

## Home assignment 2

**Lamin A/C Gene that causes Hutchinson-Gilford progeria syndrome, often called the "Benjamin Button disease."**

- 1. Selected any protein of Interest and give the name and then select any interesting structure from the result then do the following.**
  - a. What is the selected PDB ID?
    - i. 7D9N | pdb\_00007d9n**
  - b. What is the full name of the protein?
    - i. Crystal structure of a non-canonic progeria mutation S143F at lamin A/C and its structural implication to the premature aging**
  - c. Find the Length of its Sequence.
    - i. 204**
  - d. Find any two positions of Ramachandran outliers.
    - i. 0**
  - e. Find the superfamily of the protein based on SCOP classification.
    - i. Intermediate filament protein (Filament)**
  - f. Find the experimental method for this structure.
    - i. X-RAY DIFFRACTION**
  - g. Find the Genome location (if available)
    - i. Homo sapiens isolate CHM13 chromosome 1, alternate assembly T2T-CHM13v2.0**