



# MDIA2010

GYf]ci g'; Ua Yg

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

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



7 ci fgY`Cj Yfj ]Yk

GhJZZ`7 cbhJW`8 YhJ`g

7 cbj Ybcfg

B Ua Y	9a Uj`	5j Uj`UVj`]m	@cWjhcb	D\cbY
6fj[ ]X`7 cghY`c	Va "VtghY`c4 i bgk "YXi "Ui	H\i fgXUmj`%d&da `cf VmiUddc]bha Ybh	F cVYfh K YVghYf`&' %	- ' , ) `* , \$)

GWcc`7 cbhJW`bZcfa Uh]cb

GWcc`cZhY`5 frg`UbX`A YX]U

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

D\cbY. f\$&Ł- ' , ) `( , ) \*

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

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

H\Y`GWcc`cZhY`5 frg`UbX`A YX]U`k ci `X` ]\_Y`hc`F YgdYWZ`m5W\_bck`YX[ Y`hY`HfUX]h]cbU`7 i ghcX]Ubgž`hY`6YXY[ U`fP`Ybg]b[ hcb`WJa di gŁž; UX][ U`f7 ]mUbX`5fhv`8Yg][ b`7 Ua di gYgŁUbX`hY`B [ i bbUk U`dYcd`Y`f5i ghfU]Ub`8YZYbVW` : cfVW`5WUXYa m]b`7 UbVYffUŁ`cZhY`UbXg`k \YfY`YUWX`WJa di g`cZI`BGK` ]g`cWJhYX"

7 ci fgY'8YHJ]`g

7 fYX]hDc]bHg`\*`

Gi a a UfmicZ\hY'7 ci fgY

I bXYfgHUbX]b[ `k \Uh[ Ua Yg'fYU`mUFY`UbX`ck`hYmWUb`UZZYVhUbX`WYUH`Ui X]YbWg`]g`YggYbhU`  
\_bck`YX[Y`Zcf`Yj`Yfma`YX]U[ fUXi`UH`" `b`h]g`Wci`fgY`k`Y`ZcW`g`cb`hY`a`cgh`Wca`a`cb`hmd`Yg`cZ[ Ua`Yg`h`Uh`  
a`YX]U`dfcXi`Wfg`WYUH`zeWd]age`YS\_`Wc`"H\YgY`UFY`[ Ua`Yg`h`Uh`UFY`i`gYX`Zcf`fYU`!`]Z`di`fdcgYg`c`h`Y`f`h`Ub`  
di`fY`Y`bh`f`f`U]ba`Ybh`:`cf`Yi`Ua`d`Y`z`h`Y`mia`][`h`vY`i`gYX`Zcf`gc`W]U`W`Ub[ Y`z`Y`Xi`W`h]cb`z`h`f`U]b]b[ `z`UXj`Y`f`h]g]b[ `z`  
cf`h`c`Y`d`d`Y`cd`Y`U`W`Y]j`Y`U`d`U`f`h]W`U`f`Y`U`h`c`V`Y`W]j`Y`" `b`h]g`Wci`fgY`mci`k`]"`ZcW`g`cb`h`Y`W`cb`W`dh`U`  
XYg][`b`UbX`Ub`U`mg]g`c`Z`g`Y`f]ci`g`[ Ua`Yg`"H\]g`W`cb`h`i`h`k`]"`g`U`d`Y`Ub`]bj`Y`gh][`U`h]cb`]b`h`c`[ Ua`Y`U`Y`gh`h`Y`h]V`g`z`  
`Y`U`fb]b[ `z`U`ZZY`W`h`UbX`Y`b[ U[ Ya`Y`bh`i`M`ci`k`]"`U`gc`V`Y`]b`f`c`Xi`W`X`h`c`h`Y`a`Y`h`c`X`g`UbX`d`f`U`W]W`c`Z[ Ua`Y`d`U`m`i`  
h`gh]b[ "H\Y`Wci`fgY`Xc`Y`g`b`ch]bj`c`j`Y`U`b`m`W`ca`di`h`f`d`f`c[ f`U`a`a`]b[ `c`f`f`Y`ei`]f`Y`U`b`m`d`f`Y`j`ci`g`\_bck`YX[Y`]b`  
h]g`U`f`Y`U`"

7 ci fgY`@YUfb]b[ `Ci hWca Yg

- %` ÆYbh]z`m`h`Y`gc`W]U`z`Y`h`]W]`UbX`W`h`f`U`W`cb`h`i`h`g`c`Z`h`Y`d`f`c`Xi`W]cb`UbX`W`cb`gi`a`d`h]cb`c`Z`g`Y`f]ci`g`  
[ Ua`Yg`"
- &` 8]g`W`gg`z`Ub`U`m`Y`UbX`Y`j`U`i`U`h`Y`g`Y`f]ci`g`[ Ua`Yg`"
- '` "D`f`c`Xi`W`U`W`cb`W`dh`d`f`c`d`c`g`U`Z`c`f`U`g`Y`f]ci`g`[ Ua`Y`"
- (` "7`c`U`V`c`f`U`h`k`]h`W]Y`bh]g`z`X`Y`g][`b`Y`fg`UbX`i`g`Y`f][`f`ci`d`g`h`c`X`Y`j`Y`d`U`g`Y`f]ci`g`[ Ua`Y`W`cb`W`dh`"

HYUWX]b[ `GhfUH[ ]Yg`

H\Y`f`Y`k`]"`V`Y`U`g`f`cb[ `Ya`d`U`g]g`cb`h`Y`f`Y`U`h]cb`g`d`V`Y`h`Y`Y`b`d`f`U`W]W`z`h`Y`c`f`m`UbX`a`Y`h`c`X`]b`h]g`Wci`fgY`"  
H\Y`k`Y`Y`\_`m`Y`W`h`f`Y`g`k`]"`d`f`c`j`]X`Y`h`Y`c`f`Y`h]W]`UbX`a`Y`h`c`X`c`c`[ ]W]`Z`U`a`Y`k`c`f`\_`g`h`U`h`k`]"`h`Y`b`V`Y`Y`i`d`c`f`Y`X`  
k`]h]b`U`d`f`U`W]W]W`W`cb`h`i`h]b`h`Y`k`c`f`\_`g`d`g`"H\Y`k`c`f`\_`g`d`g`k`]"`U`gc`V`Y`g`f`i`W`h`f`Y`X`h`c`Y`b`W`ci`f`U[ Y`m`ci`h`c`  
[ ]j`Y`gi`d`d`c`f`h`UbX`Z`Y`X`V`U`W`\_`h`c`Z`"ck`g`h`i`X`Y`bh]g`"H\]g`k`]"`d`f`c`j`]X`Y`c`d`d`c`f`h`b]h]Y`g`Z`c`f`m`ci`h`c`f`Y`Z`Y`W`h`c`b`h`Y`  
d`f`c`Xi`W]cb`d`f`U`W]W]W`g`c`Z`c`h`Y`fg`UbX`h`c`j`]Y`k`m`ci`f`i`c`k`b`d`f`U`W]W]W`Y`i`d`Y`f]Y`b`W`g`k`]h]b`U`V`f`c`U`X`Y`f`W`cb`h`i`h`H\Y`  
Wci`fgY`k`]"`i`g`Y`f`Y`U`i`k`c`f`X`W]Y`bh`V`f]Y`Z`g`UbX`k`Y`f`Y`d`c`g`g]V`Y`k`]"`d`f`c`j`]X`Y`m`ci`k`]h`Ub`]b`Xi`g`f`f`m`W]Y`bh`h`c`k`c`f`\_`

# 5ggYgga Ybh

H\YfY'UfY'fY'UggYgga YbhUg\_g'fc'Wca d'YH''Mci 'a i ghWca d'YH'UbX'\UbX'jb'U''fY'fY'Ug\_g]b'cfXYf  
fc'dUgg'h.]g'Wci fgY''H\]g'\* %o %o


D`YUgY`gYY`A ccX`Y`Zcf`Z ``UggYgga YbhXYgW]dh]cb"

Hi fb]hb`gYH]b[ .`H\]g`Ugg][ ba Ybh]g`gi Va ]mX`h`fci [ \`Hi fb]hb`UbX`ghi XYbhg`Xc`bchgYY`Hi fb]hb`g]a ]Uf]mfYdcf]g"

5ggYgga Ybh' .`GYf]ci`g; Ua Y`DfchcmdY`DUW\_U[ Y

GhUfhXUH. `Bch5dd`]WV`Y

8YHJ]`g.

; fci d`dfc`YWh]b`h`Ua g`cZ&! ("`Gi Va ]hX`W`a dcbYbhg`UFY. ; !%\$`a ]bi h`dfYgYbhU]cbz`%&`a ]bi h` [ Ua Yd`UmXcW`a YbhU]cbz[ Ua Y`dfchcmdY`XcW`a YbhicZ, \$!%\$\$\$`k`cfXg": YYXVUW\_j ]U`W`i fgY`@A`G"

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

H\]g`hUg\_`Ug`a i`h`d`Y`XYUX`]bYg.; Ua Y`DfchcmdY`d`UmYg]g`UFY`]b`K`YY\_`+`": ]bU`@YWh`fYf`d`UmYg]g`UFY`]b`K`YY\_`-`": ]bU`dfYgYbhU]cbg`h`h`Y`7`]YbhUFY`]b`K`YY\_`%\$`fgYY`XUH`UVcj`Y`U`b`X`h`Y; Ua Y`DfchcmdY`XcW`a Ybh]g`UbXYX`]b`cb`A`ccX`Y`]b`k`YY\_`%\$`UZ`Yf`h`Y`dfYgYbhU]cb": cf`Z ``Vf]YZd`YUgY`gYY`A`ccX`Y"

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



F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

5`k YY\_mfYUX]b[ gZ[ Ua YgZ`UbX`cH`Yf`Wci fgY`WcbH`bhk ]`VY`Uj U]UV`Y`j ]U`h`Y`Wci fgY`k`YVg]H`cb  
A`ccX`Y"

F YWca a YbXYX`F Ygci fWg

H\Y`I`BGK`\_@]VfUfm\Ug`a`Ubmi`gYZ`\_`fYgci`fWg`cb`gYf]ci`g`[`Ua`Y`XYg][`b`UbX`UbU`mg]g`"H\YfY`]g`U`"b`\_`hc`  
U`@Y[`Ubhc`\_`]ghcZ`h`YgY`fYgci`fWg`cb`h`Y`Wci`fgY`k`YVg]H`"

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

Gh`XYbhYj`U`i`Uh]`Y`ZYXVUW`\_`cb`h`Y`Wci`fgY`]g`[`Uh`YfYX`Yj`YfmY`Uf`"Gh`XYbhZYXVUW`\_`]g`hU`\_`Yb`gYf]ci`g`mZ`  
UbX`Wcb]bi`U`]a`dfcj`Ya`Ybh]`UfY`a`UXY`hc`h`Y`Wci`fgY`VUgYX`]b`dUfhcb`gi`W`ZYXVUW`"H\Y`Wci`fgY`  
k`YVg]H`k`]"`Ubbci`bW`Ubmi`W`Ub[`Yg`h`Uh`Uj`Y`VYYb`a`UXY`VUgYX`cb`"UghmY`Uf`g`ZYXVUW`"

Gi Va ]gg]cb 'cZ5ggYgga YbhiHUg\_g

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

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

D`U[ ]Uf]ga `]g`i g]b[ `hY`k cfXg`cf`]XYUg`cZc`hYfg`UbX`dfYgYbh]b[ `hYa `Ug`mci f`ck b" `#WUb`hU`Y`a Ubm  
Zcfa gZ`Zca `XY`]VYfUHY`WXYUH]b[ `hc`UWV]XYbhU`mWc`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



5 WUXYa ]W**⊖**Zcfa Uh]cb

: cf`YggYbh]U`ghi XYbh]bZcfa Uh]cb`fY`Uh]b[ `tc.