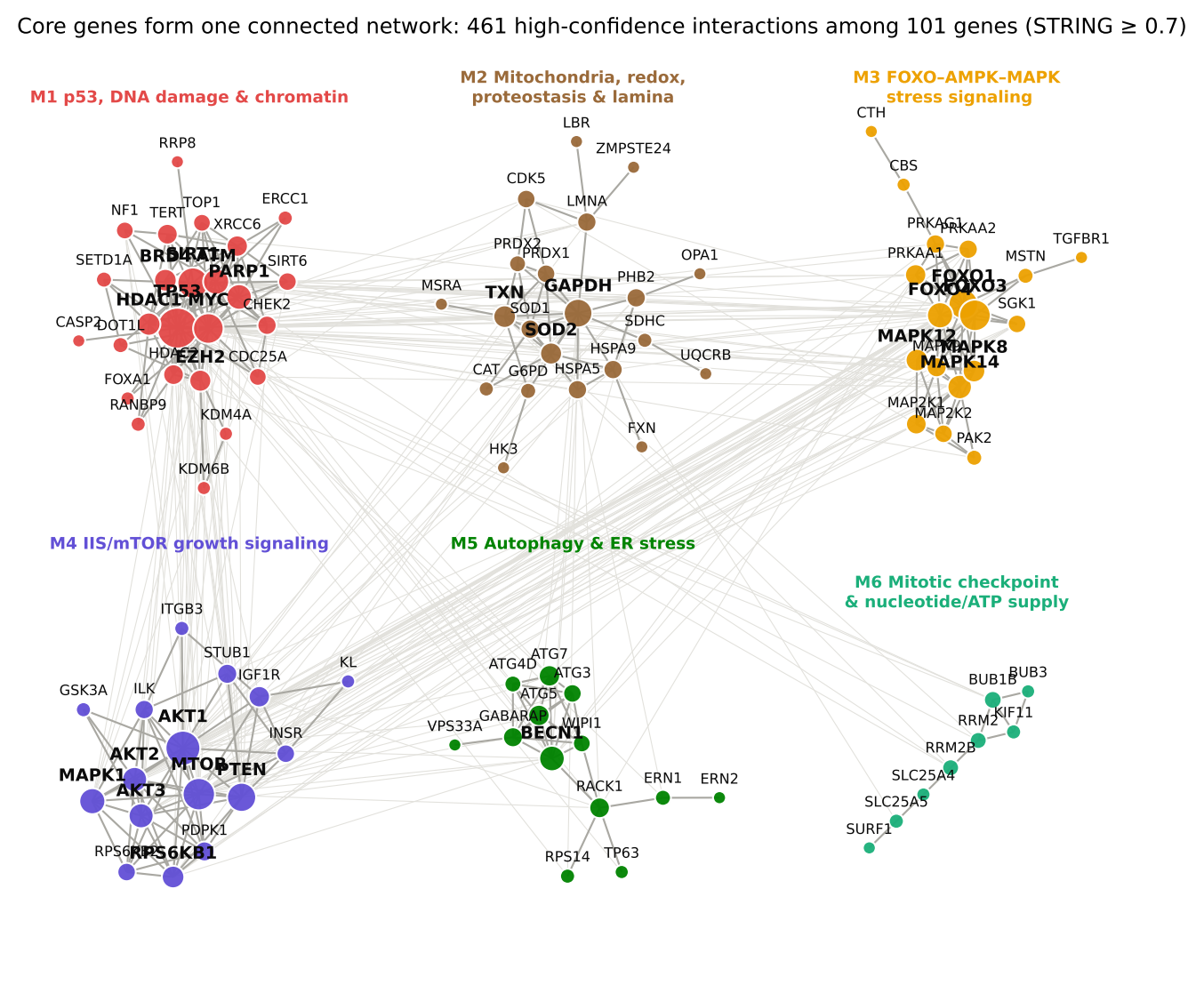

Core genes form one connected network: 461 high-confidence interactions among 101 genes (STRING ≥ 0.7)
M1 p53, DNA damage & chromatin
M2 Mitochondria, redox, proteostasis & lamina
M3 FOXO–AMPK–MAPK stress signaling
M4 IIS/mTOR growth signaling
M5 Autophagy & ER stress
M6 Mitotic checkpoint & nucleotide/ATP supply
RRP8
NF1
TERT
TOP1
ERCC1
XRCC6
SETD1A
BRD4
BRAT1
PARP1
SIRT6
TP53
HDAC1
MYC
CHEK2
CASP2
DOT1L
EZH2
CDC25A
HDAC2
FOXA1
RANBP9
KDM4A
KDM6B
LBR
ZMPSTE24
CDK5
LMNA
PRDX2
PRDX1
OPA1
MSRA
TXN
GAPDH
PHB2
SOD1
SDHC
SOD2
HSPA9
UQCRB
CAT
G6PD
HSPA5
FXN
HK3
CTH
CBS
PRKAG1
PRKAA2
TGFBR1
PRKAA1
MSTN
FOXO1
FOXO4
FOXO3
SGK1
MAPK12
MAPK13
MAPK8
MAPK14
MAP2K1
MAP2K2
PAK2
ITGB3
STUB1
KL
IGF1R
GSK3A
ILK
AKT1
INSR
AKT2
MTOR
PTEN
MAPK1
AKT3
PDPK1
RPS6KA1
RPS6KB1
ATG7
ATG4D
ATG3
ATG5
GABARAP
WIPI1
VPS33A
BECN1
RACK1
ERN1
ERN2
RPS14
TP63
BUB1B
BUB3
KIF11
RRM2
RRM2B
SLC25A4
SLC25A5
SURF1