

## BRN2 reprograms DNA repair and promotes survival in melanoma

**February 25, 2019**—Solar UV irradiation of the skin causes DNA damage that, if not repaired correctly, can cause mutations. This is why cutaneous melanoma cells often have a high mutational burden, making the cancer more aggressive and difficult to treat. However, it is not known whether these cells have specific pro-survival mechanisms or enhanced DNA repair capacity. In this article published in [Genes and Development \(PDF\)](#), Katie Herbert and colleagues from [Colin Goding's lab](#) show that BRN2—a transcription factor that drives invasiveness and regulates cell proliferation in melanoma—associates with sites of DNA damage and promotes a more error-prone DNA repair mechanism. BRN2, they find, also reduces cell death of damaged cells. This work has implications for the treatment of melanoma using DNA-damaging agents in cancers expressing BRN2.