C2.1 – MTSL

(Week 14)

INTEGRATING SKILLS

TASK 1: HOLISTIC TEXT INTERPRETATION

1) THE SEARCH for eternal youth has **fired** the imagination of aging kings, emperors, and ordinary people for countless millennia. Since antiquity, rulers, in their **relentless quest** for eternal life, have dispatched teams of explorers to **track down** the fabled fountain of youth, accidentally alternating the course of history on several occasions.
2) This quest is with us even today. The baby-boom generation, particularly with its emphasis on youth, seems determined to resist surrendering to Father Time, and **has poured $40 billion into** fueling the current exercise and diet fads.
3) Anyone who has ever stared in a mirror and watched the inexorable spread of wrinkles, sagging features, and graying hair has **yearned for** perpetual youth at some point. Aging is no fun: it involves a profound loss in muscle mass, increase in body fat (especially around the waist in men, and in the buttocks in women), weakening of our bones, decline of our immune system, and loss of vigor.
4) No matter how rich, powerful, glamorous, or influential you might be, to confront aging is to confront the reality of your mortality. Or as Butch Cassidy said to the Sundance Kid: "Every day you get older. It's a law." Unfortunately, the secret of aging and eternal youth has always been **shrouded in** mystery, if not quackery and outright fraud.

5) By rights, however, the body should live forever. Surprisingly, certain organisms, in fact, live indefinitely. Certain cells, and even animals, routinely defy the laws of aging and have no measurable life span. So if living forever does not violate any known law of cell biology, then why can't we stay eternally young?
6) A number of tantalizing and remarkable discoveries indicate that the genetic and molecular origin of aging may be within sight. Wild speculations and ancient folklore are, for the first time in human history, being replaced by hard data and concrete, reproducible results. **The excitement is palpable among researchers**. Leonard Hayflick of the University of California at San Francisco, sometimes called the "dean of biogerontology," states, "Gerontology is now at a stage where several of the theories are being collapsed into each other, and, although much important information is not yet included in the merger, we are making good progress toward the biogerontological counterpart of the physicists' Grand Unified Theory."
7) Some biogerontologists have made some cautious but reasonable predictions for the future. From now to 2020, perhaps the best bet in terms of delaying or maybe reversing some of the diseases and symptoms of aging will be carefully monitored hormone treatments. There are severe **drawbacks** to this volatile but promising technique. But if its side effects can be contained, then a combination of antioxidant/hormone treatments may reverse some of the **ravages** of aging (although they will probably not extend the human life span).
8) After 2020, however, when we have personalized DNA sequencing, an entirely new avenue will open up — i.e., identifying the fabled "age genes," if in fact they exist. It should be stressed that not all scientists believe that there are such things as age genes. And even if they do exist, the task of sifting through thousands of genes to locate the age genes will be a tedious one, but some biogerontologists claim to have found some age genes in animals, and they may have homologues in humans. One promising avenue would be to study the personalized DNA sequences of people who live exceptionally healthy and long lives, and correlate them by computer to see if they share key genetic factors.
9) From 2020 to 2050, yet another promising approach will open up: growing new organs. **It is of no use to have a long life span if we are stuck with bodies that are crumbling with decay**. Already, skin and other tissues can be grown in the laboratory, and plans exist to grow entire organs, including kidneys, hearts, and even possibly hands. Eventually, growing new organs may become as common as heart and kidney transplants today.

1. *Suggest alternative expressions to replace the following words and phrases, in bold type in the text. Your suggestions must fit into the text both grammatically and semantically.*

   a) fired (1:1)_____

   b) relentless quest (1:2)_____

   c) track down (1:3)_____

   d) has poured $40 billion into (2:2-3)_____

   e) yearned for (3:2)_____

   f) shrouded in (4:4)_____

   g) The excitement is palpable among researchers (6:4)_____

   h) drawbacks (7:4)_____

   i) ravages (7:6)_____

   j) It is of no use to have a long life span if we are stuck with bodies that are crumbling with decay. (9:2-3)_____

   _____

2. Of which text type (expository, instructive or argumentative) is the text representative?

3. What do biogerontologists study, and for what purpose?

4. Please indicate whether you believe the subject matter of the text above is mainly

a) philosophical b) scientific c) historical.

5. Based on its subject matter and language, would you characterize the text as intended for laymen or experts? From what kind of publication do you think the text has been extracted? Support your answer with evidence (at least two examples) from the text.

6. What does the expression "the merger" (paragraph 6, line 8) refer to in the text?

7. In a paragraph of 100-150 words, provide a summary (restatement) of the text.