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*Dissection of DNA
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multiconditional genetic
interaction maps*

Aude Guénoilé

Dissection of DNA damage responses using multiconditional genetic interaction maps
Aude Guénolé

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Dissection of DNA
damage responses using
multiconditional genetic
interaction maps

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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

TABLE OF CONTENTS

Abbreviations		7
Chapter 1	Introduction and outline of this thesis	9
Chapter 2	A Multi-Conditional Genetic Interaction Map to Dissect DNA Damage Response Pathways	29
Chapter 3	Rtt109 chromatin modifier regulates mutagenic DNA damage bypass	51
Chapter 4	Neddylation affects cell cycle control and genome integrity	67
Chapter 5	Irc21 is a general response factor in checkpoint control, repair and genome stability	81
Chapter 6	Sae2 and Pph3 cooperate to promote DNA repair and checkpoint recovery	95
Chapter 7	General discussion	109
Appendix	Nederlandse samenvatting	119
	English summary	123
	Résumé en français	127
	Acknowledgments	131
	Curriculum Vitae	133
	Publications	135

