











INTERNATIONAL PUTRA **INNOCREATIVE POSTER** COMPETITION

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# #MUSICANATOMY#

### LEARNING ANATOMY THROUGH SONG AND MUSIC

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**New Approach in Teaching & Learning Anatomy Curriculum:** 

To develop & implement a musical based approach in learning the function of muscles in upper and lower limbs.

### **Immersive Learning:**

To evaluate the effect of the newly developed learning approach on medical students' level of academic performance (understanding/knowledge), interest, stress, and happy index.

## **Objectives**





### **Human anatomy**

- All the muscles of the human body are identified.
- All the muscles of the human body are classified into muscles of upper and lower limbs.

### Lyric writing

**Keywords**: Anatomy, anatomy and music, immersive learning, song, music and medicine

**Human anatomy** is the identification and description of the structures of the human body. An

understanding of anatomy is fundamental to the practice of health and medicine, and all medical students need

knowledge of anatomy. However, among students studying medicine, the medical curriculum is often challenging and the anatomy course is regarded as intense and difficult requiring a lot of memorization.

Therefore, to ease and support the learning and memorization process of anatomy, the immersive learning

technique is employed into the medical curriculum. For a demanding and rigid course such as anatomy,

immersive learning provides a highly engaging learning environment for students consisting of virtual and physical inter-activities by implementing and maximizing the advantages of technology. To ensure students can

become completely immersed in the learning process and memorization of anatomy, original anatomy songs

are composed specifically for particular muscles of the upper and lower limbs in the anatomy curriculum such as hand muscles. After critically identifying and selecting the lyrics and texts of the song from anatomy terms, the

form of the music is then planned out to ensure continuation and flow of music and phrases of terms. The main

concept of the anatomy song is determined as catchy and lively and therefore rhythmic patterns of the song are

also designed to guarantee active rhythms that can accompany energetic dance movements. The culmination of

this research project is to combine the anatomy song with choreographed movements into an audio-visual video product. This recorded video is then to be copyrighted and supplemented into the medical curriculum and used

in anatomy courses. The deliberate intention of the composition of anatomy songs is to enable students to easily memorize anatomy terms and subsequently reduce their stress and anxiety in learning anatomy. Music is known to help in memorization processes whereby it is easier to recall words by music and singing. At the same

time, music helps lessen students stress levels during learning and become more motivated, excited, and immersive learning such as learning anatomy through songs can stimulate students learning process leading on

- Important anatomy terms are determined to be included into song lyrics.
- Lyrics are then written according to Hand, Arm, Leg, Thigh, and Foot.

### **Original Song Compositions**

- Decide on catchy **rhythms** of the song
- Establish the harmony and chord progressions of the song.
- Create a specific and 'catchy' **melody** for song.

**CULMINATION** 

(FINAL PRODUCTS)

**Intellectual Property IP (music** 

Develop new updated anatomy

• Songs are **recorded** with vocalist.

• File for copyright and

album)

curriculum

# Value Added

Another kind of learning:











to improved learning experiences and students success in anatomy.



# **Commercialisation Potential**

### learning method (immersive learning) • Implementation into medical

## **Usefulness**

### Innovative teaching module for anatomy:

- ✓ A "MUSICATANOMY ALBUM" of anatomy-learning music videos. (copyright)
- Development of a teaching tool that can be commercialised and patented and duplicated for other potential curriculum/syllabuses.

### **Powerful tool for:**

- Minimising the stress and anxiety levels of medical students in learning anatomy.
- A resource for innovation and creativity related to teaching methods/deliveries.

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Recognition