



# MUSC4706

A i g]W9bgYa V`Y

HYfa `H\ fYY`##`&\$&\$

7ci fgY`Cj Yfj ]Yk

GhJZZ`7cbhJW`8YhJ`g

7cbj Ybcfg

B Ua Y	9a Uj`	5j Uj`UVj`]m	@cWjhcb	D\cbY
A Ubc`Yh`A cfU	a "a cfU4 i bgk "YXi "Ui	VmUddc]bħa Ybh	F cVYfh K YVghYf`%&(`	\$&`-' , ) *, %%

GW`cc``7cbhJW`bZcfa Uh]cb

GW`cc``cZħY`5frg`UbX`A YX]U

Fcca`" %&ž@Yj Y`` žF cVYfhK YVghYf`6i ]X]b[ `fj %(`

D\cbY.`f\$&Ł`-' , ) `( , ) \*

9a Uj]: [gUa 4 i bgk "YXi "Ui](#)

K YVg]hY: [k.k.k "Ufng"i bgk "YXi "Ui #gUa](#)

H\Y`GW`cc``cZħY`5frg`UbX`A YX]U`k ci `X``\_Y`hc`F YgdYWwz`m5W`bck`YX[ Y`hY`HfUX]h]cbU``7i għcX]Ubgž`hY`6YXY[ U`fP`Ybg]b[ ĩcb`Wĵa di gŁž; UX][ U`fŕ ]mUbX`5fhv`8Yg][ b`7 Ua di gYgŁ`UbX`hY`B [ i bbUk U`dYcd`Y`f5i għfU]Ub`8YZYbVW` : cfW`5WUXYa m]b`7 UbVYffUŁ`cZħY`UbXg`k \YfY`YUWX`Wĵa di g`cZI`BGK`]g`cWJhYX"

7ci fgY'8YHJ]`g

7fYX]h'Dc]bqg`\*`

Gi a a UfmcZ'h\Y'7ci fgY

H\[g:]g'U'dfUW]W'a i g]Wwci fgY'hUhcZYfg'mci`Ub'cddcfh b]mhc'dUfh]WdUhy`]b`hk c'gY`Z'gY`YWYX

## 5ggYgga Ybh

, \$i 'UHYbXUbW`jg`hY`a ]b]a i a `fYei ]fYa YbhZcfYUW`YbgYa V`Y`  
 ?YYd`]b`a ]bX`hUh`f`&Gca Y`YbgYa V`Yg`fYei ]fY`Ui X]hcbg`df]cf`hc`k`YY`\_%`f&EGYj YfU`fYei ]fY`mci `hc`\\Uj`Y  
 Ub`]bghf`i`a`Ybh`hUh`mci` `Wb`d`Um`f`l`E`Gca Y`\\Uj`Y`]a` ]h]hcbg`]b`bi`a`VYf`cZdYcd`Y`k`\\c`Wb`VY  
 UWW`d`hY`X`"8YHJ]YX`]bZcfa`Uhcb`UVci`hYUW`YbgYa`V`Y`]g`]g`hY`X`\\YfY.  
 \\hdg.`#gUa`"Ufng`i`bgk`"YXi`"Ui`#gh`XYbng`#fYgci`fWg#a`i`g]Wg`h`XYbng#a`i`g]WYbgYa`V`Yg`#`C`b`m`Uddfcj`YX  
 YbgYa`V`Yg`c`]bYX`]b`hY`W`ffYbh`hYfa` `Wb`VY`i`gYX`Zc`f`W`i`fgY`UggYgga`Ybh`F`Y`Yj`Ubh]bZcfa`Uhcb`UVci`h  
 YUW`YbgYa`V`Y`]g`i`gi`U`mi`dXU`hY`X`VmC`!K`YY`\_`UbX`gh`XYbng`g`\\ci` `X`W`Y`W`\_`Zc`f`Ubmi`dXU`hY`g`Uh`h`]g`h`ja`Yz  
 UbX`]Z`Z`f`h`Yf`]bZcfa`Uhcb`]g`fYei`]fYX`Z`d`YUgY`W`b`h`U`W`h`h`Y`G`W`cc`c`Z`5`fng`UbX`A`YX]U`C`Z]W`.  
 \\hdg.`#gUa`"Ufng`i`bgk`"YXi`"Ui`#h`b`h`U`W`h`i`g`G`h`XYbng`g`Y`Y`W`]b[` `h`Y`]f`h`c`YbgYa`V`Yg`Zc`f`h`]g`W`i`fgY`Xc`gc`cb  
 h`Y`i`bXYfg`h`bX]b[` `h`Uh`h`Y`m`\\Uj`Y`fYUX`UbX`i`bXYfg`h`c`X`h`]g`]bZcfa`Uhcb`"

## 5ggYgga YbhHUg\_g`

5ggYgga YbhHUg_	K Y][ \\h	8i Y`8UH`	Gh XYbh@YUfb]b[ Ci hW`a Yg`5ggYggYX
9bgYa V`Y`5`7`cbf]Vi`hcb`UbX` DUfh7`\\YW_]b[` `	` \$i	Bch5dd`]WVY	%
9bgYa V`Y`6`7`cbf]Vi`hcb`UbX` DUfh7`\\YW_]b[` `	` \$i	Bch5dd`]WVY	%
A U]b`DYfZcfa`UbW`	&\$i	Bch5dd`]WVY	%&
7ca`dUfU]j`Y`Yj`U`i`Uhcb`	&\$i	6mhY`YbX`cZk`YY`_%\$	`

## 5ggYgga Ybh8YHJ]`g

5ggYgga Ybh%`9bgYa V`Y`5`7`cbf]Vi`hcb`UbX`DUfh7`\\YW\_]b[

GHUfhXUH`. Bch5dd`]WVY

8YHJ]`g.

Gh XYbngfidUfh]M]dU]cb`UbX`W`b`f]Mi`hcb`hc`YbgYa V`Y`fY`YUfgU`g`k`]`VY`UggYggYX`Zcfa`Uh]`Y`m`z`Vm`h`Y`  
 YbgYa V`Y`X]fY`W`c`f`Y`[`i`Uf`ma`cb]h`c`f]b[` `gh`XYbng`]b`fY`\\YUfgU`g`hc`Ybgi`fY`h`Uh`YUfb]b[` `]g`hU\_]b[  
 d`UW`"Gi`a`a`Uh]`Y`UggYgga`Ybh]g`UXa`]b]gh`fYX`h`fci`[` `U`dUfh`W`X`Y`W\_]b[` `h`gh`Uh`h`Y`YbX`c`Z`h`Y`g`Ygg]cb`"

: YXVUW\_`8]fY`W`h`UbX`cb[`c]b[` `ZYXVUW\_`Xi`f]b[` `fY`\\YUfgU`g`UbX`U`Z`Y`f`U`a`U]b`dYfZcfa`UbW`"

## 5XX]h]cbU`XYHJ]`g.

H`Y`dUfh`W`X`Y`W\_]b[` `h`gh`i`gi`U`m`hU`\_Yg`d`UW`]b`h`Y`k`YY`\_`U`Z`Y`f`h`Y`Z]bU`fY`\\YUfgU`#di`V`]WdYfZcfa`UbW`  
 fK`YY`\_%\$`c`f`f`&`"8YHJ]g`cZ`h`Y`dUfh`W`X`Y`W\_]b[` `h`gh`k`]`VY`Ub`b`c`i`b`W`X`"K`\\YfY`dc`gg]V`Y`Z`\_`Y`d`U`W`d`m`c`Z`U`  
 a`i`g]WdUfh`g`V`c`fYg`fY`\\YUfgYX`Xi`f]b[` `h`Y`h`Yfa`UbX`Vf]b[` `h`Ya`hc`h`Y`dUfh`W`X`Y`W\_]b[` `h`gh`"

5ggYgga Ybh&.`9bgYa V`Y`6`7`cbf]Vi`hcb`UbX`DUfh7`\\YW\_]b[



5XX]h]cbU`XYHJ]g.

K f]mYb`Yj U`i Uh]cbg`UfY`gi Va ]mYX`j ]U`h fb]h]b`UbX`]bWl XY`hY`Zc`ck ]b[ .

%` H]hY`dU[ Y. fU]gh XYb]g`Z ``bUa Y`UbX`S`fV]bUa Y`cZYUW`YbgYa V`Yz`UbX`fW]k cF`W]i bh  
&` Ub`]b]fcXi W]cfmdUfU[ fUd`za U]b`hY] hz`UbX`W]bWi g]cb"

: cf`h]dg`cb`k f]h]b[ `UVci ha i g]W]W]bgi `h`hY`< Ufj UfX`k f]h]b[ ` [ i ]XY`Uh  
\h]dg.#k f]h]b[ dfc`YW]Z]g"\Ufj UfX`YXi #]Yg`Ak d#]Yg#U]S&(S[ i ]XYS]cSdf]b]h]dXZ

5XX]h]cbU`]b]g]fi W]cbg`cb`k f]h]b[ `U`W]a dUfU]h] Y`Yj U`i Uh]cb`k ]`VY`dfcj ]XYX"

.

.

Hi fb]h]b`gY]h]b[ . H\]g`Ugg][ ba Ybh]g`gi Va ]mYX`h]fci [ \`Hi fb]h]b`UbX`gh XYb]g`Xc`bchgYY`Hi fb]h]b  
g]a ]Uf]m]fYdc]f]g"

5 hYbXUbW F Yei ]fYa YbHg

Gh XYbHg UfY gHfcb[ mYbWci fU[ YX'hc UhhYbX'U''WUggYg UbX'fYj ]Yk ''YWhi fY'fYWc fX]b[ g"

7 ci fgY'GWXYXi `Y

[J \]Yk WUgg'ha YhUVY](#)

H]a YhUV`Y`

8 UhY		

F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

5g'dfcj ]XYX`VmYbgYa V`Y`X]fYWfcfg"

F YWca a YbXYX`F Ygci fWg

7ci fgY`9j U`i Uh]cb`UbX`8Yj Y`cda Ybh

8]fYWUbX`cb[ c]b[ `ZYXVUW`Xi f]b[ `cb`]bY`gYgg]cbg`UbX`UZf`ZbU`UggYgga Ybhgi Va ]gg]cb"

Gi Va ]gg]cb`cZ5ggYgga YbhiHUg\_g

Hi fb]h]b`Gi Va ]gg]cb

Ʒmci`YbWci bHYf`U`dfcV`Ya`k` \Yb`UH`Ya` dh]b[`hc`gi`Va`]hmc`i`f`Ugg][`ba`Ybhi`h`fci`[`\`Hi`fb]h]b`z`d`Y`Ug`Y`  
HY`Yd`l`cb`Y`9I`HY`fb`U`Gi`ddc`fh`cb`-`,`)`"``"``%`cf`Ya`U]`h`Ya`i`cb`YI`HY`fb`U`HY`hgi`ddc`fh`4`i`bgk`"YXi`"Ui`"Gi`ddc`fh`  
l`ci`fg`UfY`,`.\$\$Ua`-`-%\$.\$\$da`i`cb`k`YY`XUmg`UbX`-`.\$\$Ua`-`).\$\$da`i`cb`k`YY`YbXg`fI`\*)`XUmg`U`mY`UfI`"Ʒmci`  
UfY`i`bUV`Y`hc`gi`Va`]hmc`i`f`Ugg][`ba`Ybhi`Xi`Y`hc`U`Zi`h`k`]h`Hi`fb]h]b`mci`i`a`Um`Udd`m`Zc`f`Ub`YI`HY`bg]cb`z`Vi`hmc`i`  
a`i`gh`fY`h]b]mci`f`h]W`Y`hbi`a`VY`f`Z`ca`9I`HY`fb`U`Gi`ddc`fh`f`U`cb[`k`]h`Ub`mci`h`Y`f`fY`Yj`Ub`h`Xc`W`a`Y`b`hg`L`hc`  
]b`Wi`XY`Ug`Yj`]X`Y`b`W`hc`gi`ddc`fh`mci`f`YI`HY`bg]cb`Udd`]W`h]cb`"Ʒmci`Ya`U]`9I`HY`fb`U`Gi`ddc`fh`mci`k`]`  
Ui`hc`a`U`h]W`m`f`Y`W`j`Y`U`h]W`Y`hbi`a`VY`f`z`Vi`h]Z`mci`HY`Yd`l`cb`Y`mci`k`]`b`Y`Y`X`hc`gd`Y`W`Z]W`m`Ug`\_`Zc`f`cb`Y`"  
Hi`fb]h]b`U`gc`d`fcj`]X`Y`gi`d`X`U`h`g`i`cb`h`Y]f`g`mg`h`Ya`i`gh`U`h`g`i`cb`Hk`]h`Y`f`"

;`Yb`Y`f`U`m`z`Ugg`Y`gga`Yb`hi`U`g`\_`g`a`i`gh`V`Y`gi`Va`]h`Y`X`Y`Y`W`f`cb]W`m`j`]U`Y`]h`Y`f`Hi`fb]h]b`c`f`U`A`cc`X`Y`  
Ugg][`ba`Yb`h`i`h`]b`g`h`U`b`W`g`k` \Y`f`Y`h`l`g`]g`b`ch`d`c`g`g]V`Y`z`]h`k`]`V`Y`g`h`U`h`X`i`cb`mci`f`W`ci`fg`Y`g`A`cc`X`Y`g`]h`k`]h`  
U`h`Y`fb`U`h]`Y`gi`Va`]gg]cb`X`Y`h]g`"

:`cf`]b`Z`c`fa`U`h]cb`cb`l`ck`hc`gi`Va`]h`Ugg][`ba`Yb`hg`i`cb`]b`Y`j`]U`A`cc`X`Y`.\`h`d`g`#`gh`XY`b`h`i`bgk`"YXi`"Ui`#`ck`!  
gi`Va`]h`Ugg][`ba`Yb`h`a`cc`X`Y`"

## 5 WUXYa ]W< cbYgmiUbX`D`U[ ]Uf]ga

D`U[ ]Uf]ga `]g`i`g]b[ `h`Y`k`cfXg`cf`]XYUg`cZc`h`Yfg`UbX`d`fYgYbh]b[ `h`Ya`Ug`mci`f`ck`b``#WUb`hU`\_`Y`a`Ubm`  
Zcfa`gZ`Zca`X`Y`]VYfU`h`V`X`Y`U`h]b[ `h`c`U`W`W`X`Y`b`h`U`m`i`W`c`d`m]b[ `Z`ca`U`g`ci`f`W`k`]h`ci`h`U`W`\_`b`c`k`Y`X[ `Ya`Y`b`h`

I`B`G`K` `[`f`ci`d`g`d`U[ ]Uf]ga `]b`h`c`h`Y`Z`c``c`k`]b[ `W`U`h`Y`[`c`f]Y`g.

7`c`d`m]b[ `.`i`g]b[ `h`Y`g`U`a`Y`c`f`j`Y`f`m`g]a`]U`f`k`c`f`X`g`h`c`h`Y`c`f][`]b`U`h`Y`h`c`f`]X`Y`U`k`]h`ci`h`U`W`\_`b`c`k`Y`X[ ]b[ `h`Y`

- i bXYfghUbx'mci f'f][ \hg'UbX'fYgdcbg]V]h]Yg'Ug'U'gh XYbhUhl BGK
- VY'Uk UfY'cZd'U[ ]Uf]ga ž'Wcdmf][ \hž' BGK 'Gh XYbh7cXY'cZ7cbXi W'Ubx'5W'WdhUV'Y'I gY'cZ I BGK '⇒H'F Ygci f'W'g'Dc`]W'h
- VY'Uk UfY'cZ'Y'ghUbxUfXg'cZVY\Uj ]ci f'YI dY'W'X'cZYj Yfmcby`]b'h'Y'I BGK 'W'a a i b]m
- 'cW'W'h'gYfj ]W'g'UbX' ]bZ'fa U]cb'UVci hl BGK 'UbX'I BGK '@]VfUfm

Gca Y'cZ'Y'gY'UfY'Ug'k ]''VY'ZJa ]]Uf'hc'mci ž'c'h'Yfg'k ]''VY'bYk "'; U]b]b[ 'U'gc`]X'i bXYfghUbx]b[ 'cZU''h'Y fY'U'Y'X'UgdY'W'g'cZ9@-G9'k ]''\Y'd'mci 'a U\_Y'h'Y'a cghcZmci f'gh X]Yg'Uhl BGK ""

[\h'hd.##gi V'Y'W'f'i \]X'Y'g"'\]VfUfm'i bgk "Y'X'i "U'i #' \]g'Y'#J'V'ci h' \]g'Y](#)

