



# MUSC4104

5Xj UbWX`Gh X]Yg`]b`A i g]W< ]ghc fm/ `7 i `hi fy`&

GYa YghYf`Hk c`#`&\$%

GWcc`cZH Y`5ftg`UbX`A YXJU`#`I BGK`..5ftg`UbX`GcWJU`GWYbWg





## 5 WUXYa ]WbZcfa Uhcb`

: cfYggYbhU`ghi XYbh]bZcfa Uhcb`fY`Uh]b[ `hc. `fYei Yghg`Zcf`YI hYbg]cb/fYj ]Yk `cZa Uf\_g/cVW dUh]cbU``YU`h  
UbX`gUZ`m/YI Ua ]bUh]cb`dfcW`Xi fYg/gdYW]U`Wcbg]XYfUh]cb`]b`hY`Yj Ybhcz]`bYgg`cf`a ]gUXj Ybhi fY/  
ghi XYbhYeI ]mUbX`X]gUV]`]m`UbX`ch`Yf`YggYbhU``UWUXYa ]W]bZcfa Uhcbž  
gYY`[\frdg.##k k "Ufrg"i bgk "YXi "Ui #W ffYbh\]ghi XYb\]g#UWUXYa \]W\]bZcfa Uhcb#dfc\]cWc`gl`i \]XY`\]bYg#](#)

7ci fgY'8YHJ]`g

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

Gi a a UfmcZ\Y'7ci fgY

H\Y'UggYgga Ybfg'gi ddcfhi\YgY'ZcWz'UbX'dfcj ]XY'cddcfhi b]mZcf'dYYf' [ i ]XUbWz]b'UXX]hcb'hc' [ i ]XUbW  
UbX'ZYXVUW'Zca' h\Y'Wci fgY'YWh'fYf'H\Y'gYa ]bUf'Zcfa Uh\Ug'VYYb'WcgYb'hc'cdh]a ]gY'ZYI ]V']]micZ  
hYUW.]b[ 'UbX''YUfb]b[ 'dfcW'ggYg''

5ggYgga Ybh

5ggYgga YbhHUg\_g

5ggYgga YbhHUg_			

GhUfhXUHY. 'Bch5dd`]WUV`Y

@Yb[ h. '%ca ]bi h'g'dfYgYbHh]cbz'!%) 'a ]bi h'g`X]gW gg]cb

8YHU]`g. '8fUZhdFYgYbHh]cb" '9UWX`gh XYbhk ]``[ ]j Y`U`gYa ]bUf'dfYgYbHh]cbg`cZU`XfUZhcZh\Y]f'dfc`YVW`'5

UbbchUHYX`V]V`]c[ fUd\m`a a YX]UH` ]b!WUgg`ZYXZc`fk UfX#ZYXVUW`\_cb`h`Y`X]gW ggUbhfj`Wcbf]Vi`hcbž  
Wca a Ybfg`cb`X]gW ggUbhfj`bch`gž[ YbYfU`bch`g`cb`WUgg`fYUX]b[ "D`YUgY`Bch`.`gh`XYbfg`UfY`bch]bj`c`j`YX  
]b`Ugg][`b]b[ `a`Uf\_g"

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

A Ybhf]b[ `cZch`Yf`gh`XYbfg`\Ug`fk`c`Wca`dcbYbfg.`X]fYWicbY`hc`cbY`a`Ybhf]b[ žUbX`dfY!gh`XmicZgci`fWg





# Gi Va ]gg]cb'cZ5ggYgga YbhHUg\_g

Gh XYbng'UFY'YI dYWX'hc'di hH'Y'f'buA Yg'UbX'ghi XYbhbi a VYfg'cb'Yj YfmdU[ Y'cZ'HY]f'Ugg][ ba Ybng"

## Hi fb]hb'Gi Va ]gg]cb

Zmci 'YbWci bHY'U'dfcV'Ya 'k \Yb'UHYa dh]b[ 'hc'gi Va ]hrci f'Ugg][ ba Ybh'fci [ \ 'Hi fb]hbzd'YUgY  
HY'd\cbY'9I HYfbU'Gi ddcf'hc'b-' , ) ' ' ' %cf'Ya U]'HYa 'cb'[YI HYfbU'HY'f'gi ddcf'f4 i bgk "YXi "Ui "](#)Gi ddcf'  
\ci fg'UFY' , .\$Ua '-'%. \$da 'cb'k YY\_XUmg'UbX'-. \$Ua '-') . \$da 'cb'k YY\_YbXg'f'fl \*) 'XUmg'U'mYUf'f'Zmci  
UFY' i bUV'Y'hc'gi Va ]hrci f'Ugg][ ba YbhXi Y'hc'U'ZU' 'hk ]H'Hi fb]hb'rci 'a UmUdd'm'Zcf'Ub'YI HYbg]cb'Z'Vi hrci  
a i ghfY'U]b'rci f'h]W\_Yhbi a VYf'Z'ca '9I HYfbU'Gi ddcf'f'U'cb[ 'k ]H'Ubmc'HY'f'f'Y'Yj Ubh'Xc'W a Ybng'k'hc  
]b'Wi XY'Ug'Yj ]XYb'W'hc'gi ddcf'hrci f'YI HYbg]cb'Udd']W]h'cb"-Zmci 'Ya U]'9I HYfbU'Gi ddcf'hrci 'k ]'  
Ui 'ca U]W]m'f'Y'W]j Y'U'h]W\_Yhbi a VYf'Z'Vi h]Zmci 'HY'd\cb'Y'mci 'k ]'b'Y'X'hc'gd'Y'W]W]m'Ug'\_Zcf'cb'Y"  
Hi fb]hb'U'gc'd'fcj ]XY'gi dXU'Y'g'cb'HY]f'gmg'HYa 'gh'U'h'g'cb'Hk ]HY'f"

; YbYfU'm'Z'UggYgga YbhHUg\_g'a i ghVY'gi Va ]HY'X'Y'Y'W'f'cb]W]m'j ]U'Y]H'Y'f'Hi fb]hb'cf'U'A cc'X'Y  
Ugg][ ba Yb'f' 'b]bg'U'ub'W'g'k \Y'f'Y'h' ]g' ]g'bc'hd'c'gg]V'Y'Z'hk ]'VY'g'f'U'HY'X'cb'mci f'W'ci fg'Y'g'A cc'X'Y'g]HY'k ]H  
U'HY'fb'U]j Y'gi Va ]gg]cb'XY'U]g"

## @UH'5ggYgga YbhDYbU'h]Yg

Gh XYbng'UFY'f'Y'g'd'cbg]V'Y'Zcf'HY'gi Va ]gg]cb'cZUggYgga YbhHUg\_g'Vmi'HY'f'Yei ]f'Y'X'XU'HY'g'UbX'h'a Yg'  
8Yd'Yb'X]b[ 'cZ'HY'YI HY'bh'c'Z'XY'Um]b'HY'gi Va ]gg]cb'cZUb'UggYgga YbhHUg\_g'dUgh'HY'Xi Y'XU'HY'UbX'h'a Yz  
cb'Y'cZ'HY'Z'ck ]b[ 'UH'd'Y'b'U'h]Y'g'k ]'Udd'mi b'Y'gg'gd'Y'W]U'W'cbg]XY'f'U'h'cb'cf'U'V'Ub\_Yh'YI HY'bg]cb'Xi Y'hc'U  
HY'W'b]W]ci HU[ Y' ]g[ f'Ub'HY'X": cf'HY'di f'd'cg'Y'cZ'U'HY'd'Y'b'U'm'W]W'U'h]cb'Z'U'X'Um]g'XY'Ya YX'hc'VY'Y'U'W'X  
&(!\ci f'd'Y'f]c'X'f'c'f'd'U'f'h'HY'f'Y'c'Z'd'U'gh'HY'g'h]di 'UH'X'XY'UX']b'Y'Zcf'gi Va ]gg]cb"

- K cf'\_gi Va ]HY'X'Y'gg'HY'Ub'%'\$'XUmg'U'Z'HY'f'HY'g'h]di 'UH'X'XY'UX']b'Y' ]g'gi V'Y'W'hc'U'XY'Xi W]cb'c'Z  
) i 'cZ'HY'hc'U'Uk U'f'X'U'V'Y'a U'f'\_Z'ca 'HY'a U'f\_'H'U'hk ci 'X'\Uj Y'V'Y'Y'b'U'W'X]Yj YX']Z'bc'h'Zcf'HY  
d'Y'b'U'm'Zcf'Yj Y'f'm'X'U'm'd'U'gh'HY'g'h]di 'UH'X'XY'UX']b'Y'Zcf'gi Va ]gg]cb" H\U'h]g'Z'U'gh'XY'bhk '\c'gi Va ]hg  
Ub'Ugg][ ba Ybhk ]H'U'g'h]di 'UH'X'XY'UX']b'Y'c'Z( . \$da 'cb'%' 'A Um'&\$%' 'Uh( . \$da 'cb'%' 'A Um'&\$%'  
k ]'b'W'f'U'XY'Xi W]cb'c'Z%'\$i "

HUg\_'k ]H'U'bc'b d'Y'f'W'b'U] [ Y'a U'f'\_

Z'HY'f'Ug\_]g'a U'f'\_Y'X'ci hc'Z'&) Z'HY'b'UH'gi Va ]gg]cb'k ]'U'h'f'U'W'hi'U'd'Y'b'U'm'c'Z'U'XY'Xi W]cb'c'Z'&) Z'ca 'HY  
a U'f'\_Uk U'f'Y'X'hc'HY'g'h]XY'bh'Zcf'Yj Y'f'm'&(!\ci f'd'Y'f]c'X'f'c'f'd'U'f'h'HY'f'Y'c'Z'd'U'gh'HY'g'h]di 'UH'X'XY'UX']b'Y"

- K cf\_`gi Va ]hYX`%\$`hc`%-`XUmg`UZhYf`h`Y`gh]di`U`hYX`XYUX`]bY`k`j`VY`UggYggYX`UbX`ZYXVUW`dfcj`]XYX`Vi`hU`a`Uf`\_`cZnYfc`k`j`VY`fYW`fYX`"Z`hY`k`cf`\_`k`ci`X`\\Uj`Y`fYW`]j`YX`U`dUgg`a`Uf`\_`Vi`hZcf`hY`U`hY`bYgg`UbX`hY`k`cf`\_`]g`U`W`a`di`gcfm`W`i`fgY`W`a`dcbYbhfi`fX`Y`fYei`]fYa`YbhZ`U`gh`XYbhk`]`VY`XYYa`YX`hc`\\Uj`Y`a`Yh`h`UhfYei`]fYa`Ybh`
- K cf\_`gi Va ]hYX`&\$`cf`a`cfY`XUmg`UZhYf`h`Y`gh]di`U`hYX`XYUX`]bY`k`j`bchVY`UW`W`d`hYX`Zcf`UggYgga`YbhUbX`k`j`fYW`]j`Y`bc`ZYXVUW`z`a`Uf`\_`cf`[`fUXY`"Z`hY`UggYgga`YbhUg`\_`]g`U`W`a`di`gcfm`W`a`dcbYbhicZ`hY`W`i`fgY`U`gh`XYbhk`]`fYW`]j`Y`Ub`l`bgUhgZUW`c`fm`:`U`]`fl`:`E`[`fUXY`Ug`U`fYgi`hcZ`i`bgUhgZUW`c`fmdYfZcf`a`UbVW`]b`Ub`YggYbh]U`W`a`dcbYbhicZ`hY`W`i`fgY`"

H\]g`]bZcf`a`U`h`cb`]g`U`gc`Uj`U]UV`Y`Uh`

[\`hdg`##k`k`k`"Ufmg`"i`bgk`"YXi`"Ui`#W`ffYb`h`gh`XYbhg`#JWJXYa`\]W\]bZcf`a`U`h`cb`#dfch`W`c`g`\[`i`\]XY`\]bYg`#`](#)

5 WUXYa ]W<c bYghmUbX`D`U[ ]Uf]ga

D`U[ ]Uf]ga `]g`i g]b[ `hY`k cfXg`cf]XYUg`cZchYfg`UbX`dfYgYbh]b[ `hYa `Ug`mci f`ck b" `hWUb`hU`Y`a Ubm  
Zcfa gZ`Zca `XY`]VYfUHY`WXYU]b[ `hc`UWV]XYbhU`mW`dm]b[ `Zca `U`gci fW`k ]h`ci hUW\_bck`YX[ Ya Ybh`

I BGK `[ fci dg`d`U[ ]Uf]ga `]bhc`hY`Zc`ck ]b[ `WUHY[ cf]Yg.

7 cdm]b[ .`i g]b[ `hY`gUa Y`cf`j Yfmg]a ]Uf`k cfXg`hc`hY`cf][ ]bU`hYI hcf`]XYU`k ]h`ci hUW\_bck`YX[ ]b[ `hY`  
gci fW`cf`i g]b[ `ei chU]cb`a Uf\_g`"H\]g`U`gc`Udd`]Yg`hc`]a U[ YgZ`UfhUbX`XYg][ b`dfc`YWgZ`Ug`k Y`Ug  
dfYgYbhU]cbg`k \YfY`gca YcbY`dfYgYbh]g`UbchYf`g`]XYUg`cf`k cfXg`k ]h`ci hW`YX]h`

hUddfcdf]UHY`dUfUd`fUg]b[ .`7`Ub[ ]b[ `U`ZYk`k cfXg`UbX`d`fUgYg`k`Y`a cghmifYU]b]b[ `hY`cf][ ]bU`  
ghfi`W`fY`UbX`#`f`dfc[ fYgg]cb`cZ]XYUg`cZ`hY`cf][ ]bU`Z`UbX`]bZcfa`U]cb`k ]h`ci hUW\_bck`YX[ Ya Ybh`H\]g`U`gc  
Udd`]Yg`]b`dfYgYbhU]cbg`k \YfY`gca YcbY`dUfUd`fUgYg`UbchYf`g`]XYUg`cf`k cfXg`k ]h`ci hW`YX]h`UbX`hc  
d]YW]b[ `hc[ YhYf`ei chYg`UbX`dUfUd`fUgYg`]bhc`U`bYk`k \c`Yz`k ]h`ci hUddfcdf]UHY`fYZYfYbW]b[ "

7 c`i g]cb.`k cf\_]b[ `k ]h`chYfg`Vi hdUgg]b[ `cZ`hY`k cf\_]Ug`U`dYfgcb`g`]bX]j ]Xi`U`k cf\_"`7 c`i g]cb`U`gc

- i bXYfghUbx'mci f'f][ \hg'UbX'fYgdcbg]V] ]hYg'Ug'U'gh XYbhUhl BGK
- VY'Uk UfY'cZd'U[ ]Uf]ga ž'Wc'dmf][ \hž' BGK 'Gh XYbh7cXY'cZ7cbXi W'Ubx'5W'W'dhUV'Y'I gY'cZ I BGK '⇒H'F'Ygci f'W'g'Dc' ]W'h
- VY'Uk UfY'cZ'U'g'U'bx'Uf'X'g'c'Z'V'Y'\Uj ]ci f'Y'I d'Y'W'X'c'Z'Y'j Y'f'm'c'b'Y' ]b'U'Y'I BGK 'W'c'a'a'i'b]m
- 'c'W'U'h'g'Y'f'j ]W'g'U'bx' ]b'Z'c'f'a U'h'c'b'U'V'c'i h'l BGK 'U'bx'I BGK '@]V'f'U'f'm

Gca Y'cZ'U'g'Y'U'f'Y'U'g'k ]''VY'Z'Ja ] ]U'f'U'c'mci ž'c'h'Y'f'g'k ]''VY'b'Y'k " ; U]b]b[ 'U'g'c' ]X'i bXYfghUbx]b[ 'cZU''h'Y' f'Y'U'h'X'U'gd'Y'W'g'c'Z'9@-G'9'k ]''\Y'd'mci 'a U\_Y'h'Y'a c'g'h'c'Z'mci f'g'h' X]Y'g'U'hl BGK "

[f\hd.#gi.V'Y'W'f'i \]X'Y'g' \]V'f'U'f'm'i b'g'k "Y'X'i "U'i #' \]g'Y'U'V'c'i h' \]g'Y'k](#)

7 ci fgY'GWXYXi `Y

[J.Jyk.WUgg.ha.YhUV.Y](#)

H]a YhUV`Y`

8UHr	HmdY	7cbhYbh
K YY_% '&' '>i`m!'&- '>i`m	GYa ]bUf	<p>hfcXi W]cb`UbX`X]gW gg]cb`cZWci fgY"</p> <p>A i g]WUg`gma Vc`. `dfYgYbhU]cbU`dYfZcfa UbVW"</p> <p>F Yei ]fYX`fYUX]b[ . `Hi f]bc`W\UdhYfg`%/`&amp;"</p> <p>: i fhYf`fYUX]b[ . `B Ud]Yf`&amp;\$*\$"</p>
K YY_&.` '\$>i`m!') 5i [i gh	GYa ]bUf	<p>DUfh]W]dUhcfmA i g]WUbX`DfchYghGcb[ .</p> <p>F Yei ]fYX`F YUX]b[ . `Hi f]bc`7\UdhYfg`&amp;/' +`5B 8`Uh`YUghcbY`cZ hY`Zc`ck ]b[ `dUdYfg.</p> <p>B Ud]Yf`&amp;\$%\$</p> <p>Hi a Ug!GYfbUž&gt;UbY`% - &amp;</p>
K YY_`. `*`5i [i gh!`%& 5i [i gh	GYa ]bUf	<p>GUWfYX`A i g]Wg</p> <p>F Yei ]fYX`fYUX]b[</p> <p>7fcc_ž8Uj ]X`&amp;\$-\$-`fcb`mdU[ Yg`%&amp;`UfY`fYei ]fYX`fYUX]b[ E`5B 8`E i fYg\]ž`UbX`Uh`YUghcbY`cZ hY`Zc`ck ]b[ `dUdYfg</p> <p>5bXfYUg`@cYk Yž&gt;`&amp;\$%</p> <p>E i Ubmž8cb`&amp;\$-\$-</p> <p>Hi W_Yfž? UfYb`K YghYfZ]Y`X`&amp;\$-\$-</p>
K YY_(`.%`5i [i gh!`%` 5i [i gh	GYa ]bUf	<p>K UfžX]gd`UW`a YbhžfYWcbW]U]hcb"</p> <p>.</p> <p>8YfU]g`hc`VY`UXj ]gYX</p>
K YY_)`. `&\$`5i [i gh!`&`* 5i [i gh	GYa ]bUf	<p>A UthYfg`cZ[ YbXYf</p> <p>F Yei ]fYX`fYUX]b[</p> <p>A W`Ufmž`Gi gUb`% -`%!`]bfcXi W]cb`5B 8`5`U[ \VUbX!NUXY\ž7`cÇ`&amp;\$%)`UbX`Uh`YUghcbY`cZ`hY`Zc`ck ]b[ `dUdYfg</p> <p>8ci V`YXUmž`J Yfcb]W]`&amp;\$\$,</p>

		? fUa Yfz@Uk fYbW %- - \$ B UfcX]hg_UmUz #bU`&\$\$\$
K YY_*.'&+'5i [ i gh!'& GYdhYa VYf	GYa ]bUf	A UthYfg'cZ]bgh]h h]cbU`]gU]cb F Yei ]fYX`fYUX]b[ HUfi g_]bžF ]WUfX`5B8`F ]WžH]a ch]miUbX`cbY`cZ hY`Zc`ck ]b[ `dUdYfg Dfci hž? Yb`&\$\$, < ]ž>i b]dYf`&\$\$- : c`Ymž7 UhYf]bY`9""&\$%)
K YY_+.'`GYdhYa VYf!`- GYdhYa VYf	GYa ]bUf	8 ]gW gg]cb`cZV]V`]c[ fUd\]Ygž`hd]Wž`a Yh]cXg"
K YY_,'`%\$`GYdhYa VYf! %*`GYdhYa VYf	DfYgYb]h]cb	K YY_g', `!`%&`Gh XYbhdfYgYb]h]cbg"`GWXYXi `Y`h VY`UXj ]gYX"

F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

Hi f]bcžH\ca Ug'&\$\$, `? ge[U Se EaU[S^>[XW FZWBa f[Le aXBScf[U[bSf[a` ž7\]WU[ c. l b] Yfg]hmcZ7 \]WU[ c DfYgg"

F YWca a YbXYX`F Ygci fWg

=k ]`dfcXi W`Ub`i dXUHXY`UbX`bYUHfj Yfg]cb`cZħ ]g`]ghZcf`A ccX`Y. Ug`mci `a UmigYYžhY`j Yfg]cb dfcXi W`X`VmiħY`Ui hca UHXY`gmghYa `]g`a Yggm`



E i Ubmž8cb'&\$\$- '7 Ucbg'jb'7c``]g]cb.<ma bg'UbX'7cbhYa dcfUfm7\fg]h]Ub'A i g]Wž>[fgdYkI &.(ž' &'! ' - "  
E i f8q]žF Y[i XU'6i fW\UfXh-EgX X `V S S`V S [efS`