WL
DV SRVVLEOH DERXW PROHFXODU DQG FHOOXODU PHFKDQLVI

:K\ ZHUH WKH\ QRW VXLWDEOH"

7KH ,QVWLWXWH V UHVHDFK UHOLHV LQ SDUW RQ FXVWRPL
FUHDWH EUHHG DQG VXSSO\ WKHP

5HGXFWRQ

([SODLQ KRZ WKH QXPEHUV RI DQLPDOV IRU WKLW SURMHFW
EHHQ WDNHQ WR UHGXFH DQLPDO QXPEHUV DQG SULQFLSOH
SUDFWLFHV WKDW DUH XVHG WKURXJKRXW WKH SURMHFW WF
REMHWLYHV LI DQ\ 7KHVH PD\ LQFOXGH H J SLORW VWXGI
DQG UHXVH

+RZ KDYH \RX HVWLPDWHG WKH QXPEHUV RI DQLPDOV \RX ZL

7KH HVWLPDWH IRU WKH QXPEHU RI DQLPDOV XVHG IRU EUHF
PLFH KDV FRPH IURP GDWD H[WUDFWHG IURP WKH ORXVH &R
SHUIRUPDQFH RI WKH FRORQLHV ZH PDLQWDLQ , XVHG GDWD
SHUIRUPDQXQ LHUPLFHG KH HVWLPDURU WKH QXPEHU C, fHG

7KH QXPEHU H QHÈG H[FG R KÈ KHC, ÷K@H KHV op0À°`0 `€
H~ FWLKV öLHV WRUWXW ULXW LWD H[DWR QöPLFQJ DRKH v`

:KDW PHDVXUHV DSDUW IURP JRRG H[SHULPHQWDO GHVLJQ
DQLPDOV \RX SODQ WR XVH LQ \RXU SURMHFW"

6XSHU RYXODWLRQV DUH SODQQHG VR WKDW ZH XVH IHPDOH
QXPEHU RI KLJK TXDOLW\ RRF\WHV IURP WKH VPDOOHVW QXF

:KHQ VHOHFWLQJ VWXGV PDOHV DUH SLFNHG EHWZHHQ DQ
SURGXFWLRQ 7R DYRLG ZDVWLQJ VXSHU RYXODWHG IHPDOH'
VWXGV DUH WHVWHG IRU IHUWLQW\ EHIRUHKDQG

1XPEHUV RI HPEU\RV LPSODQWHG SHU UHFLSLHQW IHPDOH D
HU XGPPSORU I`SHU DOEWXGH L •"@ •0° @đđ€`p0 € P€P0 • @ đđ

DQLPDC DW

6RPH RI RXU PLFH DUH LPPXQRGHILFLHQW WKH\ DUH NHSW I
EHLQJ H[SRVHG WR GLVHDTVH FDXVLQJ RUJDQLVPV LV ORZ VI
IXQFWLRQLQJ LPPXQH V\WVHP WKLV GRHV QRW FDXVH WKHP
VWUDLQV JHQHWLF PRGLILFDWLRQ PD\ DGYHUVHO\ DIIHFW D
VWUDLQV DXWKRULVHG IRU WKLV OLFHQFH ZLOO EH QR PRUF
DSSURSULDWH WUHDWPHQW XQGHU WKH JXLGDQFH RI WKH 1
WKH DQLPDO ZLOO EH XVHG WR DPHOLRUDWH WKHVH HIIHFW

:K\ FDQ W \RX XVH DQLPDOV WKDW DUH OHVV VHQWLHQW"

:H EUHHG LPPXQRGHILFLHQW PLFH DV D VHUYLFH WR RWKHU
V\WVHPV ZLWKRXW OLYH DQLPDOV

:H UHSODFH WKH XVH RI DQLPDOV ZLWK FXOWXUHG HPEU\RV
EUHHG PLFH ZLWK JHQHWLF PRGLILFDWLRQV \$OWKRXJK LW I

V



:H JHW UHJXODU XSGDWHV IURP 1& 5V RQ DGYDQFHV LQ UHG
SURGXFHV D PRQWKO\ QHZVOHWWHU DQG DGYLVHV RQ KRZ W

