Dissection of DNA damage responses using multiconditional genetic interaction maps

Aude Guénolé

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" Where there is a will there is a way"
Henry Hudson
(1565-1611)

ABBREVIATIONS

DNA	Deoxyribonucleic acid
IR	Ionizing radiation
UV	Ultra violet
DDR	DNA damage response
AT	Ataxia telangectasia
ATM	Ataxia telangectasia mutated kinase
PI3K	Phosphatidylinositol 3-kinase-related kinase
ATR	Ataxia telangectasia and Rad3 related kinase
ssDNA	single strand DNA
DNA-PKcs	DNA-dependent protein kinase catalytic subunit
DSB	Double-strand break
RPA	Replication protein A
APC	Anaphase promoting complex
FHA	Forkhead-associated
RNR	Ribonucleotide reductase
dNTP	Desoxyribonucleotides
MMS	Methyl methanesulfonate
HU	Hydroxyurea
H2AX	Histone H2A.X
H3	Histone H3
K56R	Lysine on position 56 replaced by an arginine
6-4PP	6-4 Photoproduct
CPD	Cyclobutane pyrimidine dimer
NER	Nucleotide excision repair
XP	Xeroderma pigmentosum
RNA	Ribonucleic acid
BER	Base excision repair
SSB	Single-strand break
MMR	Mismatch excision repair
PCNA	Proliferating cell nuclear antigen
E1	Ubiquitin-activating enzyme
E2	Ubiquitin-conjugating enzyme
E3	Ubiquitin-ligating enzyme
PRR	Post-replication repair
TLS	Translesion synthesis
NHEJ	Non-homologous end joining
HR	Homologous recombination
SUMO	Small Ubiquitin-like Modifier
CRL	Cullin-RING ligase
EMAP	Epistatic mini-array profiling
dE-MAP	differential epistasis mapping
CPT	Camptothecin
ZEO	Zeocin
DDC	DNA damage checkpoint
GCR	Gross chromosomal rearrangement

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