

Publications for Hilda Pickett

2022

Lu, R., Pickett, H. (2022). Telomeric replication stress: the beginning and the end for alternative lengthening of telomeres cancers. *Open Biology*, 12(3), 220011. [More Information]

2021

Barroso-González, J., Garcíá-Expósito, L., Galaviz, P., Lynskey, M., Allen, J., Hoang, S., Watkins, S., Pickett, H., O'Sullivan, R. (2021). Anti-recombination function of MutS[?] restricts telomere extension by ALT-associated homology-directed repair. *Cell Reports*, 37(10), 110088. [More Information]

Nathan, V., Palmer, J., Johansson, P., Hamilton, H., Warriar, S., Glasson, W., McGrath, L., Kahl, V., Vasireddy, R., Pickett, H., et al (2021). Loss-of-function variants in POT1 predispose to uveal melanoma. *Journal of Medical Genetics*, 58(4), 234-236. [More Information]

Kychygina, A., Dalli-Osto, M., Allen, J., Cadoret, J., Piras, V., Pickett, H., Crabbe, L. (2021). Progerin impairs 3D genome organization and induces fragile telomeres by limiting the dNTP pools. *Scientific Reports*, 11(1), 13195. [More Information]

Mackintosh, J., Pietsch, M., Lutzky, V., Enever, D., Bancroft, S., Apte, S., Tan, M., Yerkovich, S., Dickinson, J., Pickett, H., Selvadurai, H., Corte, T., et al (2021). TELO-SCOPE study: A randomised, double-blind, placebo-controlled, phase 2 trial of danazol for short telomere related pulmonary fibrosis. *BMJ Open Respiratory Research*, 8(1), e001127. [More Information]

2020

Ginn, S., Amaya, A., Liao, S., Zhu, E., Cunningham, S., Lee, M., Hallwirth, C., Logan, G., Tay, S., Cesare, A., Pickett, H., Dilworth, K., Lisowski, L., Alexander, I., et al (2020). Efficient in vivo editing of OTC-deficient patient-derived primary human hepatocytes. *JHEP Reports*, 2(1), 1-12. [More Information]

Sobinoff, A., Pickett, H. (2020). Mechanisms that drive telomere maintenance and recombination in human cancers. *Current Opinion in Genetics & Development*, 60, 25-30. [More Information]

Kahl, V., Allen, J., Nelson, C., Sobinoff, A., Lee, M., Kilo, T., Vasireddy, R., Pickett, H. (2020). Telomere Length Measurement by Molecular Combing. *Frontiers in Cell and Developmental Biology*, 8, 1-14. [More Information]

Pinese, M., Lacaze, P., Rath, E., Stone, A., Brion, M., Ameur, A., Nagpal, S., Puttick, C., Husson, S., Degraeve, D., Kahl, V., Pickett, H., et al (2020). The Medical Genome Reference Bank contains whole genome and phenotype data of 2570 healthy

elderly. *Nature Communications*, 11(1), 435. [More Information]

2019

Le, T., Pickett, H., Yang, A., Ho, J., Thavapalachandran, S., Igoor, S., Yang, S., Farraha, M., Voges, H., Hudson, J., Dos Remedios, C., Bryan, T., Kizana, E., Chong, J. (2019). Enhanced cardiac repair by telomerase reverse transcriptase over-expression in human cardiac mesenchymal stromal cells. *Scientific Reports*, 9(1), 1-17. [More Information]

Pan, X., Chen, Y., Biju, B., Ahmed, N., Kong, J., Goldenberg, M., Huang, J., Mohan, N., Klosek, S., Parsa, K., Lu, R., Pickett, H., et al (2019). FANCM suppresses DNA replication stress at ALT telomeres by disrupting TERRA R-loops. *Scientific Reports*, 9(1), 1-14. [More Information]

Perera, O., Sobinoff, A., Teber, E., Harman, A., Maritz, M., Yang, S., Pickett, H., Cesare, A., Arthur, J., Mackenzie, K., Bryan, T. (2019). Telomerase promotes formation of a telomere protective complex in cancer cells. *Science Advances*, 5(10), 1-14. [More Information]

Lu, R., O'Rourke, J., Sobinoff, A., Allen, J., Nelson, C., Tomlinson, C., Lee, M., Reddel, R., Deans, A., Pickett, H. (2019). The FANCM-BLM-TOP3A-RMI complex suppresses alternative lengthening of telomeres (ALT). *Nature Communications*, 10(1), 1-14. [More Information]

2018

Le, T., Pickett, H., Dos Remedios, C., Barbaro, P., Kizana, E., Chong, J. (2018). Platelet-Derived Growth Factor Receptor-Alpha expressing cardiac progenitor cells can be derived from previously cryopreserved human heart samples. *Stem Cells and Development*, 27(3), 184-198. [More Information]

Yang, S., Sun, A., Shi, Y., Li, F., Pickett, H. (2018). Structural and functional characterization of the RBBP4-ZNF827 interaction and its role in NuRD recruitment to telomeres. *Biochemical Journal*, 475(16), 2667-2679. [More Information]

Van Ly, D., Low, R., Frolich, S., Bartolec, T., Kafer, G., Pickett, H., Gaus, K., Cesare, A. (2018). Telomere Loop Dynamics in Chromosome End Protection. *Molecular Cell*, 71(4), 510-525.e6. [More Information]

Lee, M., Teber, E., Holmes, O., Nones, K., Patch, A., Dagg, R., Lau, L., Lee, J., Napier, C., Arthur, J., Hayward, N., Mann, G., Scolyer, R., Wilmott, J., Reddel, R., Pickett, H., et al (2018). Telomere sequence content can be used to determine ALT activity in tumours. *Nucleic Acids Research*, 46, 4903-4918. [More Information]

2017

Sobinoff, A., Pickett, H. (2017). Alternative Lengthening of Telomeres: DNA Repair Pathways Converge. *Trends in Genetics*, 33(12), 921-932. [More Information]

Chan, F., Vinod, B., Novy, K., Schittenhelm, R., Huang, C., Udugama, M., Nunez-Iglesias, J., Lin, J., Hii, L., Pickett, H., et al (2017). Aurora Kinase B, a novel regulator of TERF1 binding and telomeric integrity. *Nucleic Acids Research*, 45(21), 12340-12353. [More Information]

Sobinoff, A., Allen, J., Neumann, A., Yang, S., Walsh, M., Henson, J., Reddel, R., Pickett, H. (2017). BLM and SLX4 play opposing roles in recombination-dependent replication at human telomeres. *EMBO Journal*, 36(19), 2907-2919. [More Information]

Lee, M., Napier, C., Yang, F., Arthur, J., Reddel, R., Pickett, H. (2017). Comparative analysis of whole genome sequencing-based telomere length measurement techniques. *Methods*, 114, 4-15. [More Information]

Dagg, R., Pickett, H., Neumann, A., Napier, C., Henson, J., Teber, E., Arthur, J., Reynolds, C., Murray, J., Haber, M., Sobinoff, A., Lau, L., Reddel, R. (2017). Extensive Proliferation of Human Cancer Cells with Ever-Shorter Telomeres. *Cell Reports*, 19(12), 2544-2556. [More Information]

Helbig, S., Wockner, L., Bouendeu, A., Hille-Betz, U., McCue, K., French, J., Edwards, S., Pickett, H., Reddel, R., Chenevix-Trench, G., et al (2017). Functional dissection of breast cancer risk-associated TERT promoter variants. *Oncotarget*, 8(40), 67203-67217. [More Information]

Scarpa, A., Chang, D., Nones, K., Corbo, V., Patch, A., Bailey, P., Lawlor, R., Johns, A., Miller, D., Lau, L., Lee, M., Pickett, H., Reddel, R., Samra, J., Kench, J., Gill, A., et al (2017). Whole-genome landscape of pancreatic neuroendocrine tumours. *Nature*, 543(7643), 65-71. [More Information]

Hayward, N., Wilmott, J., Waddell, N., Johansson, P., Field, M., Nones, K., Patch, A., Kakavand, H., Alexandrov, L., Burke, H., Jakrot, V., Tembe, V., Pupo, G., De Paoli-Iseppi, R., Vilain, R., Shang, P., Lau, L., Dagg, R., Schramm, S., Pickett, H., Yang, J., Stretch, J., Kefford, R., Hersey, P., Long, G., Spillane, A., Saw, R., Thompson, J., Scolyer, R., Mann, G., et al (2017). Whole-genome landscapes of major melanoma subtypes. *Nature*, 545(7653), 175-180. [More Information]

2016

O'Brien, R., Tran, S., Maritz, M., Liu, B., Kong, C., Purgato, S., Yang, C., Murray, J., Russell, A., Pickett, H., et al (2016). MYC-Driven Neuroblastomas Are Addicted to a Telomerase-Independent Function of Dyskerin. *Cancer Research*, 76(12), 3604-3617. [More Information]

Law, E., Girgis, A., Sylvie, L., Levesque, J., Pickett, H. (2016). Telomeres and Stress: Promising Avenues for Research in Psycho-Oncology. *Asia-Pacific Journal of Oncology Nursing*, 3(2), 137-147. [More Information]

2015

Killedar, A., Stutz, M., Sobinoff, A., Tomlinson, C., Bryan, T., Beesley, J., Chenevix-Trench, G., Reddel, R., Pickett, H. (2015). A Common Cancer Risk-Associated Allele in the hTERT Locus Encodes a Dominant Negative Inhibitor of Telomerase. *PLoS Genetics*, 11(6), 1-23. [More Information]

Udugama, M., Chang, F., Chan, F., Tang, M., Pickett, H., McGhie, J., Mayne, L., Collas, P., Mann, J., Wong, L. (2015). Histone variant H3.3 provides the heterochromatic H3 lysine 9 tri-methylation mark at telomeres. *Nucleic Acids Research*, 43(21), 10227-10237. [More Information]

Pickett, H., Reddel, R. (2015). Molecular mechanisms of activity and derepression of alternative lengthening of telomeres. *Nature Structural and Molecular Biology*, 22(11), 875-880. [More Information]

2014

Bull, C., Mayrhofer, G., O'Callaghan, N., Au, A., Pickett, H., Low, G., Zeegers, D., Hande, M., Fenech, M. (2014). Folate Deficiency Induces Dysfunctional Long and Short Telomeres; Both States are Associated With Hypomethylation and DNA Damage in Human WIL2-NS Cells. *Cancer Prevention Research*, 7(1), 128-138. [More Information]

Guo, Y., Kartawinata, M., Li, J., Pickett, H., Teo, J., Kilo, T., Barbaro, P., Keating, B., Chen, Y., Tian, L., Al-Odaib, A., Reddel, R., Christodoulou, J., Bryan, T., et al (2014). Inherited bone marrow failure associated with germline mutation of ACD, the gene encoding telomere protein TPP1. *Blood*, 124(18), 2767-2774. [More Information]

Conomos, D., Reddel, R., Pickett, H. (2014). NuRD-ZNF827 recruitment to telomeres creates a molecular scaffold for homologous recombination. *Nature Structural and Molecular Biology*, 21(9), 760-770. [More Information]

Lee, M., Hills, M., Conomos, D., Stutz, M., Dagg, R., Lau, L., Reddel, R., Pickett, H. (2014). Telomere extension by telomerase and ALT generates variant repeats by mechanistically distinct processes. *Nucleic Acids Research*, 42(3), 1733-1746. [More Information]

Kojima, Y., Kaufman-Francis, K., Studdert, J., Steiner, K., Power, M., Loebel, D., Jones, V., Hor, A., de Alencastro, G., Logan, G., Alexander, I., Pickett, H., Tam, P., et al (2014). Transcriptional and Functional Properties of Mouse Epiblast Stem Cells Resemble the Anterior Primitive Streak. *Cell Stem Cell*, 14(1), 107-120. [More Information]

2013

Neumann, A., Watson, C., Noble, J., Pickett, H., Tam, P., Reddel, R. (2013). Alternative lengthening of telomeres in normal mammalian somatic cells. *Genes and Development*, 27(1), 18-23. [More Information]

Conomos, D., Pickett, H., Reddel, R. (2013). Alternative lengthening of telomeres: remodeling the telomere architecture. *Frontiers in Oncology*, 3, 1-7. [More Information]

Bojesen, S., Pooley, K., Johnatty, S., Beesley, J., Michailidou, K., Tyrer, J., Edwards, S., Pickett, H., Shen, H., Smart, C., Stutz, M., Reddel, R., et al (2013). Multiple independent variants at the TERT locus are associated with telomere length and risks of breast and ovarian cancer. *Nature Genetics*, 45(4), 371-384. [More Information]

2012

Bender, H., Murchison, E., Pickett, H., Deakin, J., Strong, M., Conlan, C., McMillan, D., Neumann, A., Greider, C., Hannon, G., Reddel, R., et al (2012). Extreme telomere length dimorphism in the Tasmanian devil and related marsupials suggests parental control of telomere length. *PloS One*, 7(9), 1-10. [More Information]

Uringa, E., Lisaingo, K., Pickett, H., Brind'amour, J., Rohde, J., Zelensky, A., Essers, J., Lansdorp, P. (2012). RTEL1 contributes to DNA replication and repair and telomere maintenance. *Molecular Biology of the Cell*, 23(14), 2782-2792. [More Information]

Stern, J., Zyner, K., Pickett, H., Cohen, S., Bryan, T. (2012). Telomerase Recruitment Requires both TCAB1 and Cajal Bodies Independently. *Molecular and Cellular Biology*, 32(13), 2384-2395. [More Information]

Pickett, H., Reddel, R. (2012). The role of telomere trimming in normal telomere length dynamics. *Cell Cycle*, 11(7), 1309-1315. [More Information]

Conomos, D., Stutz, M., Hills, M., Neumann, A., Bryan, T., Reddel, R., Pickett, H. (2012). Variant repeats are interspersed throughout the telomeres and recruit nuclear receptors in ALT cells. *The Journal of Cell Biology*, 199(6), 893-906. [More Information]

2011

Beesley, J., Pickett, H., Johnatty, S., Dunning, A., Chen, X., Li, J., Michailidou, K., Lu, Y., Rider, D., Palmieri, R., Stutz, M., Reddel, R., et al (2011). Functional polymorphisms in the TERT promoter are associated with risk of serous epithelial ovarian and breast cancers. *PloS One*, 6(9), 1-6. [More Information]

Pickett, H., Henson, J., Au, A., Neumann, A., Reddel, R. (2011). Normal mammalian cells negatively regulate telomere length by telomere trimming. *Human Molecular Genetics*, 20(23), 4684-4692. [More Information]

2009

Pickett, H., Reddel, R. (2009). Alternative lengthening of telomeres in human cells. In Keiko Hiyama (Eds.), *Telomeres and Telomerase in Cancer*, (pp. 127-148). New York: Springer. [More Information]

Pickett, H., Cesare, A., Johnston, R., Neumann, A., Reddel, R. (2009). Control of telomere length by a trimming mechanism that involves generation of t-circles. *EMBO Journal*, 28(7), 799-809. [More Information]

Henson, J., Cao, Y., Huschtscha-Holliday, L., Chang, A., Au, A., Pickett, H., Reddel, R. (2009). DNA C-circles are specific and quantifiable markers of alternative-lengthening-of-telomeres activity. *Nature Biotechnology*, 27(12), 1181-1185. [More Information]

Cesare, A., Kaul, Z., Cohen, S., Napier, C., Pickett, H., Neumann, A., Reddel, R. (2009). Spontaneous occurrence of telomeric DNA damage response in the absence of chromosome fusions. *Nature Structural and Molecular Biology*, 16(12), 1244-1251. [More Information]

Ng, L., Cropley, J., Pickett, H., Reddel, R., Suter, C. (2009). Telomerase activity is associated with an increase in DNA methylation at the proximal subtelomere and a reduction in telomeric transcription. *Nucleic Acids Research*, 37(4), 1152-1159. [More Information]

2008

Cao, Y., Huschtscha-Holliday, L., Nouwens, A., Pickett, H., Neumann, A., Chang, A., Toouli, C., Bryan, T., Reddel, R. (2008). Amplification of Telomerase Reverse Transcriptase Gene in Human Mammary Epithelial Cells with Limiting Telomerase RNA Expression Levels. *Cancer Research*, 68(9), 3115-3123. [More Information]