% / D 6 7

0 < D Y I   ] N   ] [j I [j h

([SHFWDWLRQV RI %/D67 5$03V

*HQHUDO 'XWLHV

/HDG 5$03

67(0 &RRUGLQDWRU

3URIHVVLRQDO 'HYHORSPHQW DQG 7UDLQLQJ

5HSRUWLQJ

2XWUHDFK

:HHNO\ 0HHWLQJV

6WDII DQG 6WXGHQW 6XSSRUW

%/D67 6FKRODUV

6FKRODU 6HOHFWLRQ 3URFHVV

New $SSOLFDWLRQV

Renewal $SSOLFDWLRQV

5$03 DQG 6FKRODU ([SHFWDWLRQV

'HYHORSLQJ DQ ,QGLYLGXDO 'HYHORSPHQW 3ODQ ,'3

5$03 DQG 6FKRODU 0HHWLQJV

6FKRODU 3DWKZD\V WR 5HVHDUFK

%06&   ,QWURGXFWLRQ WR %LRPHGLFDO 5HVHDUFK

6XJJHVWHG 0HHWLQJ 7RSLFV

%06&   (QWHULQJ 5HVHDUFK

6XJJHVWHG 0HHWLQJ 7RSLFV

%06&   5HVHDUFK 3URMHFW)RXQGDWLRQV

%06&   %LRPHGLFDO 5HVHDUFK 6NLOOV

6FKRODU 7UDLQLQJ 5HIHUHQFH &KDUW

*UDGXDWH 0HQWRULQJ 5HVHDUFK $VVLVWDQWVKLS *05$

8QGHUJUDGXDWH 5HVHDUFK ([SHULHQFH 85(

)DFXOW\ DQG &XUULFXOXP 3URMHFWV

%/D67 3URJUDP 5HVRXUFHV

%/D67 3URJUDP ([HFXWLYH 6XPPDU\

2UJDQL]DWLRQDO &KDUW 'HWDLOHG

$FWLYLWLHV E\ &RUHV

% U D Q G L Q J   D Q G   & R U U H V S R Q G H Q F H

7 U D Y H O   5 H T X H V W   3 U R F H V V

% / D 6 7   , ' 3   7 H P S O D W H

([SHFWDWLRQV RI %/D67 5$03V

5HVHDUFK $GYLVLQJ DQG 0HQWRULQJ 3URIHVVLRQ

7KH 5$03 SRVLWLRQ LV G\QDPLF DQG HQFRPSDVVHV D ZLGH YDU
XQGHUJUDGXDWH VWXGHQWV DQG PHHW ZLWK WKHP UHJXODUO\ WK
DGYLVLQJ DQG VXSSRUW 5$03V KHOS XQGHUJUDGXDWH VWXGHQWV
UHVHDUFK SURMHFWV $GGLWLRQDOO\ 5$03V SDUWLFLSDWH DQG G
DQG FROODERUDWH ZLWK SDUWQHU FDPSXVHV DQG RUJDQL]DWLRQV
RI WKH %/D67 FRPPXQLW\ DQG RIIHU VXSSRUW DQG DVVLVWDQFH WR

5$03V DUH H[SHFWHG WR OHDG E\ H[DPSOH EH D WHDP SOD\HU
VXJJHVWLRQV IRU LPSURYHPHQW DQG HQFRXUDJH LQQRYDWLYH SUR
H[SHFWDWLRQV

*HQHUDO 'XWLHV

” 'HYHORS DQ XQGHUVWDQGLQJ RI WKH %/D67 DQG 1,+ %8,/' SUR
  REMHFWLYHV
” 6XSSRUW SURJUDP 6FKRODUV *UDGXDWH 0HQWRULQJ 5HVHDUF
  8QGHUJUDGXDWH 5HVHDUFK ([SHULHQFH 85(DZDUGHHV DQG
” :RUN FROODERUDWLYHO\ ZLWK VWDII IHOORZ 5$03V SURJUDP
  GLVFXVV JRDOV SURMHFWV SURJUHVV DQG FKDOOHQJHV
” 6HHN DVVLVWDQFH DQG VXSSRUW ZKHQ QHHGHG
” $FFHSW UHVSRQVLELOLWLHV DQG FRQVWUXFWLYH IHHGEDFN
” $VVLVW XQGHUJUDGXDWHV ZLWK %/D67 IXQGLQJ DSSOLFDWLRQ
” &RPSOHWH DOO VXUYH\V
” 5HYLHZ DQG HYDOXDWH DSSOLFDWLRQV IRU %/D67 IXQGLQJ
  05$ JDWKHULQJV DQG 1,+ VWDII
” &RQWULEXWJP
” 6HUYH DV LQVWUXFWRU OHDG IRU SURJUDP FRXUVHV VXPPHU
” &RRUGLQDWH DTð€p€ `QJHFLSDWH LQ GHYHORSPHQW RU@GHYHOR

67(0 &RRUGLQDWRU

- 0RQLWRU SDUWLFLSDQWV¶ DFDGHPLF SURJUHVV PHHW UHJXOD
- ,GHQWLI\ FRQWDFW DQG HVWDEOLVK SODQ RI DFWLRQ IRU VW
- $VVLVW DQG GHYHORS RXWUHDFK DFWLYLWLHV
- $WWHQG ZHHNO\ PHHWLQJV SURYLGH XSGDWHV RQ FXUUHQW S
  SURJUDP GHYHORSPHQW
- 'HYHORS ZD\V WR FROODERUDWH ZLWK RWKHU RUJDQL]DWLRQV
  RSSRUWXQLWLHV
- $VVLVW VWXGHQWV ZLWK SUHSDUDWLRQ RI DSSOLFDWLRQV DQ
- 3DUWLFLSDWH LQ PHQWRULQJ WUDLQLQJ FXOWXUDO DZDUHQH
  UHTXLUHG
- $VVLVW VWXGHQWV ZLWK GHFLGLQJ RQ D PDMRU FRXUVH VFK
  ILQDQFLDO DLG HPSOR\PHQW VRFLDO VXSSRUW DQG UHOHYDO
- 8VH WHVV VFRUHV DFDGHPLF UHFRUG DQG SURIHVVLRQDO MX
  DQG VHPHVWHU ORDG
- ([SODLQ XQLYHUVLW\ SROLFLHV GHJUHH DXGLWV DQG FUHDWL
  JUDGXDWLRQ
- 0RQLWRU SURJUDP SDUWLFLSDQWV DFDGHPLF SURJUHVV PDL
  UHFRUGV RI DGYLVLQJ VHVVLRQV
- $GYRFDWH IRU VWXGHQWV RQ DFDGHPLF LVVXHV LQFOXGLQJ E
  ILQDQFLDO DLG DFDGHPLF SUREDWLRQ DQG DFDGHPLF GLVTXD
- 5HIHU VWXGHQWV WR DSSURSULDWH OHJDO DQG VRFLDO UHVR
- ,GHQWLI\ WKH QHHG IRU LPSURYHG RU DGGLWLRQDO VHUYLFHV
- :RUN FORVHO\ ZLWK 5$03V DQG %/D67 VWXGHQWV WR SURYLGH

3URIHVVLRQDO 'HYHORSPHQW DQG 7UDLOO

%/D67 SURYLGHV PDQ\ RSSRUWXQLWLHV DQG VXSSRUW WR GH
5$03V VKRXOG DWWHQG FRQIHUHQFHV DQG RU RWKHU SURIHVVLRQD
HIIHFWLYHQHVV LQ WKH SURJUDP 5$03V DUH H[SHFWHG WR SDUWLF
ZRUNVKRSV DQG RWKHU SURIHVVLRQDO WUDLQLQJV DV UHTXHVWH

5$03V VKRXOG LGHQWLI\ DQG GLVFXVV SURIHVVLRQDO GHYHO
DQQXDO SHUIRUPDQFH HYDOXDWLRQ DQG SXUVXH WKRVH WUDLQLQJ

2XWUHDFK

7KH %/D67 3URJUDP IRFXVHV RQ HVWDEOLVKLQJ FROODERUDWL
&DPSXV FRPPXQLW\ )DFLOLWDWLQJ DQG GHYHORSLQJ WKHVH UHDO
WR VWHS RXWVLGH RI \RXU FRPIRUW]RQH :H VWULYH WR GHYHORS
RSSRUWXQLWLHV WKDW EHQHILW VWXGHQWV DQG WKHLU FRPPXQLW
WKDW DUH RI LQWHUHVW DQG FDSLWDOL]H RQ LQGLYLGXDO VWUHQ

2XWUHDFK LQFOXGHV QHWZRUNLQJ DGYHUWLVLQJ UHFUXLWLQ
GHSDUWPHQWV IDFXOW\ VWDII DQG VWXGHQW RUJDQL]DWLRQV WR
RSSRUWXQLWLHV)RU DQ\ RXWUHDFK IO\HUV EURFKXUHV RU GHVF
IDFXOW\ HWF RU DQ\ %/D67 HYHQWV WKH %/D67 ORJR WKH 8$) O
&RQVRUWLXP 3URJUDP ORJR PXVW EH SUHVHQW *(see "Branding and Corresponde*
$FNQRZOHGJHPHQWV WKDW LQFOXGH RXU 1,+ IXQGLQJ JUDQW QXPE
DFNQRZOHGJHPHQW PXVW DOVR EH RQ WKH VDPH IO\HU RU DGYHUW

3OHDVH DFFHVV WKH IXOO JXLGHOLQHV DW WKH %/D67 ZHEVLW
&RRUGLQDWRU EHIRUH SXEOLFL]LQJ DQ\ HYHQWV RU UHVHDUFK WR

+RZ WR UHSRUW RXWUHDFK DFWLYLWLHV
$Q\ RXWUHDFK HYHQW PXVWWR EH WHSRUWHG LQ WZR

7KH *"Wufoo BLaST Activities Report"*

7KH *"Blast Outreach/Activities, Training, Collaborations, Presentations, and Products"* HSRUW

:HHNO\ 0HHWLQJV

5'$0/V *"*DUH H[SHFWHG WR DWWHQG DOO ZHHNO\ VWD@

6 W D I I   D Q G   6 W X G H Q W   6 X S S R U W

7KH %/D67 3URJUDP LPSOHPHQWV D JURXS WLHUHG PHQWRULQJ
VWXGHQWV HQVXULQJ D VXFFHVVIXO H[SHULHQFH LQ UHVHDUFK DQ
UHVHDUFK RSSRUWXQLWLHV WR GHYHORS WKHLU VNLOOV DQG HQFF
LQWHUHVWLQJ WR WKHP DQG UHOHYDQW WR WKHLU FRPPXQLWLHV
HQYLURQPHQW WKDW IRVWHUV JURZWK DQG LQGHSHQGHQFH

6XSSRUW IRU *05$V DQG IDFXOW\ PHPEHUV LQFOXGHV DVVLVWL
WR WKH DSSURSULDWH SHUVRQ IRU DQVZHUV KHOSLQJ WKHP QDYL
SURMHFWV 5$03V PDLQWDLQ FRQWDFW DQG SURYLGH VXSSRUW WR
FDPSXVHV DV QHHGHG RQ UHVHDUFK SURMHFWV LQ ZKLFK XQGHUJ
XQGHUJUDGXDWH VWXGHQW VXFFHVV RQ WKHVH SURMHFWV

6XSSRUW IRU 6FKRODUV LQFOXGHV PHHWLQJ UHJXODUO\ ZLWK
JXLGDQFH DQG PD\ LQFOXGH SXUFKDVLQJ VXSSOLHV DQG PHHWLQJ
EHJLQQLQJ RI HDFK VHPHVWHU WR GLVFXVV WKH UHVHDUFK SURMH

%/D67 6FKRODUV

(OLJLELOLW\ DQG ([SHFWDWLRQV RI D %/D67 6FKRODU

")RRG FDQQRW EH SXUFKDVHG)RU D OLVW RI RWKHU XQDOORZD

[KWWS ZZZ XDI HGX ILOHV SURFXUHPHQW 3UR&DUG 3UR&DUG 8O](KWWS)

6 F K R O D U 6 H O H F W L R Q 3 U R F H V V

1 H Z

      ii   Social and emotional needs of the scholar

      iii   Individual goals of the scholar

      iv   Personality

c   Scholars may request to be reassigned to a differ...

Renewal Applications

Primary Screening

a   Renewal application period opens in December and...

b   Office Manager downloads applications from Wufoo a...
    eligible based on requirements (i e GPA full time ...
    to the RAMPs for evaluation

c   RAMPs provide a primary review and score all renew...
    evaluation criteria

      i   Academic Experience

      ii   Research Interests

      iii   Motivation

      iv   Programmatic Fit

d   Scores are aggregated and sent to Director of the...

Secondary Screening

a   Director of the Student Training Core and RAMPs me...
    also an opportunity to identify and discuss actio...
    accepted into the program for an additional year

Awards

a   Renewal award letters are sent via email to sele...
    Office Manager within two weeks

b   Any declined award will open a spot for a new Scho...

c   If an awarded Scholar drops from the BLaST program...
    alternate new Scholar may be chosen to fill that ...

Pairing with RAMPs

a   Returning Scholars will keep with their assigned...
    change is requested or appropriate

5$03 DQG 6FKRODU ([SHFWDWLRQV

5$03V DUH SULPDU\ UHVRXUFHV IRU RXU 6FKRODUV DQG DEOH W
0HHWLQJ ZLWK \RXU 6FKRODUV UHJXODUO\ WR RIIHU JXLGDQFH DQG
HQYLURQPHQW IUHH RI MXGJPHQW DQG EDVHG RQ SXUSRVHIXO FR

6XSSRUW LQFOXGHV EXW QRW OLPLWHG WR

- ” 0HHWLQJ ZLWK D 5$03 DQG 6WXGHQW &RUH 'LUHFWRU DW WKH
  ,'3 ,QGLYLGXDO 'HYHORSPHQW 3ODQ DQG VHPHVWHU JRDOV
- ” &OHDUO\ GHILQLQJ H[SHFWDWLRQV DW LQLWLDO PHHWLQJV
- ” :RUNLQJ ZLWK VWXGHQWV WR FUHDWH D FXVWRP ,'3
- ” 8VLQJ WKHLU ,'3 IRU PHHWLQJ VWUXFWXUHV DQG GLVFXVVLRQV
- ” 0HHWLQJ FRQVLVWHQWO\ ZHHNO\ RU DW PLQLPXP EL ZHHNO\ 5
  VWXGHQW DFFRXQWDELOLW\ DQG HQJDJHPHQW
- ” .HHSLQJ ZULWWHQ DQG HOHFWURQLF UHFRUGV RI DGYLVLQJ VH
  GHWDLOV
- ” (QVXULQJ WKDW 6FKRODUV WDNH UHTXLUHG VDIHW\ WUDLQLQJV
- ” 0RQLWRULQJ VFKRODUV DFDGHPLF SURJUHVV DQG HVWDEOLVK
- ” $VVLVWLQJ LQ ORFDWLQJ UHVHDUFK SURMHFWV UHODWHG WR V
  PHQWRUV *05$V LI QHHGHG HQVXUH WKDW PDWFKHV ZLWK PHQ
- ” 3URYLGLQJ UHVRXUFHV VSHFLILF WR VWXGHQW¶V LQWHUHVW
- ” .HHSLQJ VWXGHQWV LQIRUPHG DERXW UHVHDUFK SUHVHQWDWL
  LQWHUHVWV
- ” 5$03V ZLOO PHHW ZLWK HDFK 6FKRODUV DQG WKHLU DVVLJQHG
  WR GLVFXVV WLPHOLQHV DQG H[SHFWDWLRQV DQG WR HQVXUH
- ” %HLQJ DYDLODEOH DQG UHVSRQVLYH WR WKH QHHGV RI VFKRO

5$03 DQG 6FKRODU 0HHWLQJV

b

   (IIHFWLYH DGYLVLQJ DQG PHQWRULQJ LV WKH FRUQHUVWRQH RI
FRQVLVWHQW SURFHVV ZKLFK LV EXLOW XSRQ WKH EDVLV RI IUHTX
5$03V DQG 6FKRODUV 2XU PLVVLRQ LV WR SURYLGH VHQVLWLYH D
ZUHVWOH ZLWK WKH PDQ\ FKRLFHV RSHQ WR WKHP DQG WR GHYHOR
IRVWHUV WKH GHYHORSPHQW RI WKH ZKROH VWXGHQW ZKR LV D VH
DQG HQFRXUDJHV WKH VXFFHVVIXO FRPSOHWLRQ RI GHJUHH UHTXLU

$GYLVRU 0HQWRUV ZKR SRVVHVV WKH IROORZLQJ FKDUDFWHULVWL

- ” ,QWHUHVWHG LQ DGYLVLQJ
- ” 'HPRQVWUDWHV D FRQFHUQHG DQG FDULQJ DWWLWXGH W
- ” ([KLELWV HIIHFWLYH LQWHUSHUVRQDO DQG FRPPXQLFDW
- ” $YDLODEOH WR 6FKRODUV
- ” +DV IUHTXHQW FRQWDFW ZLWK 6FKRODUV
- ” .QRZOHGJHDEOH RI LQVWLWXWLRQDO UHJXODWLRQV SRO
- ” 0RQLWRUV VWXGHQW SURJUHVV
- ” 8VHV DSSURSULDWH LQIRUPDWLRQ VRXUFHV DQG UHIHUV
- ” (QJDJHV LQ PHDQLQJIXO GHYHORSPHQWDO DGYLVLQJ

&RQGXFWLQJ 0HHWLQJV

1. *Ask about general well being*
   a. *How is school going? Specific Classes – try to uncover any support BLaST could provide such as tutoring.*
   b. *How are things going with your family? FriendsI*

   b. o F t nal and caril dudeble of
   b. o F E hen st rs
      a.
      b.
      b. *sngl ngas s*

a. $ G P L Q   7R-7KHVH DUH 6FKRODU PDLQWHQDQFH LWHPV
YHU\ FORVH WR WKH ZHHN LQGLFDWHG

b.   6XJJHVWHG 7RSLFV UHOHYDQW WR D QHZ 6FKRODU HV
VHFRQG \HDU LQ FROOHJH ZKR PD\ EHQHILW IURP WKH FRQ
PDQGDWRU\ DQG WKH VFKHGXOH LV IOH[LEOH GHSHQGLQJ I
RI WKH VFKRODU

c.   % O 6 &   & R X U V H RXWFRPHV-DVVLJQPHQWV WKDW QHHG DGGL
5$03V WR HQVXUH FRPSOHWLRQ

%06&   ,QWURGXFWLRQ WR %LRPHGLFDO 5

&UHGLWV 2IIHUHG)DOO

<u>&RXUVH 'HVFULSWLRQ</u>   &RXUVH DLPV WR LQWURGXFH VWXGHQWV Z
DERXW GLVFXVV DQG FRQGXFW HWKLFDO ELRPHGLFDO UHVHDUFK
7KH XOWLPDWH REMHFWLYH LV IRU SDUWLFLSDQWV WR GHYHORS VH
TXDOLWDWLYH ELRPHGLFDO UHVHDUFK RSSRUWXQLWLHV HDUO\ RQ

<u>&RXUVH 2EMHFWLYHV</u>

   D 3UHVHQW TXDOLWDWLYH DQG TXDQWLWDWLYH UHVHDUFK PHW

   E ,GHQWLI\ GHVFULEH DQG SHUIRUP GLYHUVH UHVHDUFK PHWK
     DQG DGGUHVV LPSRUWDQW LVVXHV

   F 'HILQH XQGHUVWDQG DQG GHP\VWLI\ WHUPLQRORJ\ XVHG ZK

   G 'LVFXVV KRZ FXOWXUH ZRUOGYLHZV DQG SULRU H[SHULHQFH
     PHWKRGV XVHG LQ UHVHDUFK

   H 'LVFXVV LPSRUWDQW HWKLFDO FRQVLGHUDWLRQV LQYROYHG L

<u>5$03 5HVSRQVL</u>ELOLWLHV

     %06&)   LQWURGXFHV 6FKRODUV WR ELRPHGLFDO UHVHDUFK P
  5&5 7UDLQLQJ DQG FHUWLILFDWLRQ LV EXLOW LQWR WKH FXUULFX
SURSRVDO EDVHG RQ D WHVWDEOH UHVHDUFK VWDWHPHQW DQG EH
    7KH UROH RI WKH 5$03 LQ WKLV FRXUVH LV WR EH VXSSRUWLYH
VWDWHPHQWV DQG WKH SURMHFW SURSRVDO SRVWHU   7KH 5$03 FD
HOHPHQWV LQ GHYHORSLQJ D SURSRVDO EDVHG RQ SULPDU\ OLWHU
pacing guide built into the suggested topics sequence).   7KH 5$03 PXVW EH IDPLOLDU ZLWK
XVH WKDW DV D UHVRXUFH IRU FRQYHUVDWLRQV GXULQJ FKHFN LQ

%06& (QWHULQJ 5HVHDUFK
&UHGLWV 2IIHUHG 6SULQJ)DOO DV QHHGHG

<u>&RXUVH 'HVF</u>ULSWLRQ 7KLV FRXUVH IDFLOLWDWHV PHQWRUHG UHV
HQJDJHG LQ DGYDQFHG UHVHDUFK WRSLFV IURP RXWVLGH WKH XVX
ZLOO EH UHTXLUHG WR DFWLYHO\ SDUWLFLSDWH LQ UHVHDUFK DFW
FRXUVH WKURXJK ZHHNO\ PHHWLQJV DQG RQOLQH WKURXJK %ODFNE
5HVHDUFK 5HSRUW DQG D SRVWHU SUHVHQWDWLRQ EDVHG RQ UHVH

<u>&RXUVH 2EMH</u>FWLYHV
   $ /LQN JHQHUDO FXUULFXOXP LQ WKH) FXUUHQFKHU GHYHURXJK ODERUDWRUV
     LQGHSHQGHQW UHVHDUFK DQG SURMHFWHFEOLVTXHV
     DFWLYLWLHV) /HDUQ WR ZRUN FRRSHUDWLYHO
   % 3URYLGH VWXGHQWV ZLWK RSSRUWXQLWLHV WR HQJDJH
     LQ UHVHDUFK LQ WKH ODERUDWRUL*HVRI 8$)WR WKLQN FULWLFDOO\ D
   &)RVWHU KHDOWK\ PHQWRULQJ FRQQHFWDLRQ FROOHFWOXHRQV RU LQIHUH
     VWXGHQW DQG 8$) UHVHDUFKHUV + *DLQ H[SHULHQFH FRPPXQLFDWL
   ' 'HYHORS DQG DSSO\ VFLHQWLILF PHWKRGRORJ\WRDUJXPHQWV
     H[SHULPHQWDO GHVLJQ

<u>5$03 5HVSRQVL</u>ELOLWLHV
   (QWHULQJ 5HVHDUFK LV VHOI SDFHG (DFK 5$03 ZLWK HQUROO
WKHLU 6FKRODUV 5$03V DUH H[SHFWHG WR PDQDJH DVVLJQPHQWV
   5$03V QHHG WR NHHS D FRQVLVWHQW VFKHGXOH RI ZHHNO\ PHH
7KH V\OODEXV SURYLGHV D VXJJHVWHG WLPHOLQH IRU FRXUVH DVV
SDJH LQ WKLV KDQGERRN 7KH %/D67 0HQWRULQJ +DQGERRN LV WK
ZRUNVKHHWV WR VHOHFW DOLJQ DQG FXOWLYDWH D UHVHDUFK PH
SURYLGHV D VWHS E\ VWHS IUDPHZRUN IRU FRPSOHWLRQ
)RU 6FKRODUV WKLV PD\ EH WKH ILUVW WLPH WKH\ KDYH ZRUN
H[SHULHQFH RU DUH FXUUHQWO\ LQYROYHG LQ D SURMHFW 7KHUH
UHTXLUHG IRU DOO 6FKRODUV IRU H[DPSOH ODE URWDWLRQV DQG
WKH SUHYLRXV VHPHVWHU ZKLOH HVWDEOLVKLQJ D PHQWRUVKLS
%HORZ DUH WKH PDMRU DVVLJQPHQWV WR EH DZDUH RI

   <u>/DE 5RWDWLRQ DQG 9</u>LVLWDWLRQ 5HSRUW ± ,I 6FKRODUV DUH
   HQFRXUDJHV WKHP WR YLVLW D IHZ SRWHQWLDO ODEV SURMHF

%06&   6XJJHVWHG 0HHWLQJ 7RSLFV

0HHWLQ $VVXPH ZHHNO\ PHHWLQJ	'LVFXVVLRQ 7RS	7DVNV
	” ,QWURGXFWLRQ WR W FRXUVH ”)LQGLQJ D 5HVHDUFK ” .HHSLQJ D UHVHDUFK %E	” -RLQW 7DVN 'HYHORS D UHVHDUFK SURMHFWV DQ ” 6WXGHQW 7DVN 'RZQOR PHQWRULQJ KDQGERRN % ” 6WXGHQW 7DVN 5HDG SJ 0HQWRULQJ +DQGERRN ” 5$03 7DVN /RJ +RXUV

	” ([SHFWDWLRQV DQG U +DQGERRN SJV
	 ” 'LVFXVV SRWHQWLDO YLVLW /DE URWDWLR
	 ” 5HYLHZ SUHYLRXV ZHH HQWU\
		” 6WXGHQW 7DVN &HQGXGH7DGVN
		        UHVHDUFK SURMHFW
		          YLVLW /DE URWD

	" ([SHFWDWLRQV RI WKL 5HVHDUFK 5HSRUW % " *DWKHULQJ 5HIHUHQF 1DYLJDWLQJ 'DWDEDV " 5HYLHZ SUHYLRXV ZHI HQWU\	" -RLQW 7DVN 5HYLHZ H 6HPHVWHU 5HVHDUFK 5H GHYHORS WLPHOLQH IRU " -RLQW 7DVN 5HYLHZ V %E " 5$03 7DVN /RJ +RXUV " 6WXGHQW 7DVN *DWKH LQIRUPDWLRQ DERXW \R
	" +RZ WR ZULWH LQWUR VFLHQWLILF SDSHUV " +RZ WR ZULWH D PHW %E " 5HYLHZ SUHYLRXV ZHI HQWU\	" 6WXGHQW 7DVN :ULWH \RXU VHPHVWHU UHSRUV " 6WXGHQW 7DVN :ULWH VHFWLRQ IRU \RXU UHSF " 5$03 7DVN /RJ +RXUV
6FKRODU 0HHWLQJ 7LPH 7%	" &RPPXQLFDWLRQ (WKL 7LSV IRU 5HVROYLQJ	" 5$03 7DVN /RJ +RXUV
	" 5HYLHZ GUDIW RI ,QW 0HWKRGV VHFWLRQ DC " 3URSHUO\ XVLQJ ILJX %E " 5HYLHZ SUHYLRXV ZHI HQWU\	" 6WXGHQW 7DVN 'HYHO WDEOHV UHOHYDQW WR " 6WXGHQW 7DVN &RPSO GUDIW RI LQWURGXFWLF VHFWLRQ
	" 5HYLHZ VHFRQG GUDIV DQG PHWKRGV VHFWL HGLWV " :ULWLQJ FRQFOXVLRQ GLVFXVVLRQV " +RZ WR ZULWH DEVWU " 5HYLHZ SUHYLRXV ZHI HQWU\	" 6WXGHQW 7DVN &RPSO FRQFOXVLRQ UHVXOWV VHFWLRQ RI \RXU UHSR
	" 5HYLHZ GUDIW RI FRQFOXVLRQ GLVFXVV VXJJHVV HGLWV " 5HYLHZ SUHYLRXV ZHI HQWU\	" 6WXGHQW 7DVN *Complete Semester Report.* " 5$03 7DVN /RJ +RXUV
6FKRODU 0HHWLQJ 7LPH 7%	" &RQYHUVDWLRQ DERX UHJLVW *(Blast Scholars Only)* " 'LVFXVV SRWHQWLDO WZR DV D 6FKRODU	" 5$03 7DVN /RJ +RXUV " 6WXGHQW 7DVN 5HDG ؟ 0HQWRULQJ +DQGERRN
	" 5HYLHZ WKH ILUVW GU 5HSRUW DQG VXJJHVV " ([SHFWDWLRQV RI WKI %ODFNERDUG " &RQYHUVDWLRQ DERX UHJLVWUDWLRQ " 5HYLHZSRVWHU GUDIV " 5HYLHZ WKH GUDIW R 5HSRUW " &RQFOXGLQJ D 0HQWR 5HODWLRQVKLS +DQG	" 6WXGHQW 7DVN *Complete s* *of Semester Report* " 6WXGHQW 7DVN *Complete F* *Project Poster* " 5$03 7DVN /RJ +RXUV

	” 5HYLHZ SUHYLRXV WZ HQWU\	
	” 5HYLHZ SRVWHU ILUVW UHYLVH HGLW ” 5HYLHZ VHFRQG GUDI\ 5HSRUW DQG VXJJHVW ” 3UHSDULQJ IRU FORVX SDJH ” 3UDFWLFH GHOLYHU\ SUHVHQWDWLRQ DQG ” 5HYLHZ SUHYLRXV ZH HQWU\	” 6WXGHQW 7DVN *Submit Pr* *Draft* ” 6WXGHQW 7DVN *Complete* *of Project Poster* ” 6WXGHQW 7DVN 'HOLYH SUHVHQWDWLRQ
6FKRODU ' 0HHWLQ 7LPH 7%	” 6WXGHQW SUHVHQWD\	” 6WXGHQW 7DVN *Submit fin* *Report* ” 6WXGHQW 7DVN *Submit fin* *Poster* ” 5$03 7DVN /RJ +RXUV

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&UHGLW 2IIHUHG)DOO

5HVHDUFK 3URMHFW)RXQGDWLRQV VXSSRUWV XQGHUJUDGXDWH PHWKRGRORJLHV XVHG ZKHQ HVWDEOLVKLQJ D VFLHQWLILF UHVHDU SHUVRQDO DFDGHPLF DQG FDUHHU JURZWK 7RSLFV LQFOXGH SHUV PHQWRULQJ UHODWLRQVKLSV SURMHFW PDQDJHPHQW VFLHQWLILF VFLHQFHV *XHVV VSHDNHUV IURP WKH 8$) DQG %/D67 UHVHDUFK FR WKHLU RZQ H[SHULHQFHV DQG EDFNJURXQG ZLWK VWXGHQWV 7RSL DFFRPSDQLHG E\ DFWLYLWLHV WKDW UHLQIRUFH WKH DSSOLFDWLR XQGHUJUDGXDWH VWXGHQW

&RXUVH 2EMHFWLYHV
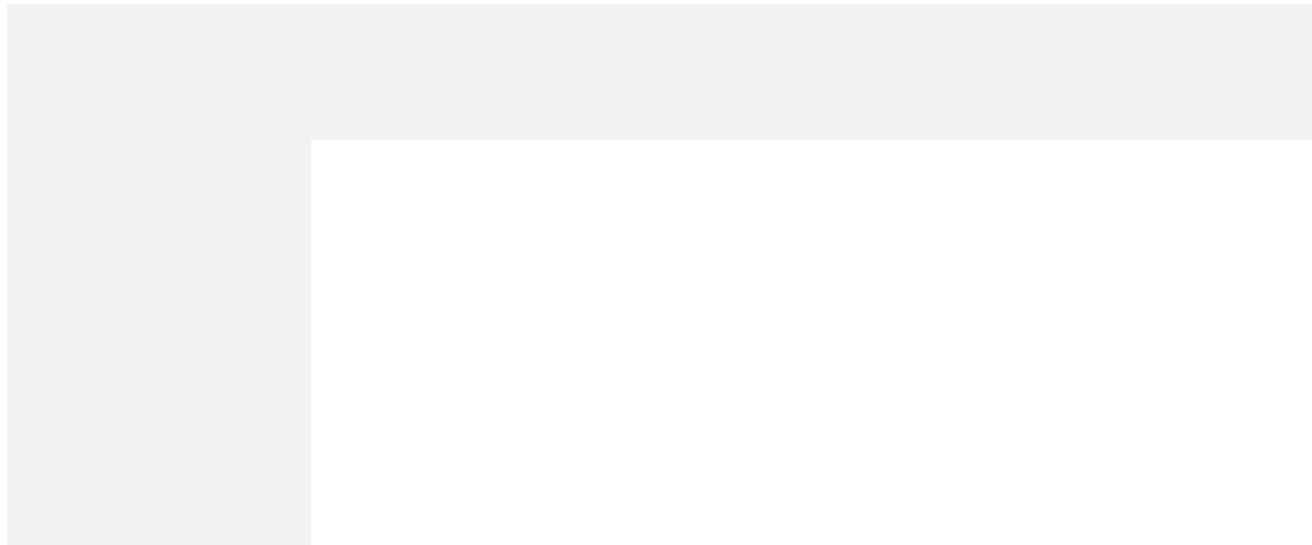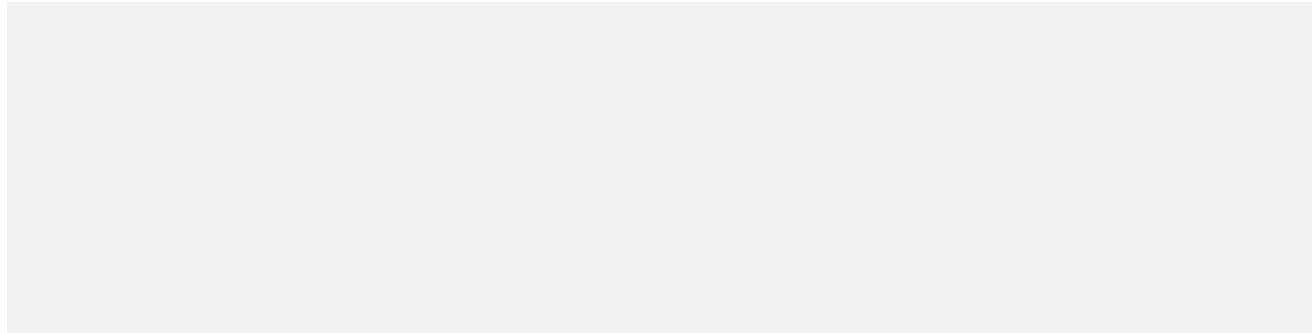
- D)RVWHU SHUVRQDO ZHOO EHLQJ DQG KHDOWK\ PHQWRUL
- E &RQQHFW DFDGHPLF WRSLFV WR DSSOLFDWLRQV LQ UHV
- F (PSKDVL]H VWUDWHJLHV IRU SURMHFW PDQDJHPHQW DQG
- G +LJKOLJKW DFDGHPLF FROOHJH DQG FDUHHU SODQQLQJ
- H 6XSSRUW SURMHFW SURSRVDO FUHDWLRQ DQG VXEPLVVL
- I 3URYLGH DQ RSHQ IRUXP IRU VKDULQJ RI LGHDV

5$03 5HVSRQVLELOLWLHV

%06&   DVVXPHV 6FKRODUV DUH DFWLYHO\ SDUWLFLSDWLQJ LQ H[SORULQJ SURMHFW RSSRUWXQLWLHV   *The RAMPs may utilize the same steps as in draft an agreement and verify the proper safety trainings have been completed.)*

7KH UROH RI WKH 5$03 LV VXSSRUWLYH DQG LV HQFRXUDJHG W PHHWLQJV DQG HQFRXUDJH LQGHSHQGHQW UHVHDUFK 0DQ\ RI WK VFKRODUV WR VKDUH DQG FRPSOHWH ZLWK 5$03 RU PHQWRU DVVLV

Credit Offered Spring

Biomedical Research Skills supports individual stude... skills and techniques commonly used in biomedical resear... research community are invited to present and share the... Topics are presented through discussion and visits to UA... research reinforce the application and best practices i... undergraduate student

Course Objectives

a   Connect academic topics to applications in r...

b   Present skills, techniques and equipment use...

c   Encourage peer mentoring and networking oppor...

d   Provide an open forum for sharing of ideas

RAMP Responsibilities

BMSC   assumptions

A student is actively participating in a project...

Students may be completing research experiences...

to engage in independent research in the future...

The role of the RAMP is supportive and is encouraged...

meetings and encourage independent research

5$03 5HVSRQVLELOLWLHV

    5$03V PXVW HQVXUH FRPSOLDQFH ZLWK WKH WUDLQLQJV DQG G
WUDLQLQJV IRU VFKRODUV LQ WKHLU FKDUJH   ,W LV WKH 5$03¶V U
FHUWLILFDWHV RQ WKH *RRJOH 'ULYH LQ WKH GHVLJQDWHG IROGHU

*UDGXDWH 0HQWRULQJ 5HVHDUFK $VVLVW

:KDW LV D *UDGXDWH 0HQWRULQJ 5HVHDUFK $VVLVWDQWVKLS *05$
” 8$))XOO WLPH JUDGXDWH VWXGHQW   FUHGLWV
”   PRQWK DZDUG
” 1HHG WR PHQWRU DW OHDVW RQH XQGHUJUDGXDWH VWXGHQW
” 5HTXLUHPHQWV ± DWWHQG ZHHNO\ 2QH +HDOWK VHPLQDUV WZ
  E\ %/D67 PDLQWDLQ JRRG DFDGHPLF VWDQGLQJ DQG HYDOXDW
LÀ —WXGHQW € p`0 ð HPLQDUHHG WRORSPHQW WUA…@0P\ÂFep€ `GH
•@`P@À À `ð° UH@``° 0P[H QPK … ? ð   p0
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8QGHUJUDGXDWH 5HVHDUFK ([SHULHQ

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- 8$) 8$6 ,ÇLVD¥YLN VWXGHQWV ZKR DUH IXOO WLPH FUHGL
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  RU VHUYLFHV RQO\
- 0DLQWDLQ JRRG DFDGHPLF VWDQGLQJ
- &RPSOHWH UHTXLUHG ODERUDWRU\ VDIHW\ DQG 5HVSRQVLEOH
- 3DUWLFLSDWH LQ D PHQWRUHG UHVHDUFK SURMHFW
- &RPSOHWH DOO VXUYH\V UHTXHVWHG E\ %/D67 (YDOXRJLF DQ
- $VVXUH WKDW DOO SXEOLFDWLRQV FRPSO\ ZLWK 1,+ JXLGHOLQ
- 3UHVHQW ZRUN DW FRQIHUHQFHV SRVWHU VHVVLRQV RU RWKH
- 3DUWLFLSDWH LQ %/D67 HYHQWV LQFOXGLQJ 2QH +HDOWK VHP
  UHTXHVWHG %H DFWLYH LQ WKH %/D67 FRPPXQLW\

$SSOLFDWLRQ SURFHVV

- 6HPHVWHU SURFHVV ± DSSOLFDWLRQV DUH DFFHSWHG HDFK VH
  IRU IROORZLQJ DFDGHPLF \HDU
- *05$V UHYLHZ 85(DSSOLFDWLRQV
- $ZDUGV DPRXQWV YDU\

0HQWRULQJ UHVRXUFHV

- 0HQWRULQJ KDQGERRN
- 0HQWRULQJ ZRUNVKRSV DQG GLVFXVVLRQ JURXSV

3XUFKDVLQJ

- 0HQWRU QHHGV WR RUGHU RQ EHKDOI RI 85(
- 0HQWRUV FDQ FKHFN RXW D 3URFDUG IURP 7UDYHO DQG 3XUFK
- $OO SXUFKDVHV QHHG WR VXEPLW ZLWK DWWDFKHG UHFHLSWV
  SXUFKDVH
-)RRG FDQQRW EH SXUFKDVHG)RU D OLVW RI RWKHU XQDOORZ
  KWWS ZZZ XDI HGX ILOHV SURFXUHPHQW 3UR&DUG 3UR&DUG 8
- 8QGHUJUDGXDWHV FDQQRW FKHFN RXW 3URFDUGV

)DFXOW\ DQG &XUULFXOXP 3URMHF

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7KH ,QVWLWXWLRQDO 'HYHORSPHQW &RUH

7KH ,QVWLWXWLRQDO 'HYHORSPHQW &RUH IRFXVHV RQ GHOLEH

RSSRUWXQLWLHV LQ ELRPHGLFDO UHVHDUFK ZLWKLQ WKHLU FRPPX
ELRPHGLFDO UHVHDUFK HQWHUSULVH ZLWK UXUDO FRPPXQLWLHV D

6SHFLILF $LP 'HYHORS DQG LPSOHPHQW VXPPHU ELRPHGLFDO UHV
FDPSXV IRU UXUDO VWXGHQWV :H ZLOO GHYHORS RU ZN VXS
UHVHDUFK H[SHULHQFHV DW YDU\LQJ OHYHOV ZLOO DFFRPPRGDWH
ELRPHGLFDO UHVHDUFK HQWHUSULVH

6SHFLILF $LP (VWDEOLVK WKH DFWLYH FRQQHFWHG DQG H[SHUL
LQLWLDWLYH ZLOO LQWHJUDWH KLJK LPSDFW OHDUQLQJ DSSURDFKH
H[HUFLVHV LQ LQWURGXFWRU\ FRXUVHZRUN VFRXUVHHWL]DOOGHDUHDLLUQLQ
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FDUHHUV DQG SURYLGH PRGXODUL]HG RSWLRQV IRU SURJUDP HQW
VFLHQFH DQG 2QH +HDOWK

    $ODVNDQ XQLYHUVLWLHV DQG FROOHJHV DUH XQLTXHO\ SRVLW
WUDLQLQJ E\ LQFUHDVLQJ VXFFHVV RI UXUDO $ODVNDQ VWXGHQWV
RUJDQL]DWLRQV WR LGHQWLI\ EDUULHUV WR VXFFHVV IRU WKHVH V
UHGXFH WKH\VH EDUULHUV

    8QGHUJUDGXDWHV LQ %LRPHGLFDO 6FLHQFHV DQG %/D67 6FKRO
DQG UHFHLYH LQGLYLGXDOL]HG VFXRSUXSVRUHVW WDKQUGRRXFFKR SConnectionsLYH DG
SDUWLFLSDWLQJ LQ IDFXOW\ PHQWRUHG ELRPHGLFDO UHVHDUFK ZL
J E\ LQFUH @ðÀÐ€

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3URIHVVLRQDO &DUHHU 2EMHFWLYH   HJ   VSHFLILF SRVLWLRQ ZL
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1st Choice	
2nd Choice	

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0 B— ^

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`ðHp/3 U 2 WRU[,Rð5ÀW 4 5 7 7p @•‡R €DpQ X V ÎQ' @Ò^

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VXSSRUWLQJ \RXU GHYHORSPHQW LQ YDULRXV VNLOO VHWV (YHQWXDOO\
SOHDVH IHHO IUHH WR DGG DGGLWLRQDO PHQWRUV LI DSSOLFDEOH WR \R
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*RDOV WR EH FRPSOHWHG LQLWLDOO\ E\ WKH VWXGHQW

$V DQ ,'3 LV DQ RYHUDOO SODQ IRU WUDLQLQJ VHWWLQJ JRDOV IRU HDFK

LQ VXFFHVVLYH \HDUV .HHS LQ PLQG WKDW FHUWDLQ JRDOV IRU D FDUHH

VW<HDU *RDOV 6KRUW 7HUP

QG<HDU *RDOV /RQJ 7HUP

3ODQQLWQR EH FRPSOHWHG ZLWK WKH PHQWRU

6WXGHQWV ZLOO ZRUN ZLWK WKHLU PHQWRU V WR FUHDWH JRDOV DQG VS
IRU WKHLU DQWLFLSDWHG FDUHHU 7KLV SODQ VKRXOG EH DVVHVVHG DQG
VHSDUDWH SDJHV PD\ EH DGGHG

7LPH IUDPH FRYHUHG E\ WKLV 3ODQ

2WKHU	$FWLRQ 6WHS	)UHTXHQF\ L H	7DUJHW &RPSOH

0LGWHUP &KHFN
'DWH   BBB 0HW *RDO   BBB ,Q 3URJUHVV   BBB 1HHGV 5HY

2WKHU	$FWLRQ 6WHS	)UHTXHQF\ L H	7DUJHW &RPSOH

0LGWHUP &KHFN
'DWH   BBB 0HW *RDO   BBB ,Q 3URJUHVV   BBB 1HHGV 5HY

2WKHU	$FWLRQ 6WHS	)UHTXHQF\ L H	7DUJHW &RPSOH

0LGWHUP &KHFN
'DWH   BBB 0HW *RDO   BBB ,Q 3URJUHVV   BBB 1HHGV 5HY