

# [Cellular and molecular biology of human melanoma](https://assignbuster.com/cellular-and-molecular-biology-of-human-melanoma/)

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This paper " Cellular and Molecular Biology of Human Melanoma" is a good example of an essay on health sciences and medicine.  Melanoma is a type of cancer that emanate from cells containing a pigment known as melanocytes. The melanocytes in human skin refer to a group of cells that mainly convey skin colour (Satyamoorthy & Herlyn, 2002, p. 14). Research on melanocytes has provided valuable knowledge into the pathological and biological states of animal and humans. Melanocytes come from the neural crest cells within an organism. Melanocytes in people’s skin are dispensed as single unit cells within the initial layer of the skin unlike in the mouse epidermis. Severe sunburn during childhood has promoted the occurrence to melanoma in adults.   
Biologically, tumour development is triggered by some elements in the skin. Inflammatory cells, dermal fibroblasts, epidermal keratinocytes, and endothelial are some of the components that trigger tumour development. The keratinocytes keep melanocytes into a check from continuous and multiplication this fine balancing contributes to healthy skin. Melanocytes are prevented from migrating into the dermis by a well-defined basement membrane, (p. 16). Because of the foreign environment nature, isolated melanocytes cannot survive in the dermis. Melanocytes are inhibited from hostile cell multiplication due to lack of complete modification in a dermal nevus. Therefore melanocytes stay in a collection and may even terminate the basement membrane barrier.   
Finally, it can be said that melanoma evolves as a result of complex perturbations. The high adaptability of melanoma to varying microenvironments proves its ability to attack and metastasize distant body organs in the body, (p. 17). There is a need for robust and particular therapeutic intermediation for melanoma development. A compounded plan of action for restoring of normal homeostasis in the epidermis with targeted deposition of apoptosis-inducing agents could be ideal.