

# **MUSC1707**

DYfZcfa UbWY @UVcfUhcfm5

HYfa 'C bY''##'&\$&\$

# 7ci fgY<sup>·</sup>Cj Yfj ]Yk

## GHJZZ:7cbHJWh:8YHJ]`g`

7cbj Ybcfg

B Ua Y		

## 5ggYgga Ybh

Q: YfY 'mci 'WUb'ci h]bY'UbmfY`Yj Ubh']bZcfa Uh]cb'h\Uhik Ug'bch']bWl XYX']b'5 → G'Vi ha Umdfcj Y'\Y`dZ ``Zcf mci f'ghi XYbhg": cf'Yl Ua d`Yžmci 'a ][\hdfcj ]XY'XYhU]`g'cb'h\Y'fYZYfYbW]b[ 'gmghYa ž``]b\_g'hc'dfYj ]ci g ghi XYbhYl Ya d`Ufg'cf'h\Y'XYg][ bUhYX'k YY\_`]b'h\Y'Wci fgY'h\Uhmci 'k ]``X]gW gg'h\Y'UggYgga Ybh'Uh`Yb[ h\"

@Yb[h\."%\$"a ]bi hYq

8 YHU]`g. DYfZcfa UbWY#dfYgYbHUh]cbg`k]```VY`WcbXi WhYX`Xi f]b[`k cf\_g\cd`gYgg]cbg`]b`H%`UbX H&"``#oghfi a YbHJ`]ghg`UbX`j cWJ`]ghg`k]```dYfZcfa `cbY`Wca d`YhY`]hYa `]b`YUWX`hYfa žk\]WX`a UmiVY`U a cj Ya YbhcZU```Uf[Yf`k cf\_/Wca dcgYfgžg]a]`Uf`mžk]```dfYgYbhh\Y`dYfZcfa UbWY`cZcbY`]hYa `cfa cj Ya Ybh'``: YYXVUW\_.``k f]hhYb`fYdcfhg

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

H\]g`k]```VY`U`%\$!a]bi hY``YWi fY!fYWjhU``dfYgYbhUhjcbžWcadf]g]b[`DckYfDc]bhcf`df]bhYX`bchYgž'j YfVU` dfYgYbhUhjcb`g]h Uhjb[`h\Y`kcf\_fgŁ'dYfZcfaYX`k]h\]b`]hg`\]ghcf]WU`ž'W\`h fU`ž'aig]WU``cf`UYgh\YhjWwcbhYl hž UbX'h\Y`dYfZcfaUbWY`cZh\Y`kcf\_]hgY`Z'

Gi Va ]gg]cb bchYg.`]j Y dfYgYbhUh]cb

5qqYqqa Ybh ( DfUWh) WU YI Ua ]bUh]cb

GhUfhXUhY. Bch5dd`]WUV`Y

8YHU]`g. :: cf'dYfZcfa UbWY`ghi XYbhgžYl Ua ]bUh]cbg'k ]``VY`i bXYfHU\_Yb`]b'H' "'Ghi XYbhg'k ]``dfYgYbh'U &\$!a ]bi hY`dfc[ fUa a Yž]bWi X]b[ 'U'ghi XmžYhi XY`cf'j cWU`]gY`cZUddfcl ]a UhY`m) !a ]bi hYgfiXi fUh]cbžXYj ]gYX ]b'bY[ ch]Uh]cb'k ]h\ 'h\Y]f'gdYWJU`]ghih hcfgž'hc gi ]hh\Y]f'dYfgcbU``]bhYfYghg'UbX`hfUYWhcf]Yg"'`Ghi XYbhg ]XYbh]Zm]b[ 'Ug'Unn`gdYWJU`]ghg'k ]``'dfYgYbhhYW\b]WU`k cf\_'Zfca 'h\Y`Unn`gm`UVi g'XYj ]gYX`Zcf'h\]g Wti fgY"'H\Y`Yl Ua ]bUh]cb'k ]``'U'gc']bWi XY`U'g\cfhig][ \hfYUX]b[ 'hYghZcf'U``ghi XYbhg"'H\]g'k ]``'VY`h\Y`Z]bU`UggYgga YbhhUg\_'Zcf'dYfZcfa Yfg": cf'Wta dcg]h]cb'ghi XYbhgž'dcfhZc`]cg'k ]``'VY`gi Va ]hhYX`]b'H' "'DcfhZc`]cg a Um]bWi XY`Ubmbi a VYf'cZk cf\_gžVi hh\Y`hchU``Xi fUh]cb'cZk cf\_gʻg\ci `X`VY`%) 'a ]bi hYg"'`GWtfYgʻg\ci `X VY`gi Va ]hhYXž'U`cb[ 'k ]h\ fYWtfX]b[ g`cZU``k cf\_g"''H\]g'k ]``VY`h\Y`Z]bU``UggYgga YbhhUg\_'Zcf Wta dcqYfg": YYXVUW\_. K f]hHYb'fYdcfhcb'dflUWhWD``Yl Ua 'UbX`Wta dcq]hcb'dcfhZc`]c"

## 5 https://bxubwww.Fyei ]fya Ybhg

D`YUgY`bchY`h\Uh`YWh fY`fYWcfX]b[g`UfY`bch'Uj U]`UV`Y`Zcf'h\]g`Wci fgY"`Gh XYbhg`UfY`ghfcb[`mYbWci fU[YX`hcUhhYbX`U```WUggYg`UbX`WcbhUWhh\Y`7 ci fgY`5i h\cf]hmhc`a U\_Y`U`hYfbUh]j Y`UffUb[Ya Ybhg`Zcf`WUggYg a ]ggYX"

## 7ci fgY'GWXYXi `Y

#### J]Yk Wugg'ha Yhuv'y

### H]a YHJV`Y

	8UHY	HmdY	7 cbhYbh
	K_YY_'%'%+': YVfi Ufm!'&% : YVfi Ufm	GYa ]bUf	±olfcXi WqcbgžWci fgY`cj Yfj ]Yk ž'UggYgga Ybh glfi Wi fYž[cU``gYlqb["
cfhighi	KYKYK <u>I</u> d%E7&Fa:UKKMY (JUFM)U&) :YVfiUfm	sqYac]bjjfY`UbX	G\cfngh XYbhdYfZcfa UbWYg/`YUfb]b[ 'hc'[]j Y'UbX fYWY]j Y'ZYYXVUW_"
	K YY_" ."&"A UfWX"!"* A UfWX	GYa ]bUf	±0!7`Uggʻghi XYbhdYf7cfa UbWYg"
			8YU`]b['k]h\`dYfZcfaUbWY`Ubl]Yhm`igYZI``YlYfW]gYgUbX`WfYUh]jY`]aU[Yfm'
	K YW <u>ff</u> b( b[-"Hac"[Jff /WK"U196K A UfVX	GYa ]bUf	±0!7`Uggʻghi XYbhdYfZcfa UbWYg#ZYYXVUW_"
			8]gWgg]cb`cZWf]h]WU``fYZYWf]jYkf]h]b[`]b`dfYdUfUh]cb Zcf`h\Y`a UghYfWUgg`UbX`a UghYfWUgg`Wf]h]eiY"
<u> </u>	K YY_`) . '%+ <b>%</b>	<b>‰</b> ‰	·

## Fygci fWyg

## DfYgWf]VYX F Ygci fWYg

 $\%``9j Yfmt\]b[ \ `]g`7 cbbYWfYX.``H\Y`Dck Yf`cZA i g]WVm8 Ub]Y``6UfYbVc]a$ 

&"``A chicbž'9a chicbž'UbX'@cj Y. 'H\Y'B Uhi fY'cZ5fhighjWDYfZcfa UbWY'VmiH\ca Ug'7 Ufgcb A Uf

' "'@YthYfg'hc'U'Mci b['DcYh'VmFU]bYf'F]`\_Y

.

FYWca a YbXYX FYgci fWYg

Gi Va ]gg]cb cZ5ggYgga YbhHUg\_g

Gi Va ]gg]cb cZ5ggYgga YbhHUg\_g

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

Image: Ybwb: bh/f'u'dfcv'ya k \yb'uhh/a dh/b[ 'hc'gi va ]hmci f'ugg][ ba Ybhh\fci [ \ 'Hi fb]h/bž'd'YugY

HY'Yd\cbY'9| h/fbu''Gi ddcfhcb'-', ) '' ' ' %cf'Ya U] 'h\Ya 'cb'Yl h/fbu'h/hgi ddcfh4 i bgk "YXi "Ui "'Gi ddcfh
\ci fg'UfY', .\$\$Ua '-'\\$\$.\$\$da 'cb'k YY\_XUmg'UbX'-.\$\$Ua '-') .\$\$da 'cb'k YY\_YbXg'fl \*) 'XUmg'U'mYUfŁ'' Image
UfY'i bUV'Y'hc'gi va ]hmci f'Ugg][ ba YbhXi Y'hc'U'ZJi 'hk ]h\ 'Hi fb]h/b'mci 'a UmUdd'mZcf'Ub'Yl h/bg]cbž'Vi hmci
a i ghfYhJ]b'mci f'h/W\_Yhbi a VYf'Zfca '9! h/fbU''Gi ddcfhfU'cb[ 'k ]h\ 'Ubmch\Yf'YY] UbhXcW a YbhgŁ'hc
]bWi XY'Ug'Yj ]XYbW''hc'gi ddcfhmci f'Yl h/bg]cb'Udd']\WJh/jcb'' Image 'Ya U]''9! h/fbU''Gi ddcfhmci 'k ]'`
Ui hca Uh/WJ'`mfYW']j Y'U'h/W\_Yhbi a VYfž'Vi h]Zmci 'hY'Yd\cbY'mci 'k ]'`'bYYX'hc'gdYW/ZWJ'`mUg\_'Zcf'cbY''
Hi fb]h/b'U'gc'dfcj ]XYg'i dXUh/g'cb'h\Y]f'gmghYa 'ghUh' g'cb'Hk ]hYf''

; YbYfU``mž'UggYgga YbhiHug\_g'a i ghVY'gi Va ]hhYX'Y`YVWfcb]\W)``mj ]U'Y]h\Yf'Hi fb]hjb'cf'U'A ccX`Y Ugg][ ba Ybh'' =b']bgHJb\W'g'k \YfY'h\]g']g'bchdcgg]V`Yž']hk ]``'VY'gHJhYX'cb'mci f'\\circ i fgY'g'A ccX`Y'g]hY'k ]h\ U`hYfbUhj Y'gi Va ]gg]cb'XYHJ]`g''

cfi]bZcfa Uh]cbicbi\ckihcigi Va ]hUgg][ ba Ybhgicbi]bYij ]UiA ccXiY.i\hdg.#gh XYbh'i bgk "YXi "Ui #\ck! qi Va ]hUgq][ ba Ybha ccXiY

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

D`U[]Uf]ga i]gii g]b[ih\Yik cfXgicfi]XYUgicZch\YfgiUbXidfYgYbh]b[ih\Ya iUgimci fick b"i±i\WbihU\_Yia Ubm Zcfa gžZfca iXYi]VYfUhYiW\YUh]b[ihciU\W]XYbhU`m\Wcdm]b[iZfca iUigci f\Wik ]h\ci hiU\w\_bck iYX[Ya Ybh'

IBGK [fcidg'd'U[]Uf]ga ]bhc'h\Y'Zc``ck]b[ WUhY[cf]Yg.

7 cdm]b[.'i g]b['h\Y'gUa Y'cf'j Yfmg]a ]`Uf'k cfXg'hc'h\Y'cf][]bU`hYl h'cf']XYU'k ]h\ci h'UW\_bck `YX[]b['h\Y gci fW'cf'i g]b['ei chUh]cb'a Uf\_g"'H\]g'U`gc'Udd`]Yg'hc']a U[Ygž'Ufh'UbX'XYg][b'dfcYWhgž'Ug'k Y``'Ug dfYgYbhUh]cbg'k \YfY'gca YcbY'dfYgYbhg'Ubch\Yf'g']XYUg'cf'k cfXg'k ]h\ci h'WfYX]h'

⇒ Uddfcdf]UhY 'dUfUd\fUg]b[. '7\Ub[]b['U'ZYk'k cfXg'UbX'd\fUgYg'k\]Y 'a cghmfYhU]b]b['h\Y'cf][]bU`ghi Wh fY 'UbX#cf'dfc[fYgg]cb'cZ]XYUg'cZh\Y'cf][]bU`žUbX']bZcfa Uh]cb'k]h\ci hUW\_bck`YX[Ya Ybh'H\]g'U`gc Udd`]Yg']b'dfYgYbhUh]cbg'k\YfY'gca YcbY'dUfUd\fUgYg'Ubch\Yf'g']XYUg'cf'k cfXg'k]h\ci h'WfYX]h'UbX'hc d]YW]b['hc[Yh\Yf'ei chYg'UbX'dUfUd\fUgYg']bhc'U'bYk'k\c`Yžk]h\ci h'Uddfcdf]UhY'fYZYfYbW]b['"

7 c``i g]cb.'k cf\_jb['k]h\ch\Yfg'Vi hdUgg]b['cZZh\Y'k cf\_'Ug'U'dYfgcb'g']bX]j ]Xi U``k cf\_"'7 c``i g]cb'U`gc ]bWi XYg'dfcj ]X]b['mci f'k cf\_'hc'Ubch\Yf'ghi XYbhVYZcfY'h\Y'Xi Y'XUhYžcf'Zcf'h\Y'di fdcgY'cZh\Ya d`U[]Uf]g]b['UhiUbmh]a Yž'dUm]b['Ubch\Yf'dYfgcb'hc'dYfZcfa 'Ub'UWUXYa ]WhUg\_ž'ghYU']b['cf'UWei]f]b[ Ubch\Yf'dYfgcb'g'UWUXYa ]Wk cf\_'UbX'Wcdm]b[']hz'cZYf]b['hc'Wca d'YhY'Ubch\Yf'dYfgcb'g'k cf\_'cf'gYY\_]b[ dUma YbhZcf'Wca d'Yh]b['UWUXYa ]Wk cf\_"

±bUddfcdf]UhY`W]hUh]cb.`7]h]b[`gcifWrg`k\]W\`\UjY`bchVYYb`fYUXžk]h\cihUW\_bck`YX[]b[`h\Y`´gYWcbXUfm´gcifWrZfca`k\]W\`\_bck`YX[Y`cZh\Ya`\Ug`VYYb`cVhU]bYX"

8 i d`]\WUh]cb`ffgY`Zd`U[]\Uf]ga "Ł gi Va]\h]b[`mci f`ck b`k cf\_ž]b`k \c`Y`cf`]b`dUfhžk \YfY`]h\Ug`dfYj]ci g`m VYYb`dfYdUfYX`cf`gi Va]\hYX`Zcf`Ubch\Yf`UggYgga Ybhcf\Wci fgY`UhI BGK `cf`Ubch\Yf`i b]j Yfg]\m'

7 cffYWnfYZYfYbWlb[ 'dfUWnWyg.

• DUfUd\fug]b[ z'gi a a Uf]q]b[ z'YggUmk f]hb[ 'UbX'ha Y'a UbU[ Ya Ybh

### 5 WUXYa ]W = b Zcfa Uh cb.

: cf`YggYbhJU``gh XYbh`]bZcfa UhJcb`fY`UhJb[ 'hc.

- fYei Yghg Zcf Yl hYbg]cb/
- `UhY`gi Va ]gg]cbg`[i ]XY`]bYg/
- fYj ]Yk 'cZa Uf\_g/
- I BGK '< YU`h\ 'UbX'GUZYhm'dc`]W[Yg/
- YI Ua ]bUhcb dfcWXi fYg/
- gdYWJU``Wcbg]XYfUHjcb`]b`H\Y`Yj YbhcZ]``bYgg`cf`a ]gUXj Ybhi fY/
- gh XYbhYei ]mUbX X]gUV]`]m/
- UbX'ch\Yf'YggYbhJU`'UWUXYa ]W']bZcfa UhJcbž'gYY

\hdg.#k k k "Uffg"i bgk "YXi "Ui #W ffYbhgh XYbhg#UWJXYa ]W]bZcfa Uf]cb#dfchcWc`g![i]XY`]bYg#

•

### ∍a U[Y'7fYX]h

Gc`c'DYfZcfa UbWY'A U\_]b['&\$%

#### 7F = 7CG

7F = 7CG Dfcj ]XYf 7cXY. \$\$\$-,;