



MUSC2116

Gci bXžGcWjYmUbX'GY`Z]b`K cfX`A i g]W

GYa YghYf`C bY`#`&\$%

7 ci fgY`Cj Yfj JYk

`GHUZZ`7 cbhUW`i8YHUJ`g`

`7 cbj Ybcfg`

B Ua Y	9a Uj`	5j Uj`UVj`]m	@WUjcb	D\cbY
A Ubc`YH`A cfU	a "a cfU4 i bgk "YXi "Ui	K YXbYgXUmg %%\$\$Ua !%&.\$\$da	F cca `%&(ž F cVYfh K YVghYf 6i]X]b[- ' ,) `(' , -

`@YWi fYfg`

B Ua Y	9a Uj`	5j Uj`UVj`]m	@WUjcb	D\cbY
A Ubc`YH`A cfU	a "a cfU4 i bgk "YXi "Ui	Ug`UVcj`Y	Ug`UVcj`Y	Ug`UVcj`Y

`Hi hcfg`

B Ua Y	9a Uj`	5j Uj`UVj`]m	@WUjcb	D\cbY
>c\b`B Ud]Yf	^bUd]Yf4 i bgk "YXi "Ui	h`V"U"	F cca `%% ž F cVYfh K YVghYf 6i]X]b[- ' ,) `* -)'
6Yb`D\]ddg	V"d\]ddg4 i bgk "YXi "Ui			

GWXcc`7 cbhUW`i`bZcfa Uhjcb

F cca ` ` %&ž`Yj Y`" `F cVYfhK YVghYf`6i]X]b[

D\cbY.`fB&Ł`- ' ,) `(,) *

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

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

H\Y`GWXcc`cZhY`5fng`UbX`A YX]U`k ci`X`_Y`hc`F YgdYWz`m5W`bck`YX[Y`hY`HfUX]hcbU`7 i`ghcX]Ubgž`hY`6YXY[U`fP`Ybg]b[hc b`WUa di`gŁž; UX][U`f7]mUbX`5fhi`8Yg][b`7 Ua di`gYgŁ`UbX`hY`B [i`bbUk U`dYcd`Y`f5i`gfu]Ub`8YZbW` : cfW`5WUXYa`m]b`7 UbVYffUŁcZhY`UbXg`k \YfY`YUW`WUa di`g`cZI`BGK`]g`cWUHX"

5hYbXUbW`F Yei]fYa Ybhg

5`ghi`XYbh]g`YI`dYW`X`hc`UhY`bX`U`WUgg`W`bUW`i`ci`fg`Zc`f`U`ZUW`!`hc`!ZUW`!`fi`&`Ł`cf`V`Yb`XYX`W`i`fg`Y`Ub`X`W`a`d`Y`H`U`U`W`j`]h`Y`g`Zc`f`U`V`Yb`XYX`cf`Z`mcb`]b`Y`W`i`fg`Y"

5`ghi`XYbhk` \c`Uffj`Yg`a`cfY`h`Ub`%`a`]bi`h`g`U`h`a`Um`VY`d`Yb`U`]g`YX`Zc`f`bc`b`!`UhY`b`X`Ub`W`"Z`gi`W`U`d`Yb`U`h`m`]g`]a`dcg`YX`ž`h`Y`gh`XY`bia`i`gh`VY`]b`Zc`fa`YX`j`Yf`V`U`m`Uh`h`Y`Y`b`X`c`Z`W`U`gg`Ub`X`U`X`]g`YX`]b`k`f]h]b[`k`]h]b`&` \ci`fg"

Z`U`gh`XY`bh`YI`d`Yf`]Y`b`W`g`]`b`Y`gg`ž`a`]g`U`X`j`Y`bh`f`Y`c`f`c`h`Y`f`c`W`W`f`f`Y`b`W`h`U`ha`U`_`Y`g`U`V`g`Y`b`W`Z`ca`U`

WUgg#UWj]]mi bUj c]XUV`Yžcf`YI dYWg`hc`VY`UVgYbhZca`U`Zc`fH`Wca`]b[`WUgg#UWj]]mž`h`Ymg`l`ci`X`g`YY`_`d`Y`fa`]gg]cb`Zca` `h`Y`7`ci`fg`Y`5`i`h`c`f]mž`UbX`k` \YfY`Udd`]WUV`Yž`h`Y]f`f`Yei`Yghg`l`ci`X`VY`UW`Wca`dUb]YX`VmiUb`cf][]bU`cf`W`f]Z]YX`Wc`dmcZU`a`YX]WU`W`f]Z]WU`h`c`f`ch`Yf`Zca` `cZUddfcdf]U`h`Y`j`]XYbW`"

5`7`ci`fg`Y`5`i`h`c`f]ma`UmYI`W`gY`U`g`h`XYbhZca` `WUggYg`cf`UWj]]hYg`Zcf`i`d`h`c`bY`a`cb`h`" <ck`Yj`Yfž`h`Ym`a`UmUgg][b`UXX]h]cbU`UbX`#`cf`U`h`f`b`U]h] Y`hUg`_`g`hc`Ybgi`fY`Wca`d`]UbW`"5`7`ci`fg`Y`5`i`h`c`f]miWc`bg]XYf]b[`h`Y`[`f`U`b]h]b[`cZUVgYbW`a`i`gh`VY`g`U]h]gZ]YX`U`g`h`XYbhk`]`g`h`"VY`UV`Y`hc`a`YYh`h`Y`Wc`i`fg`Y`g`"YUfb]b[`ci`h`Wca`Yg`UbX`#`cf]`ci`a`Y`c`Z`YUfb]b["5`g`h`XYbhgYY_]b[`Uddfcj`U`hc`VY`UVgYbhZcf`a`cfY`h`Ub`cbY`a`cb`h`a`i`gh`Udd`m`]b`k`f]h]b[`hc`h`Y`8`Y`Ub`UbX`dfcj`]XY`U`"cf][]bU`cf`W`f]Z]YX`gi`ddcf]h]b[`XcW`a`Yb`h]h]cb`"

: cf`a`cfY`]bZca`U]cb`UVci`h`h`Y`U`h`Y`b`X`Ub`W`dfc`h`Wc`g`]b`h`Y`: UW`hmcZ5`f]g`UbX`GcW]U`G`W`Y`b`W`g. [\`h`d`g`.#`k`k`"U`f`g`"i`b`g`k`"Y`X`i`"U`i`#`W`f`f`Y`b`h`g`h`XY`b`h`g`#`U`W`U`X`Y`a`_`W`\]`b`Z`c`a`U`h\]`c`b`#`d`f`c`h`Wc`g`l`\[`i` \]X`Y`\]`b`Y`g`#`](#)

5`W`U`X`Y`a`]W`b`Z`c`a`U`h]`c`b`

: cf`Y`gg`Y`bh]U`g`h`XYbh]bZca`U]cb`fY`U]h]b[`hc`f`Yei`Y`g`h`g`Zcf`YI`h`b]g]cb`/`f`Y`j`]Yk`c`Za`Uf`_`g`/`c`W`W`d`U`h]`c`b`U`"Y`U`h`

5ggYgga Ybh

Q-YfY'mci 'WUbi'ci h]bY'UbmifY'Yj Ubh]bZcfa Uh]cb'hUhk Ug'bc'h]bWl XYX'j]b'5 A G'Vi ha Umidfcj Y'\Y'dZ'`Zcf
mci f'gh XYbhg": cf'Yl Ua d'Yžmci 'a][\hdfcj]XY'XYfU]g'cb'hY'fYZfYbW]b['gmgfYa ž"]b_g'hc'dfYj]ci g

5ggYgga Ybh&. @ghYb]b['HYgh

GHUfhXUHY. '

@Yb[h\ . '@ghYb]b['HYgh' %/ '&' YUWk ' ' \$'a]bg/YUWk '* 'YI Ua d'Yg'hc]XYbh]ZmUbX'XYgWf]VY"

8YHU]`g. 'H\]g'UggYgga YbhfUg_`Wcbg]ghg'cZfk c'HYghg'cZYei U`k Y][\h]b["'HYghg'k]`VY" '\$'a]bg'YUWk]b Xi fUhc]b"'H\]g']g' h\Y'Z]bU`UggYgga YbhfUg_`HYghdUdYfg'k]`VY'fYh' fbYX'k]h' a Uf_g'UbX`Wca a Ybhg'Ug bYVW'ggUfm'

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

H\]g'UggYgga YbhfUg_`Wcbg]ghg'cZfk c'HYghg'cZYei U`k Y][\h]b["'HYghg'k]`VY" '\$'a]bg'YUWk]b'Xi fUhc]b" HYghdUdYfg'k]`VY'fYh' fbYX'k]h' a Uf_g'UbX`Wca a Ybhg'Ug bYVW'ggUfm'

Gi Va]gg]cb' bchYg.bi ``

Hi fb]hb'gYH]b[. 'H\]g']g'bchU'Hi fb]hb'Ugg][ba Ybh

5ggYgga Ybh' . '8]gW'gg]cb'V`c[

GHUfhXUHY. '

@Yb[h\ . ': ci fV`c[g'YUWk ') \$\$'k cfXg

8YHU]`g. 'Gh XYbhg'k]`VY'fYei]fYX'hc'gi Va]hZci fV`c[g'cZ) \$\$'k cfXg'YUWk'Uhi]a Yg'gdYW]ZYX"Gh XYbhg'k]`VY' []j Yb'ZYXVUW_`cb'V`c[g'UZ]f'h\Ym\Uj Y'VYYb'dcghYX"

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

H\]g'Ugg][ba Ybh]g'gi Va]hYX'h'fci [\ 'Hi fb]hb]bZ'ghi XYbhg'Xc' bchgYY'Hi fb]hb'g]a]Uf]mifYdcfng

Gi Va]gg]cb' bchYg.5``V`c[g'UfY'hc'VY'gi Va]hYX'j]U'Hi fb]hb'Uh%%) - da'cb'h\Y'Xi Y'XUHY""

Hi fb]hb'gYH]b[. 'H\]g'Ugg][ba Ybh]g'gi Va]hYX'h'fci [\ 'Hi fb]hb'UbX'gh XYbhg'Xc' bchgYY'Hi fb]hb'g]a]Uf]mifYdcfng"

Gi Va]gg]cb`cZ5ggYgga YbhHUg_g

Gh XYbng`UFY`YI dYW`X`hc`di h`h`Y`f`b`Ua`Yg`UbX`gh`XYbhbi`a`VYfg`cb`Yj`YfmdU[`Y`c`Z`h`Y`f`Ugg][`ba`Ybng`"

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

z`mci`YbWci`bHY`f`U`dfcV`Ya`k`Yb`U`h`Ya`dh]b[`hc`gi`Va`]hmc`f`Ugg][`ba`Ybh`h`fci`[`h`Hi`fb]h]b`z`d`YUgY`h`Y`d`l`cb`Y`9I`h`fb`U`Gi`ddcfh`cb`-`,`)`''`'`%`cf`Ya`U`h`Ya`cb`[YI`h`fb`U`h`h`gi`ddcfh`i`bgk`"YXi`"Ui`"](#)Gi`ddcfh`l`ci`fg`UFY`,`.\$`\$Ua`-`%`\$`.\$`\$da`cb`k`YY`X`Umg`UbX`-`.\$`\$Ua`-`)\$`.\$`\$da`cb`k`YY`YbXg`f`l`*)`X`Umg`U`m`Y`U`f`l`z`mci`UFY`i`bUV`Y`hc`gi`Va`]hmc`f`Ugg][`ba`Ybh`Xi`Y`hc`U`Z`U`h`k`]h`Hi`fb]h]b`mci`a`Um`U`dd`m`z`f`Ub`YI`h`bg]cb`z`Vi`hmc`a`i`gh`f`Y`h]b`mci`f`h]W`Y`h`bi`a`VY`f`z`ca`9I`h`fb`U`Gi`ddcfh`f`U`cb[`k`]h`Ub`mc`h`Y`f`f`Y`j`Ub`h`X`c`W`a`Y`b`h`g`l`hc`]b`W`i`X`Y`U`g`Y`j`]X`Y`b`W`h`c`gi`ddcfh`mci`f`YI`h`bg]cb`U`dd`]W`h]cb`z`mci`Ya`U`9I`h`fb`U`Gi`ddcfh`mci`k`]`Ui`h`ca`U`h]W`m`f`Y`W`]`Y`U`h]W`Y`h`bi`a`VY`f`z`Vi`h]z`mci`h`Y`d`l`cb`Y`mci`k`]`b`Y`Y`X`h`c`g`d`Y`W`z`W`m`U`g`z`f`cb`Y`"

f`G][b]Z]W]b]h]m]U]Z]Y]W]h]m]i] f]d]Y]f]Z]c]f]a] U]b]W]W]]b]U]g]g]Y]g]g]U]V]`]Y]`]k] c]f]_]Z]V]Y]`]h]U]`]Z]c]f]a] U]`]Y]b]X]!]c]Z]g]Y]a] Y]g]h]f]`]Y]I] U]a]]b]U]h]c]b]Z]U] W]U]g]g]`]h]Y]g]h]Z]U]`]U]V]c]f]U]h]c]f]m]h]Y]g]h]Z]U]`]g]Y]a]]b]U]f]d]f]Y]g]Y]b]h]U]h]c]b]`]c]f]U]b]m]c]h]Y]f]Z]c]f]a] `]c]Z]U]g]g]Y]g]g]a] Y]b]h]

: c]f]Z] f]h]Y]f]X]Y]h]U]`]g]`]b]`]f]Y]`]U]h]c]b]`]h]c]`]G]d]Y]W]U]`]7]c]b]g]X]Y]f]U]h]c]b]`]b]W]i] X]b]b] []`]K] \]Y]b]`]h]c]`]5]d]d]`]m]Z]`]<]c]k]`]h]c]`]5]d]d]`]m]`]U]b]X] `]G]i] d]d]c]f]h]b] []`]8]c]W]a] Y]b]h]U]h]c]b]`]d]`]Y]U]g]Y]`]f]Y]Z]f]`]h]c]`]h]Y]`]G]d]Y]W]U]`]7]c]b]g]X]Y]f]U]h]c]b]`]k] Y]V]g]h]Y]`].`

[\\]h\]c\]g.\]#\]g\]h\] X\]Y\]b\]h\]i\] b\]g\]k\] "Y\]X\]i\] "U\]i\] #\]g\]d\]Y\]W\]U\]`\]!\]W\]c\]b\]g\]X\]Y\]f\]U\]h\]c\]b\]](#)

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

D`U[]Uf]ga `]g`i g]b[`h`Y`k cfXg`cf`]XYUg`cZchYfg`UbX`dfYgYbh]b[`h`Ya `Ug`mci f`ck b" `hWUb`hU`Y`a Ubm
Zcfa gž Zca `XY`]VYfUHy`WXYUh]b[`h`UWV]XYbU`mW`dm]b[`Zca `U`gci fW`k]h`ci hUW_bck `YX[Ya YbH`

I BGK `[fci dg`d`U[]Uf]ga `]b`h`Y`Zc`ck]b[`WUHy[cf]Yg.

7cdm]b[.`i`g]b[`h`Y`gUa Y`cf`j Yfmg]a]Uf`k cfXg`h`h`Y`cf][]bU`hYI hcf`]XYU`k]h`ci hUW_bck `YX[]b[`h`Y
gci fW`cf`i`g]b[`ei`chU]cb`a Uf_g`"H\]g`U`gc`Udd`]Yg`h`ja U[YgžUfhUbX`XYg][b`dfc`YWgžUg`k Y`Ug
dfYgYbU]h]cbg`k \Yfy`gca YcbY`dfYgYbh]g`UbchYf`g`]XYUg`cf`k cfXg`k]h`ci hWYX]hY[cf]Yg.

- VYhYf'a UbU[Y'mci f'h]a Y
 - i bXYfgHUbX'mci f'f][\hg'UbX'fYgdcbg]V']hYg'Ug'U'gh XYbhUhl BGK
 - VY'Uk UfY'cZd'U[]Uf]ga ž'Vc'dmf][\hž' BGK 'Gh XYbh7cXY'cZ7cbXi WñUbX'5WwdfUV'Y'l gY'cZ
I BGK '⇒H'F Ygci fWg'Dc`]Wñ
-

7 ci fgY`GWXYXi `Y

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

H]a`YhUV`Y`

8UhY	HmdY	7cbhYbh
K YY_%`&`*`:` YVfi Ufm!`(` A UfVX	@YWhi fY	-bfciXi W]cb. ghi Xm]b[/` ``]ghYb]b[`hc`k cfX`a i g]W a i g]W` gcW]Ym! A YhcXg``A U]b`a i g]WU`WcbWdrg``C hYf WcbWdrg. W`h fU`fY`Uhj]ga ž`a i`h]W`h fU`]ga ž Wcga cdc`]fub]ga ž]bhYfW`h fU`]ga žgcW]U`Ž bW]cbž gY`ZccX" Hi hc]f]U`fYUX]b[g`k`]``VY`Ubbci bW]X`]b`hY`YWhi fYg"
K YY_`&.`)` `A UfVX`!`%% A UfVX	@YWhi fY	

		<p>5XUa g'6cXca c'UbX'A Ubc'YHY'A cfU""8cW a Ybh]b[Gdc_Yb'UbX'Gi b['HYI hg'cZHY'8U[UUVU'cZK Ygh 5Z]WJ""9a d]f]WJ'A i g]Vt'c[mF Yj]Yk 'J c""&ZBc"" " &\$+\$'fUfh]WY'UbX'a i g]WJ'YI Ua d'Yg'a UmU'gc'VY Zci bX'h'fci [\ 'h'Y'cb]bY'9a d]f]WJ'A i g]Vt'c[m F Yj]Yk 'UfVX]j Y'Uh \hd.# V"cgi."YXi #XgdUVW #UbX`Y#% %&#&., %)</p> <p>H\Y'Zc`ck]b['Ufh]WY'dfcj]XYg'U'a cfY'[YbYfU' fYZfYbWY'UbX'Vt'bhYI hZcf'8U[UUFY'fBcfh'K Ygh ; \UbU'z'a i g]Wk]h]b'K Ygh5Z]WJ"</p> <p>>UW'i Y]bY'7c[XY""8 Y8 Y'fk Ygh5Z]WJ.'Ub]b'fcXi W]cb'f'</p> <p>H\Y'; Uf'UbX'YbW]WcdYX]U'cZk cfX'a i g]W'J c'i a Y %"'dd""((&! (+\$"B Yk 'Mc'f_.; Uf'UbX'Di V"z</p>

HVY'7i VUb'ea` Wca d'YI 'fba` t _ S_ Ta! UbX f[TSfi

	Hi hcf]U`	F Ya VYh_U'Zcfa g/ 'a Yhf]WJ` ghfi Wñ fYg#XcW a YbUfm`
K YY_-'.' \$'5df]'!* 'A Um	@YWñ fy	H\Y'6'UW_5hUbñW('!'6fUn]` '5S` Va_ T`W eS_ TS/ fdb[US{S
	Hi hcf]U`	8]gW gg]cb'cZ6`c[' ("` DfUWñW`k cf_g\cd. i bXYfghUbX]b['UbX'd'Um]b['hY` ea` 'UbX'dg_ TS WUj Y/gUa VU`VUñ WUXU`f\mñ a g"
K YY_`%\$. '+ 'A Um! '% A Um	@YWñ fy	H\Y ; cb['7\]a Yg'cZGci hYUgh5g]U. H\Y`bXcbYg]Ub'[Ua Y`Ub
	Hi hcf]U`	DfUWñW`k cf_g\cd. hY'6U]bYgY'[Ua Y`Ub`gYa Uf dY[i]b[Ub'f]b'K YVgñf'fcca ' ' %"
K YY_`%&. &%A Um! '&+ A Um	@YWñ fy	Gcb[g'cZd'UW`UbX'dck Yf.

%&'f%L"

HYbnYfzA]\XUY`

%- - %'4S↑ WēW_ ge[Už6Yf_Y`Ym'DYf]d'i g'9X]hcbg"

&\$\$\$'9S_ WS` 9a`Y =WkSd FZW3d'aXFi W f[WZž5W fgdk 4S↑ WēW? ge[Už7\]WJ[c.'l b]j Yfg]micZ
7\]WJ[c'DfYgg"

hX][Ybci g'5i ghfU']Ub.

7cfbž5Ufcb

&\$\$' "@UbXžGcb[ž7cbgh]h h]cb. '9l d'c]b['9l dfYgg]cbg'cZ5bWghfU`5[YbWž' hYfW`h fU`8]d'ca UWniUbX
: Ua]m@Y[UWni]b'h\Y'A i g]WcZMc]h i 'M]bX]k]h'A UbXUk i mM bi d] i ""Babg'Sd? ge[Uf'J c""&- žBc""%'dd"
, %!%\$&"

K Ygh5ž]WJ.

A cfUžA Ubc`Yh`UbX`5XUa g'6cXca c"

&\$\$+ 'cW a Ybh]b['Gdc_Yb`UbX`Gi b['HYl hg'cZh\Y'8U[UUVU'cZK Ygh5ž]WJ""7_ b[dUS^? ge[Ua`hYk

.....; YfUfX'6Å\U[i Yžřč!6fUn]Ub'fUX]hcbgřdd"" (\$!'))"

.....C`Uj c`5`Åb`F cXf][i Ynžř i VUřdd"; &&! , (\$"

Dcfh [U`UbX`GdU]b.

A Ubi YžDYřf"% , , "Babg`Sd? ge[Ue aXfZW@a` ž WefWđ I adV`C I žc fX`I b]j Yfg]mDfYgg"řGdU]břdd"
%&%d%&*"řDcfh [U`řdd"%%) !%&%"ři fYfYfřd&*!% ("

F]W`žH]a cĤmž>Ua Yg`DcfhřřUbX`7`f]g'; cYfmYbžřYX"

&\$\$\$.....

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