



Universiteit
Leiden
The Netherlands

DNA damage signaling networks: from stem cells to cancer

Carreras Puigvert, J.

Citation

Carreras Puigvert, J. (2011, October 20). *DNA damage signaling networks: from stem cells to cancer*. Retrieved from <https://hdl.handle.net/1887/17980>

Version: Corrected Publisher's Version

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/17980>

Note: To cite this publication please use the final published version (if applicable).

Stellingen

behorende bij het proefschrift

DNA damage signaling networks: from Stem Cells to Cancer

1. Genotoxic stress induces Wnt-signaling in embryonic stem cells, which protects against cisplatin-induced apoptosis (*This thesis*).
2. p53 plays a critical role in the apoptotic response to genotoxic stress in mouse embryonic stem cells (*This thesis*).
3. The combined expression of oncogenes and integrins strongly affect the response to chemotherapeutics and may thus determine the efficacy of chemotherapy (*This thesis*).
4. The integration of different OMICs enhances the ability to unveil novel molecules and pathways in the DNA damage response as compared to using the individual datasets (*This thesis*).
5. While many DNA damage response components are known, the frequent reporting of additional factors in the literature suggests that many more await identification (Stephen P Jackson, *Genes & Development*, 2011).
6. The frequent derailment of DNA damage response systems in tumors presents another possible route by which new treatments can act selectively on the tumor (Jan HJ Hoeijmakers, *New England Journal of Medicine*, 2009).
7. Pre-cancerous lesions present activation of DNA damage response pathways controlled by ATM/ATR, Chk2 and p53, which act as anti-malignancy barrier. A breach in this barrier can lead to genomic instability and further cancer formation. (Jiri Bartek, *Nature*, 2005)
8. Understanding the biology of cancer stem cells will contribute to the identification of molecular targets important for future therapies (Michael F Clarke, *The Annual Review of Cell and Developmental Biology*, 2007).
9. It is only the one that gets lost that finds the new roads (Niels Kjaer).
10. Pursuing a dream requires action, determination and courage.
11. Working with mouse embryonic stem cells is as fascinating as it is frustrating.
12. It takes the same time and effort to do an experiment right as to do it wrong, therefore you should do it right the first time.

Jordi Carreras Puigvert, Leiden, 20 October 2011