SKIN CANCER DATABASE

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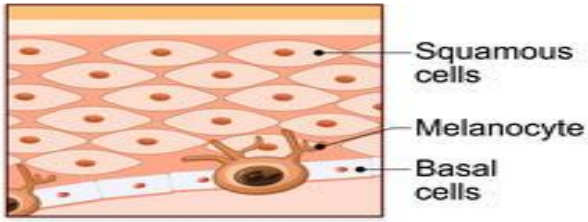
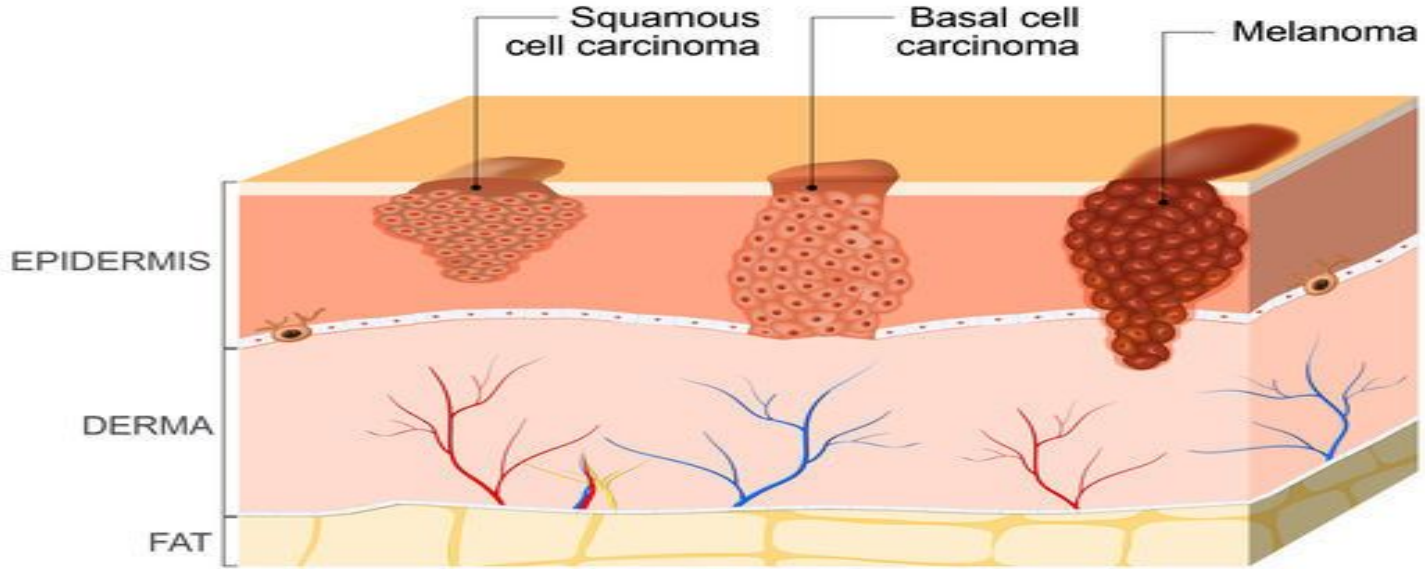
INTRODUCTION

Skin cancer is the most common type of cancer. The main types of skin cancer are squamous cell carcinoma, basal cell carcinoma, and melanoma. Melanoma is much less common than the other types but much more likely to invade nearby tissue and spread to other parts of the body. Most deaths from skin cancer are caused by melanoma.

HEALTHY EPIDERMIS



SKIN CANCER



OVERVIEW OF METHODOLOGY

- In this project, sequences will be imported from the Uniprot database. The genes are downloaded from the Cosmic Cancer database from the skin section.
- We will be using specific queries to navigate through the database. The database is created in MySQL by importing the CSV files that were downloaded from the COSMIC cancer database and the database is hosted via Xampp server with the PHPmyadmin host.
- Making a user friendly website where the user just needs to input the Protein name / ID it will be confirmed whether that particular protein is cancerous or not.

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Entry	Entry name	Protein names	Gene names	Organism	Length
Q8NFG4	FLCN_HUMAN	**Folliculin**	**FLCN** BHD	Homo sapiens (Human)	579
O14519	CDKA1_HUMAN	**Cyclin-dependent kinase 2-associate...**	**CDK2AP1** CDKAP1, DOC1	Homo sapiens (Human)	115
P43355	MAGA1_HUMAN	**Melanoma-associated antigen 1**	**MAGEA1** MAGE1, MAGE1A	Homo sapiens (Human)	309
P43357	MAGA3_HUMAN	**Melanoma-associated antigen 3**	**MAGEA3** MAGE3	Homo sapiens (Human)	314
Q9UGL1	KDM5B_HUMAN	**Lysine-specific demethylase 5B**	**KDM5B** JARID1B, PLU1, RBBP2H1	Homo sapiens (Human)	1,544
Q7TMS5	ABCG2_MOUSE	**Broad substrate specificity ATP-bin...**	**Abcg2** Abcp, Bcrp1	Mus musculus (Mouse)	657
Q9BPY8	HOP_HUMAN	**Homeodomain-only protein**	**HOPX** HOD, HOP, LAGY, NECC1, OB1	Homo sapiens (Human)	73
P63244	RACK1_HUMAN	**Receptor of activated protein C**	**RACK1** GNB2L1, HLC7, PIG21	Homo sapiens	317

NOVELTY

- In other websites user have to read and analyse on their own whether a particular protein is relevant to skin cancer or not.
- Our project’s novelty would be to provide a single website for all types of skin cancer.
- Thus, we can prevent the disease if it is continuously screened

WORK UNDER PROGRESS

- Collection of data
- Database generation

REFERENCES

- Taraborelli, M., Genitori, C., Cavazzana, I., Fredi, M., Tincani, A., Pinton, P. C., & Franceschini, F. Scientific Abstracts Friday, 16 June 2017 585.
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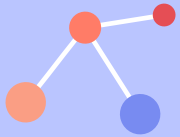
- https://www.mayoclinic.org/diseases-conditions/skin-cancer/symptoms-causes/syc-20377605#:~:text=Skin%20cancer%20%E2%80%94%20the%20abnormal%20growth,squamous%20cell%20carcinoma%20and%20melanoma.
- https://www.skincancer.org/skin-cancer-information/skin-cancer-facts/#:~:text=Skin%20cancer%20is%20the%20most,doubles%20your%20risk%20for%20melanoma



THANK YOU!