Escuela Profesional de
Ciencia de la Computación

Bioinformatics

Biology of cell

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Overview

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Objectives

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- Understand about the biology of DNA.

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Objectives

- Understand about the biology of DNA.
- Understand how is the process of protein synthesis from DNA.

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The biology of cells

Where is DNA?

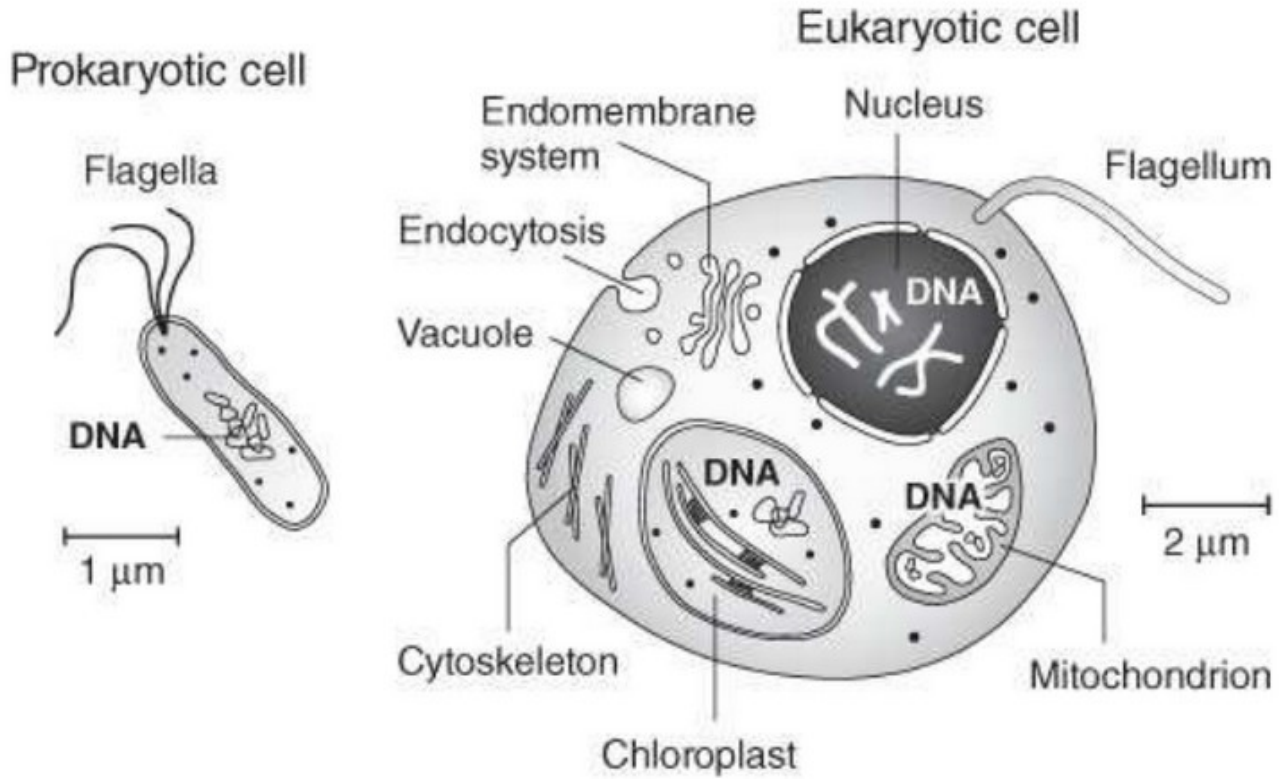

Figure: Where DNA is located in prokaryote and eukaryote cells [1].

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Where is DNA?

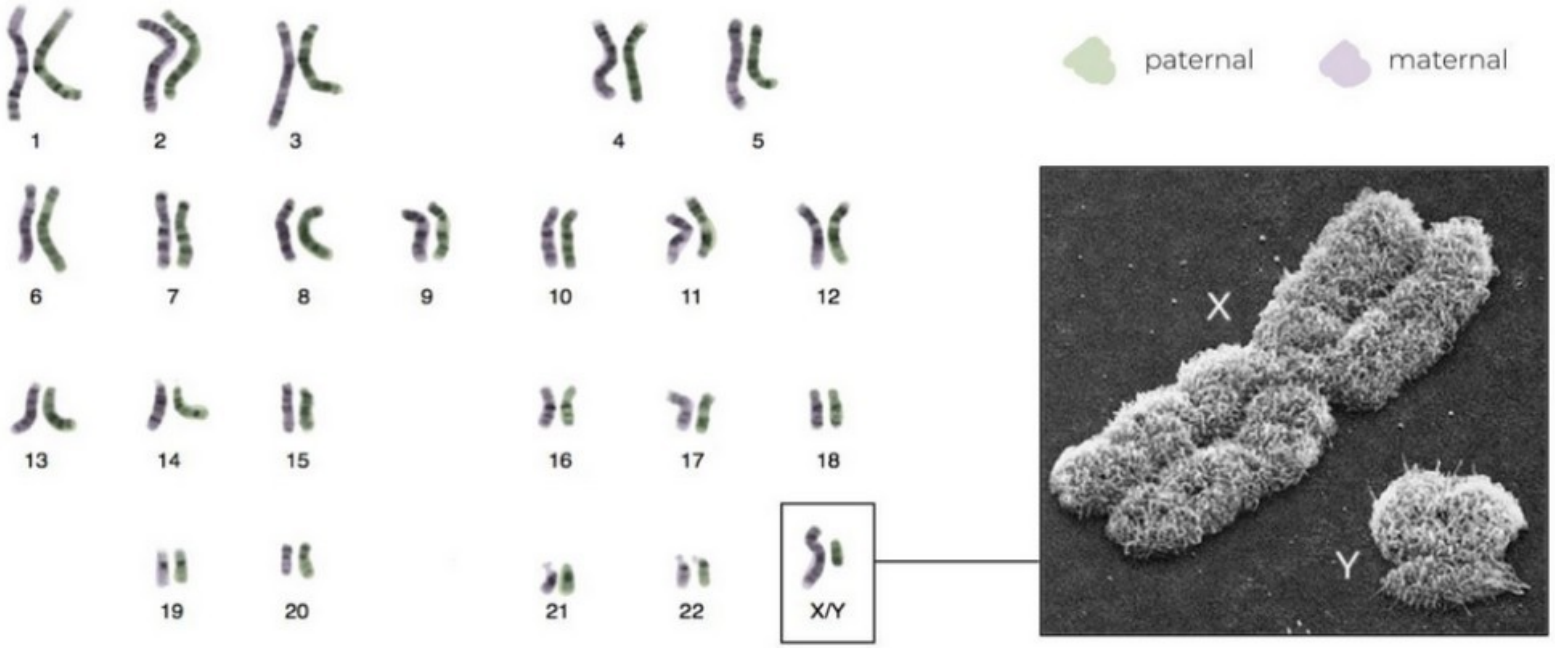

Figure: The 23 pairs of chromosomes in human cells [1].

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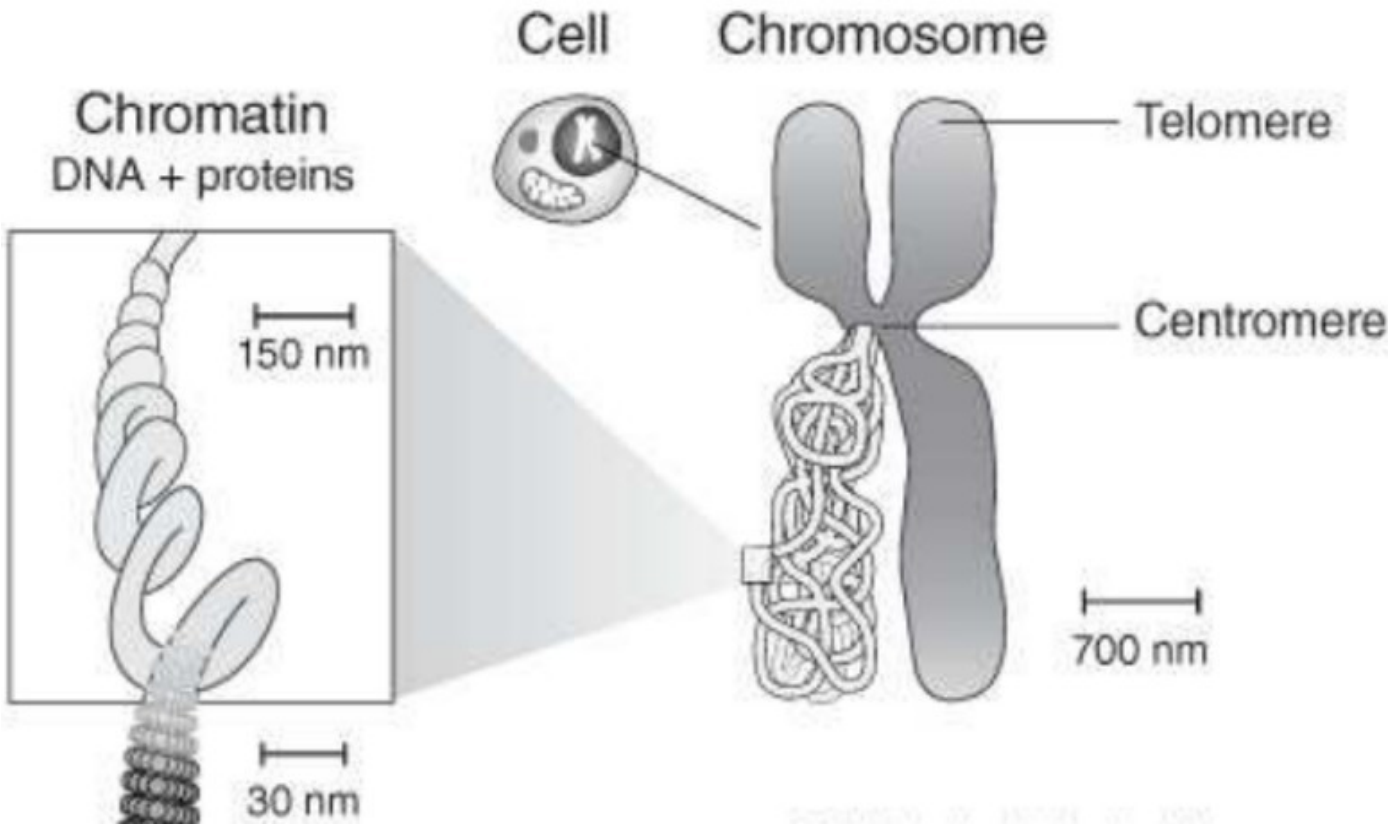

Figure: Chromatin: Material composed of DNA and proteins that condense to form chromosomes [1].

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Where is DNA?

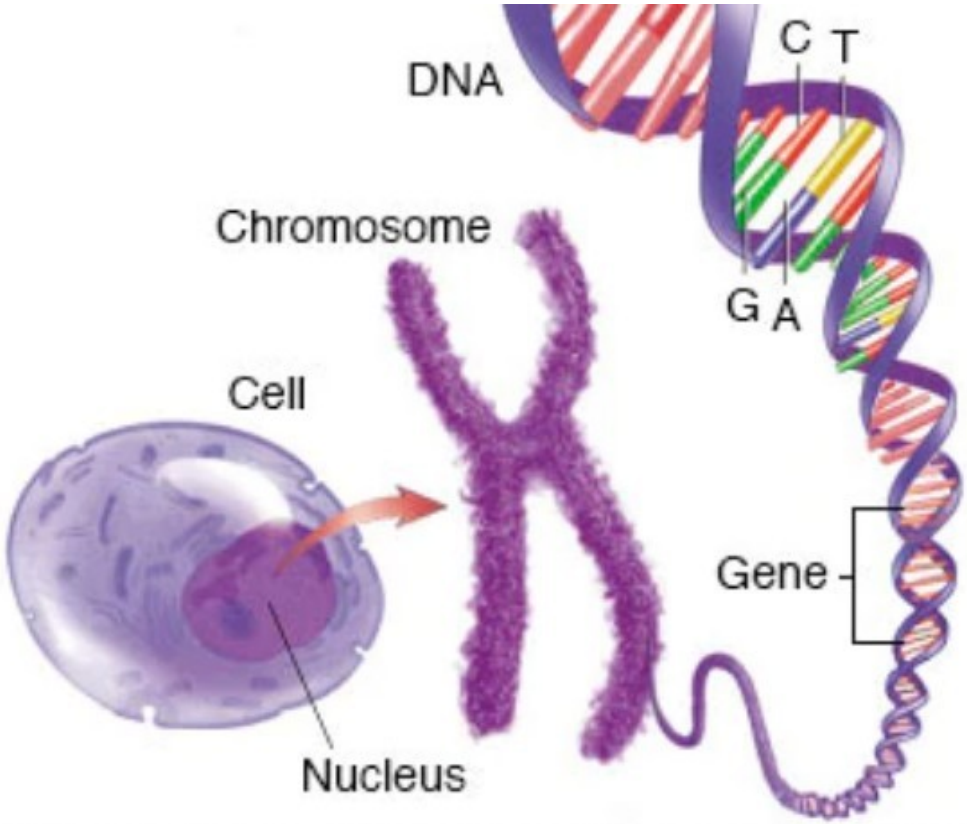

Figure: Where DNA is located [2].

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DNA structure

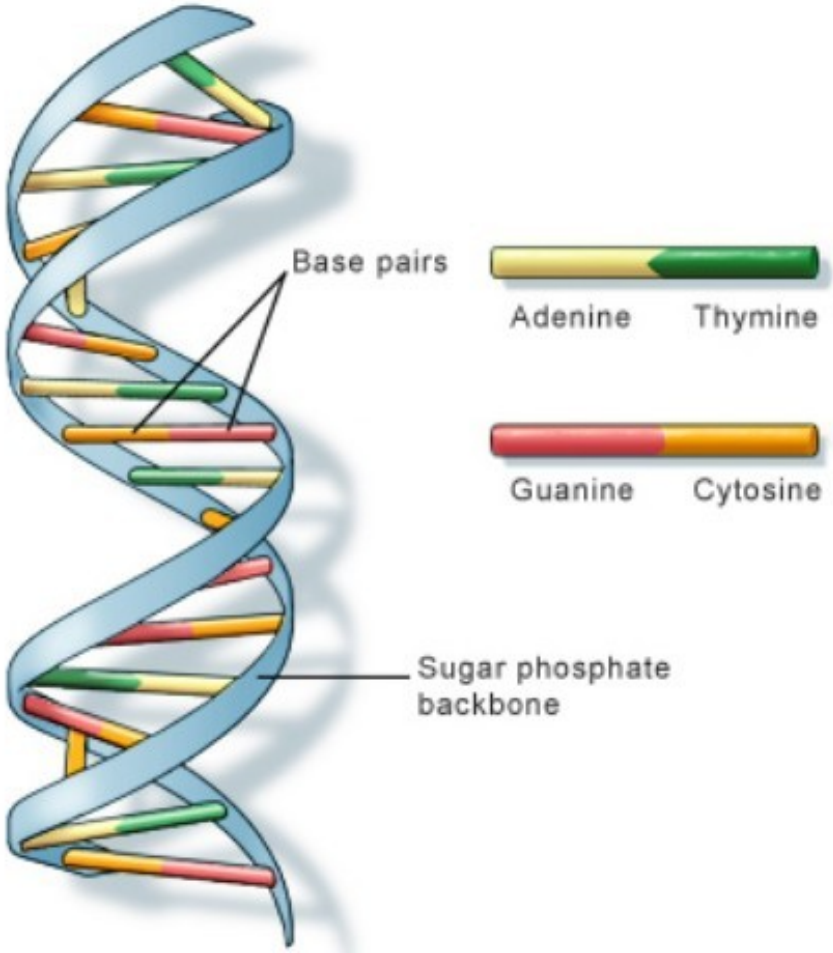

Figure: Molecules in DNA. Adenine, Thymine, Guanine and Cytosine [2].

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DNA structure

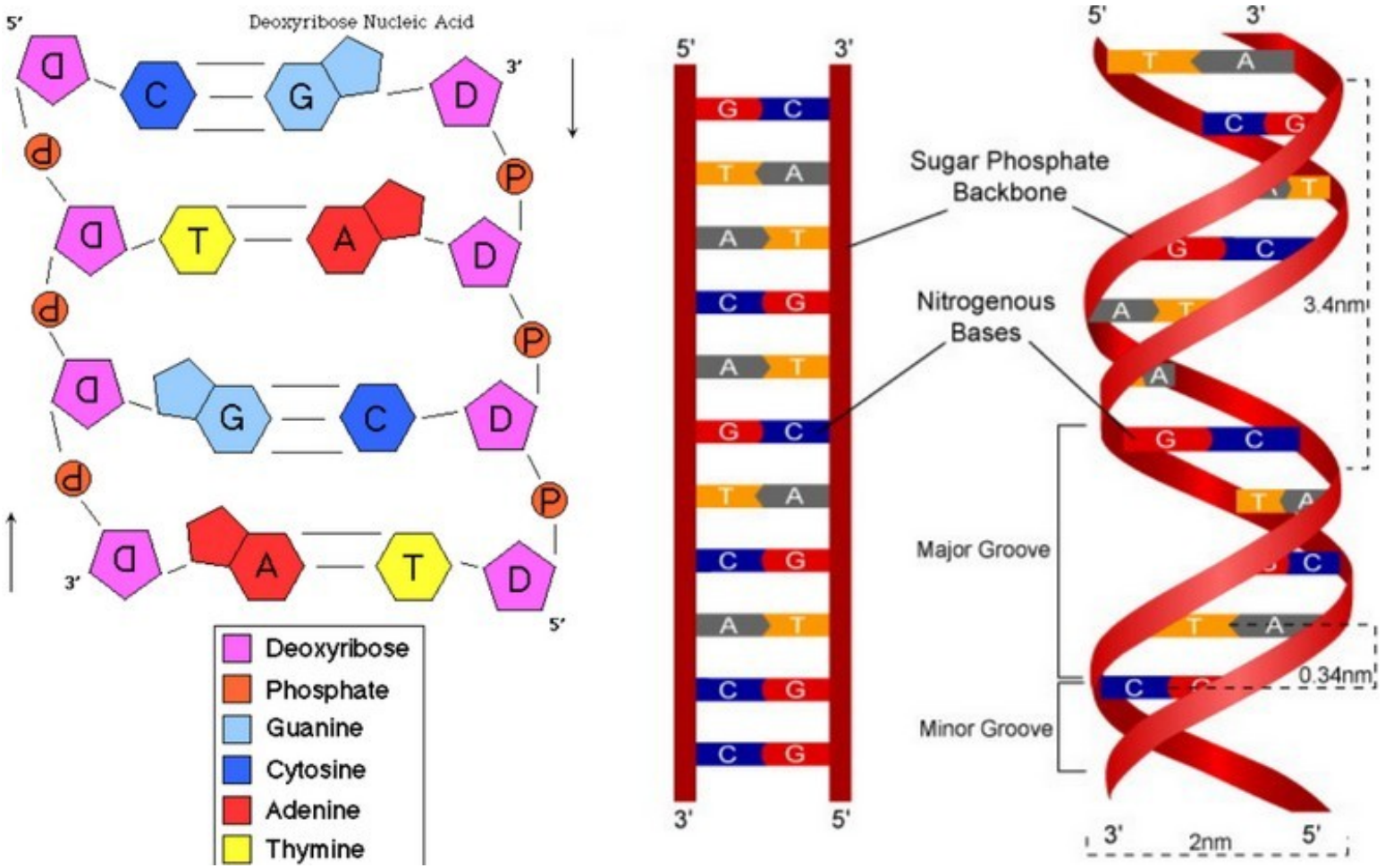

Figure: DNA structure [3].

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DNA structure

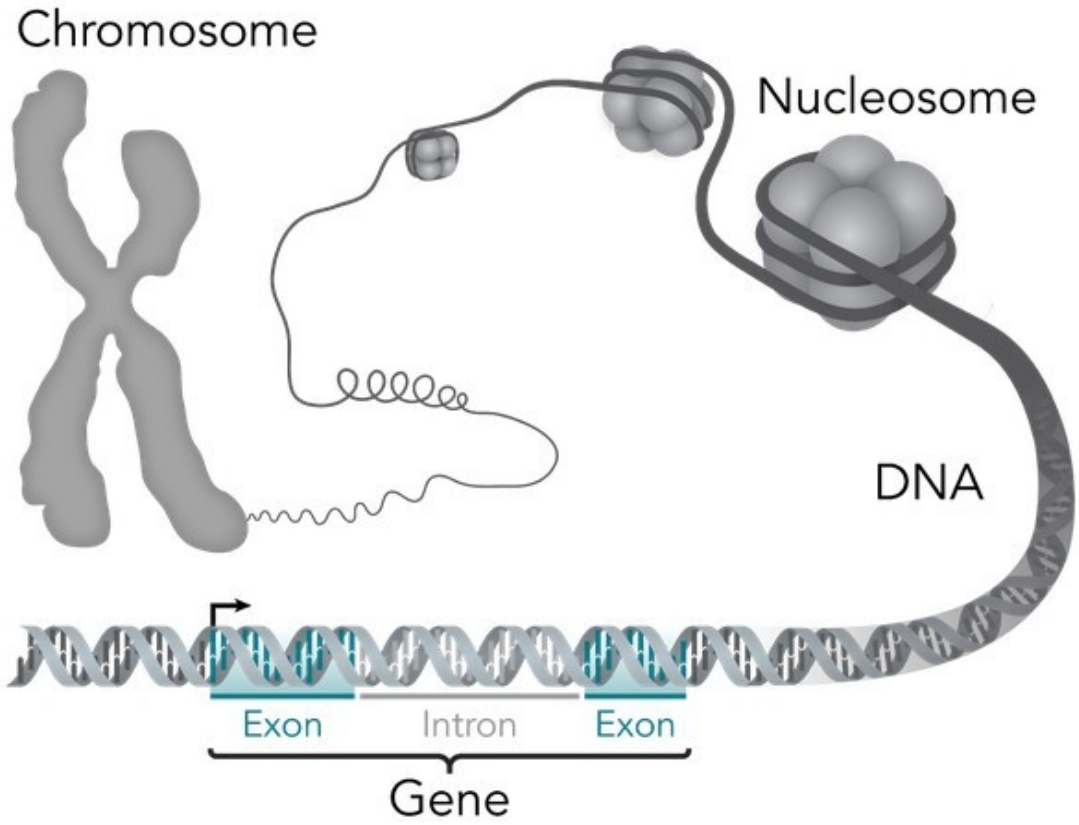

Figure: Chromosome-DNA-gene [4].

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Transcription and Translation

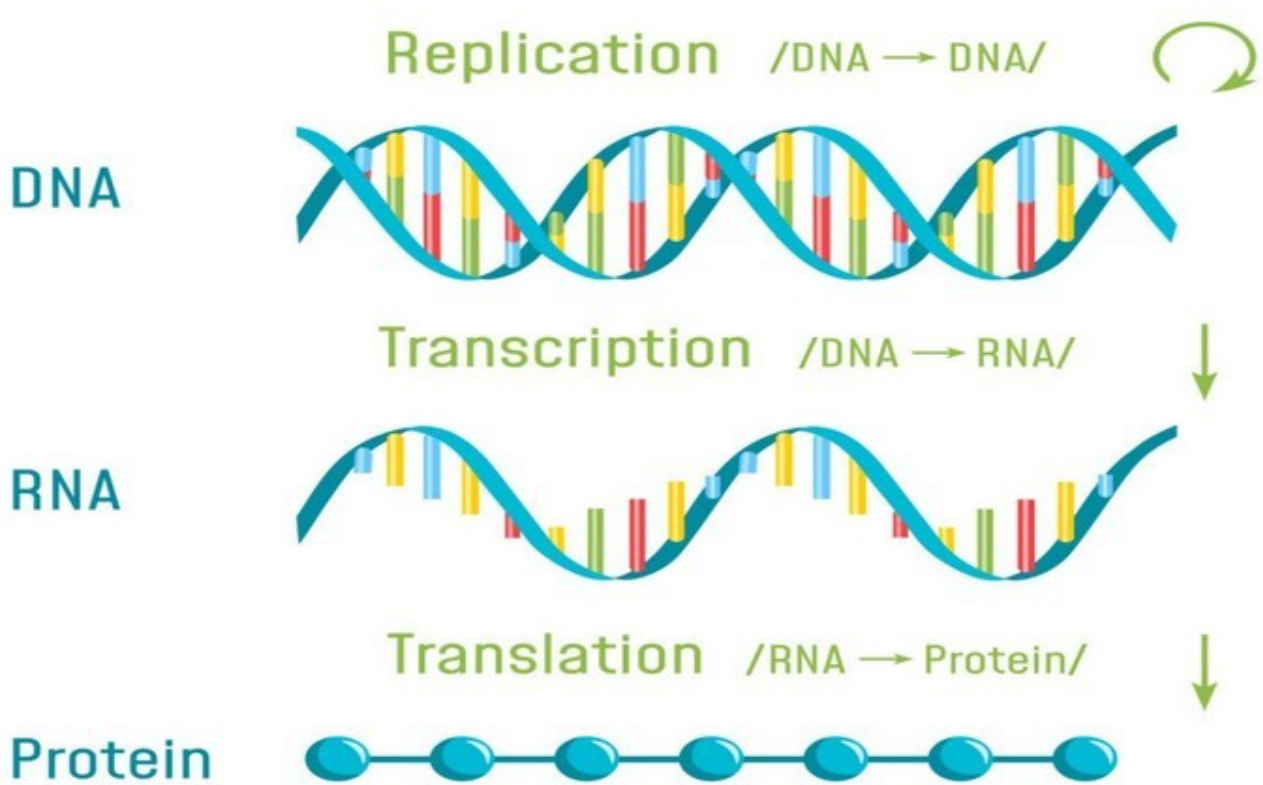

Figure: Transcription and Translation [4].

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From DNA to Protein

Click here to see the video

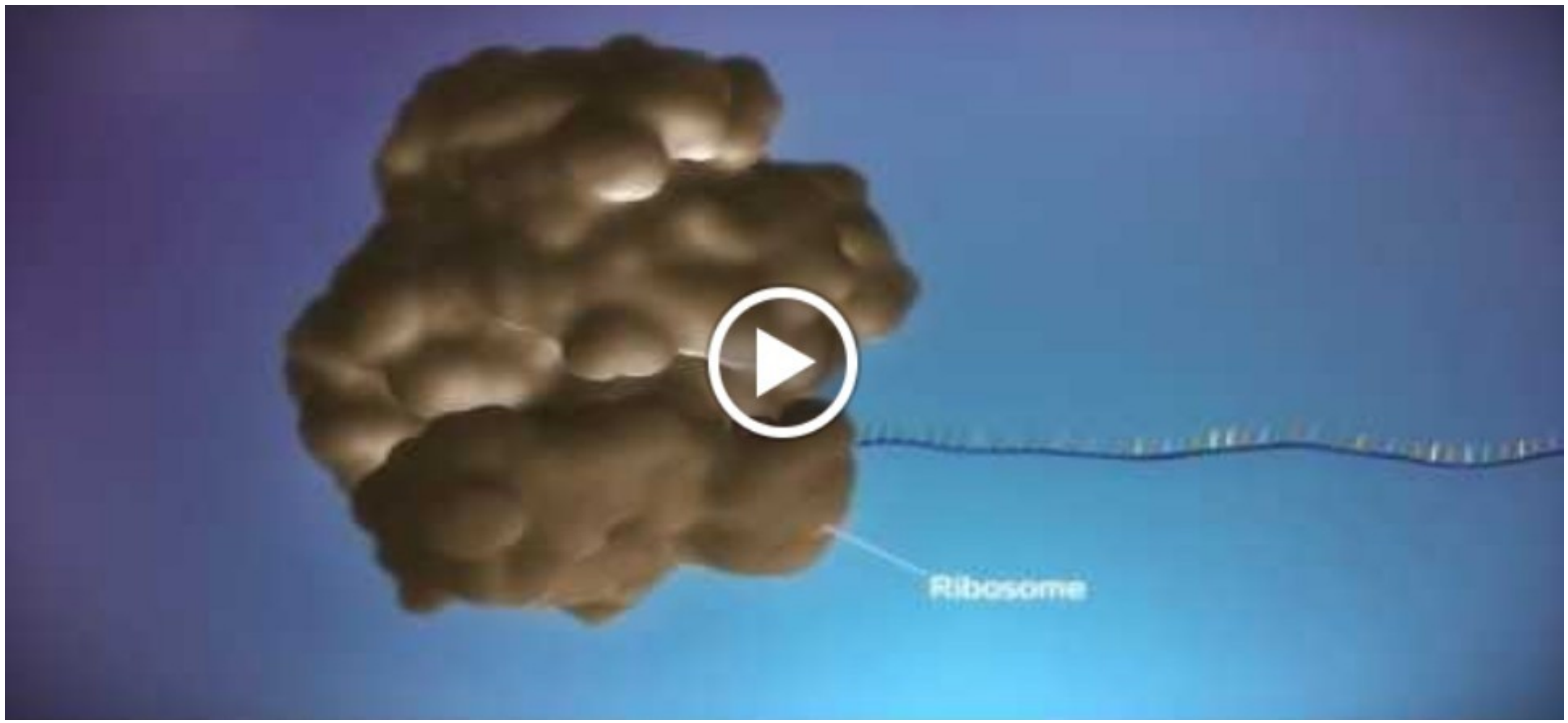

Figure: Video from DNA to protein.

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From DNA to Protein

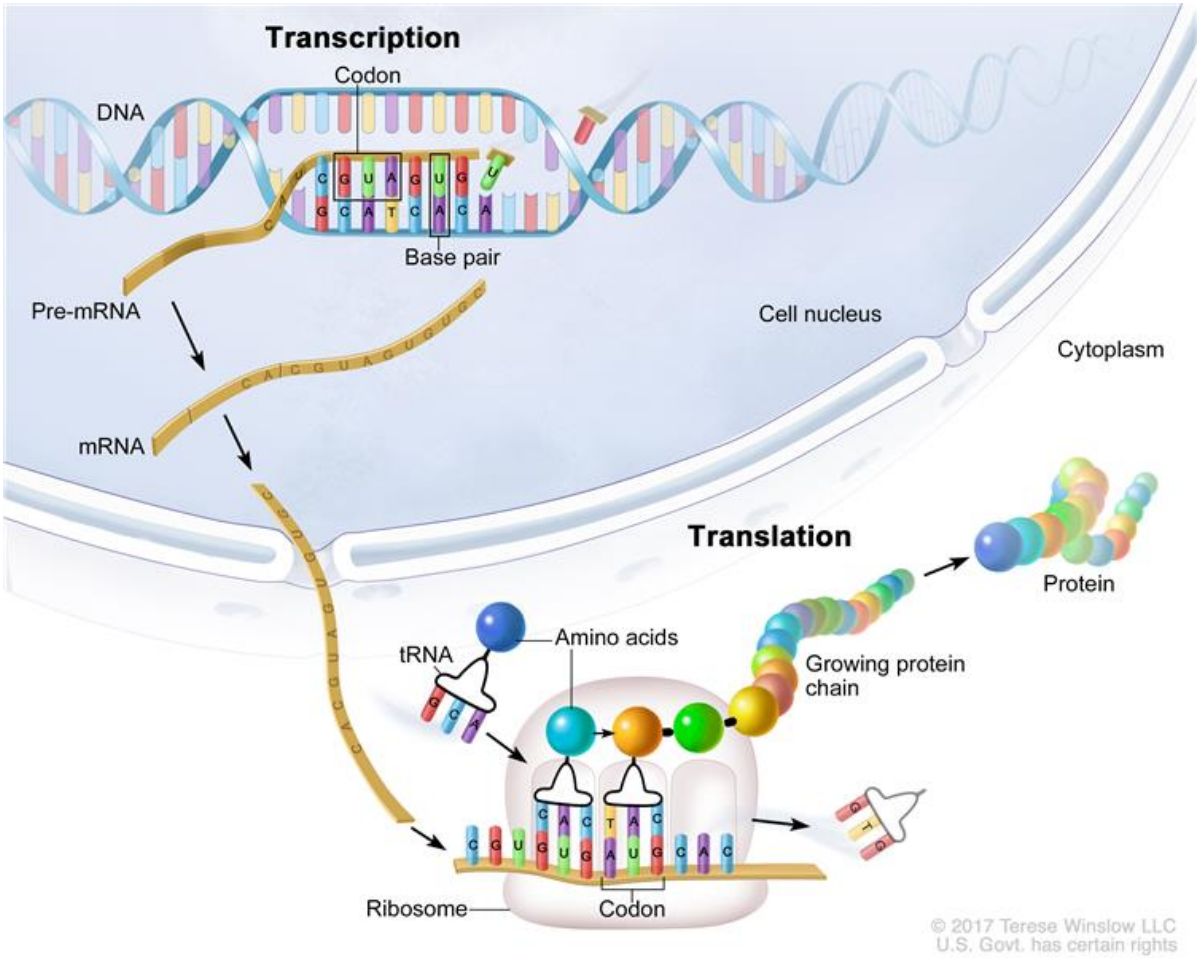

Figure: Transcription and translation [5].

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Bioinformatics

Homework

Register to the following courses and bring yours certificated of accomplish:

- Introduction to Bioinformatics (6 hours)

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References I

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References II

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