



Professor Roger Reddel
Sydney, AUSTRALIE

"Cancer without telomerase"

Professor Roger Reddel is an Australian medical researcher who originally trained as a medical oncologist. He is the Executive Director of the Children's Medical Research Institute (CMRI) and Lorimer Dods Professor at The University of Sydney. Reddel is internationally recognized for his work on the immortality of cancer cells and the role of telomeres in cancer growth. He discovered Alternative Lengthening of Telomeres (ALT) and identified a molecular marker for it. His recent research also focuses on translating proteomics into the cancer clinic. He has won several awards for his contributions to cancer research, including the Ramaciotti Medal for Excellence in Biomedical Research and the Neil Hamilton Fairley Medal of the Royal Australasian College of Physicians. He is an elected member of the Australian Academy of Science and the Australian Academy of Health and Medical Sciences.

Latest publications:

- Gonçalves, E. J., Poulos, R. C., Cai, Z., Barthorpe, S., Manda, S. S., Lucas, N., Beck, A., Bucio-Noble, D., Dausmann, M., Hall, C., Hecker, M., Koh, J. M. S., Lightfoot, H., Mahboob, S., Mali, I., Morris, J., Richardson, L. P., Seneviratne, A. J., ... Reddel, R. R. (2022). Pan-cancer proteomic map of 949 human cell lines. *Cancer Cell*, 40(8), 835-849.e8. <https://doi.org/10.1016/j.ccell.2022.06.010>
- De Nonneville, A., Salas, S., Bertucci, F., Sobinoff, A. P., Adélaïde, J., Guille, A., Finetti, P., Noble, J. R., Churikov, D., Chaffanet, M., Lavit, E., Pickett, H. A., Bouvier, C., Birnbaum, D., Reddel, R. R., & Géli, V. (2022). TOP3A amplification and ATRX inactivation are mutually exclusive events in pediatric osteosarcomas using ALT. *Embo Molecular Medicine*, 14(10). <https://doi.org/10.15252/emmm.202215859>
- De Nonneville, A., & Reddel, R. R. (2021). Alternative lengthening of telomeres is not synonymous with mutations in ATRX/DAXX. *Nature Communications*, 12(1). <https://doi.org/10.1038/s41467-021-21794-0>



Doctor Wei Yang
Bethesda, USA

"Molecular secrets of DNA replication, recombination and repair"

Dr Wei Yang is a structural biologist specialized in DNA replication, repair, and recombination. She is a distinguished investigator at the Laboratory of Molecular Biology of the U.S. National Institutes of Health and holds a Ph.D. in Biochemistry and Molecular Biophysics from Columbia University. Dr Yang's research utilizes various techniques such as X-ray crystallography, cryo electron microscopy, enzymology, and biophysics to decipher the molecular mechanisms of genetic rearrangements and DNA repair. Among many other contributions, her work brought to light the mechanism of the MutL ATPase, of the proofreading function of MutS, and of the initiation of V(D)J recombination by the RAG1/2 protein complex. She has also studied DNA polymerase eta, leading to a better understanding of the genetic skin disorder xeroderma pigmentosum. Dr Yang was awarded the Dorothy Crowfoot Hodgkin Award in 2011. She was also elected at the National Academy of Sciences in 2013 and the American Academy of Arts and Science in 2015.

Latest publications:

- Kim, J., Li, C.L., Chen, X. et al. Lesion recognition by XPC, TFIIH and XPA in DNA excision repair. *Nature* (2023). <https://doi.org/10.1038/s41586-023-05959-z>
- Liu, L., Chen, X., Li, J., Wang, H., Buehl, C. J., Goff, N. J., Meek, K., Yang, W., & Gellert, M. (2021). Autophosphorylation transforms DNA-PK from protecting to processing DNA ends. *Molecular Cell*, 82(1), 177-189.e4. <https://doi.org/10.1016/j.molcel.2021.11.025>
- Chen, X., Xu, X., Chen, Y., Cheung, J., Wang, H., Jiang, J., De Val, N., Fox, T., Gellert, M., & Yang, W. (2021). Structure of an activated DNA-PK and its implications for NHEJ. *Molecular Cell*, 81(4), 801-810.e3. <https://doi.org/10.1016/j.molcel.2020.12.015>