

Read through the extracts and discuss the answers to the following questions with a partner:

- What's the discipline?
- What's the form or genre?
- What's the function?
- Which stage of the writing does this extract come from?
- Is it undergraduate or postgraduate?

- a.) Computer Science, Undergraduate, Ethno-Methodological Study**
- b.) Medical Engineering, Third Year Research Project: Aims and Objectives**
- c.) Biology, Undergraduate, Summary, (Conclusion)**
- d.) Medical Engineering: Masters Research Project, Extended Abstract**
- e.) Electronic Engineering: Masters Report, Discussion Section**
- f.) Biology, Undergraduate, Summary, (Conclusion)**

1.

To date, nanotechnology has become one of the largest growing fields in science and technology with a wide range of applications branching into many fields, more notably the fields of Robotics, Telecommunication, Medical Electronics and Bio-Engineering. The purpose of the report is to conduct a feasibility study into the four main areas of the nanotechnology in the attempts to better understand the application their dangers and if it's worth entering in a specific field of nanotechnology.

Electronic Engineering: Masters Report, Discussion Section,

2.

Over the past thirty years, the interest in the use of synthetic biomaterials as **scaffolds for bone implants** has been ever so growing (Carlisle, 1970; Hing, 2005; Guth et al., 2010). More significantly, hydroxyapatite (HA) has been widely reported due to its chemistry, molecular structure and mineral content being similar to that of mineral bone phase (Hing, 1996; Hing et al., 1999), as well as having optimal biocompatibility, bioactivity, osteoconductivity and partial osteoinductivity (Cordell et al., 2009). Hydroxyapatite comprises approx 70 wt% (40 vol%) of bone and is responsible for its rigidity and compressive strength (Hench, 1993; Wilson, 1993). There are two main types of HA: dense and porous. Whilst dense HA is required for cell vitality and mechanical strength, it has been shown that porous material, contributing to cell and ion transport, is vital for tissue ingrowth and consequently a key factor in successful bone graft substitutes (Hornez et al., 2007; Woodward, 2007).

Medical Engineering Masters Research Project: Extended Abstract

3.

This study has shown that due to divergence displayed by the sequences, identification of the bacteria for medical purposes needs to be higher resolution than is currently used, as it is in these slightly differing sequences that determine the nature of the bacteria. Instead of trying to find a specific bacterium that causes disease, finding the right balance of 'good bacteria' may be the answer. Looking at the intestine as an ecosystem in its own right is a new way of thinking that may lead to major advances in diagnosis and the production of new medications, and ultimately increase the survival rates of premature infants.

Biology, Undergraduate, Summary, (Conclusion)

4.

Retweeting is how **Twitter** users share interesting tweets from the people they are following. So if a person was following someone who posted an interesting tweet, they might want to share this with their followers. There are many different reasons why a user may want to retweet something, some involve:

- Commenting on someone's retweets by retweeting and adding new content often to begin a conversation
- Recognising or referring to less popular people or less visible content
- Saving tweets for future personal access

The above motivations for posting retweets illustrate **their different individual and collaborative uses**, for example, saving tweets for personal access and recognising less popular people are primarily individual activities. These are individual activities because they do not expect any input from other users, such a case would be if a celebrity was to retweet what a fan said, they do not expect any reply from the fan. This is in contrast to the collaborative nature of commenting on someone else's tweet by retweeting it; the user expects some reply from the originator of the tweet if they are intending to start a conversation.

Computer Science, Undergraduate, Ethno-Methodological Study

5.

The techniques used in this research could be amplified and researched on a much larger scale to produce more confident results. In this way, methods such as cultivation independent genomic analysis could be one of the factors that revolutionises medicine and contributes to the quest in being able to diagnose patients quickly through linking specific microorganisms to the onset of particular diseases.

Biology, Undergraduate, Summary, (Conclusion)

6.

Elevated ROS levels are associated with increased oxidative stress eventually leading to premature senescence of the cells. High oxygen tension is associated with increased ROS generation which induces oxidative stress resulting in limited proliferative lifespan. The study of MSC behaviour expanded under different oxygen tensions in correlation with ROS generation is important in determining the suitable oxygen tension for long term expansion of the cells. Therefore, **the aim of the dissertation is to examine** the effects of oxygen tension on the production of cellular ROS in goat MSCs. The proposed hypotheses for this investigation are;

- Expansion of goat MSCs at 2% oxygen reduces ROS generation compared to expansion at 20% oxygen tensions
- Alteration of the oxygen conditions from the expansion oxygen levels rapidly alters ROS generation.

Medical Engineering, Third Year Research Project: Aims and Objectives