



**Life Science
DPL1 information session**

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What Is Life?

They say it's from **B** to **D**.

From **B**irth to **D**eath,

But what's between **B** and **D**?

It's a "**C**" So what is a "**C**"?

It is a **C**hoice.

Our **L**ife is a matter of **c**hoices,
Live well and it will never **GO WRONG**.

Biology – Life Science

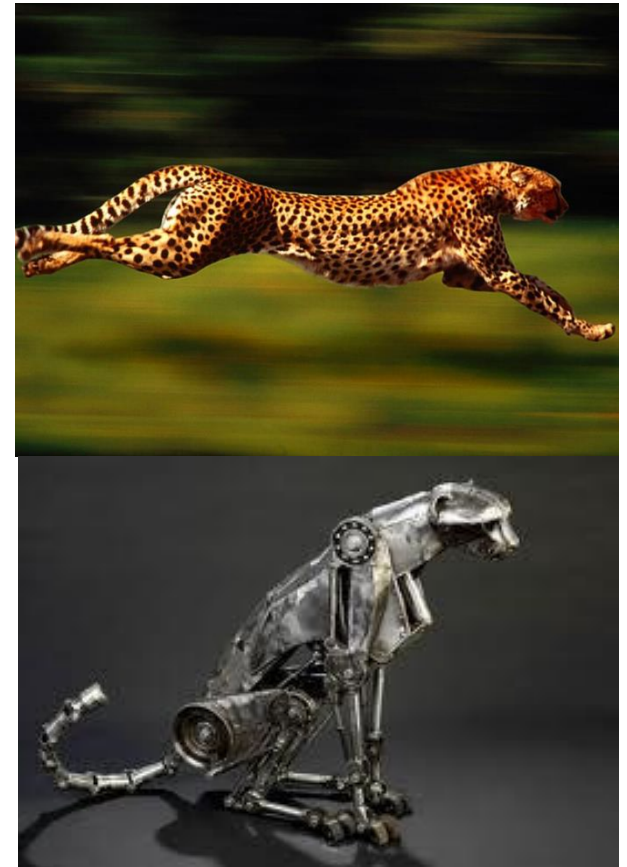
- BIO- : living things
- -OLOGY : the study of

**Biology - Study of Life
in a Scientific way**



What Are the Key Features of Living Organisms?

- Living organisms possess all of the following characteristics
 - Composed of cells
 - Have different levels of organization
 - Use energy
 - Grow
 - Reproduce
 - Respond and adapt to environment





What makes us similar but different?

- Cell fate determining factors
- Environmental factors
- Genetic factors
-

DIFFERENT CELL TYPES

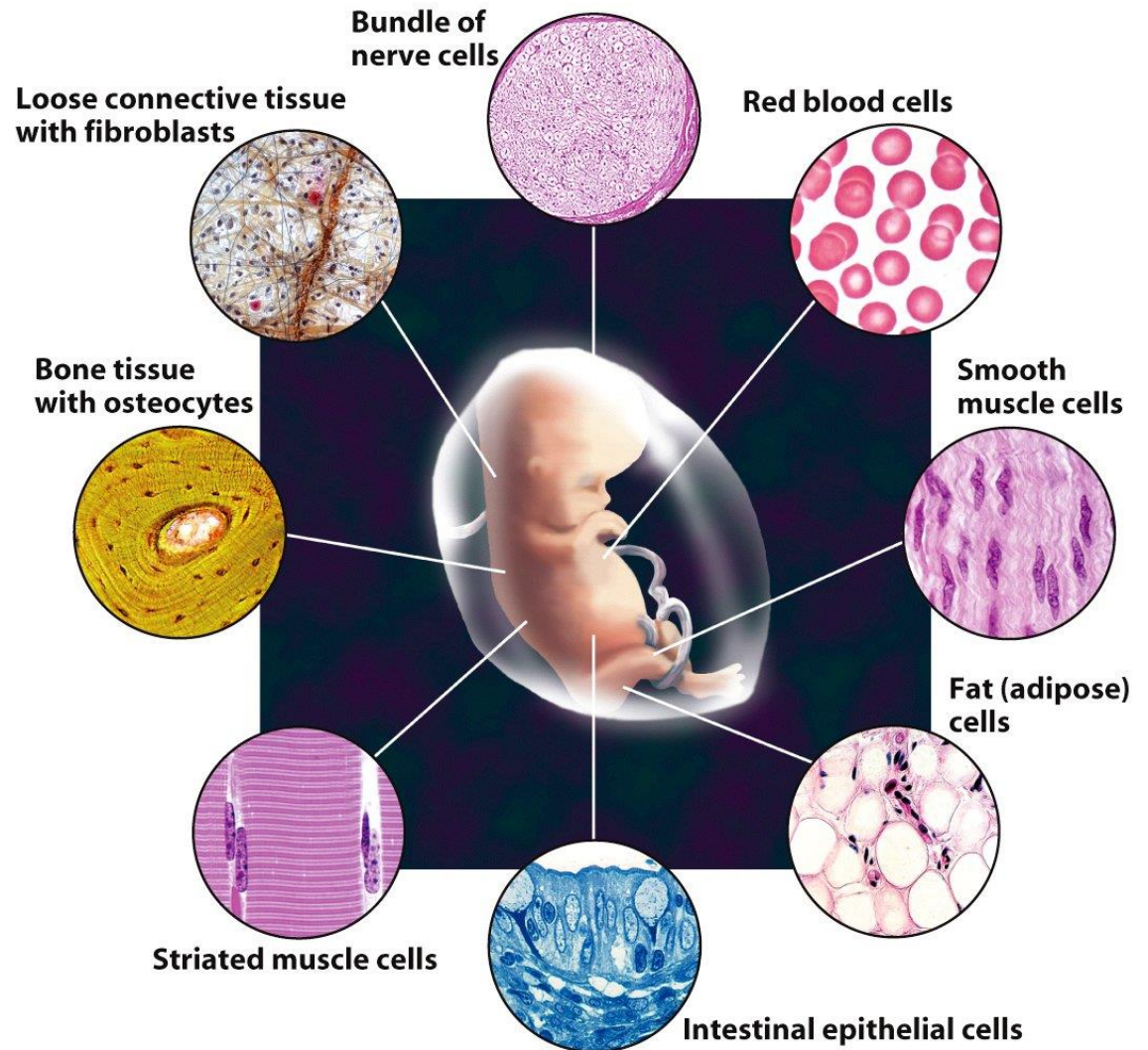


Figure 1-17 Cell and Molecular Biology, 4/e (© 2005 John Wiley & Sons)

Genes are “conserved” across species



Humans are extremely similar genetically to Chimpanzees (98.7 percent alike). Shared genes differ in their **activity level**, and this accounts for much of the difference between the two species.



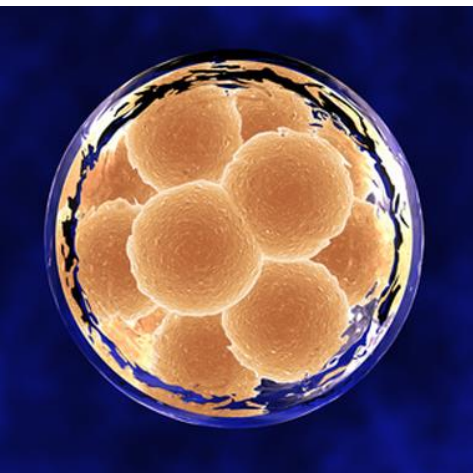
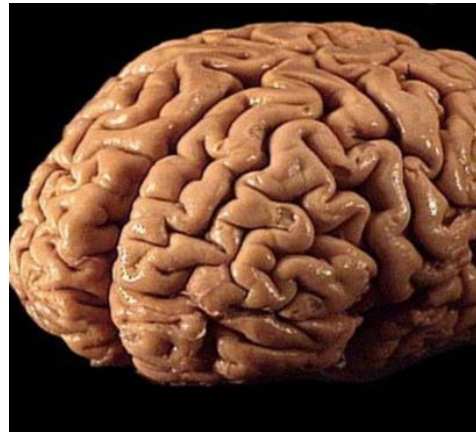
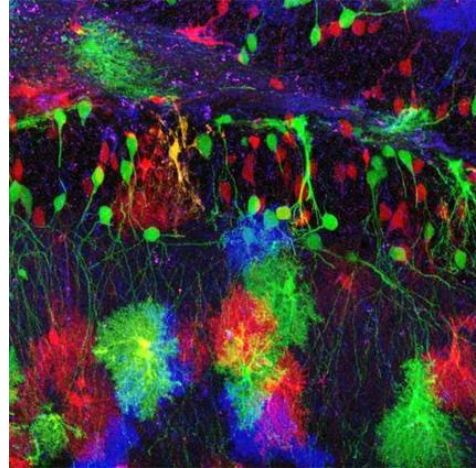
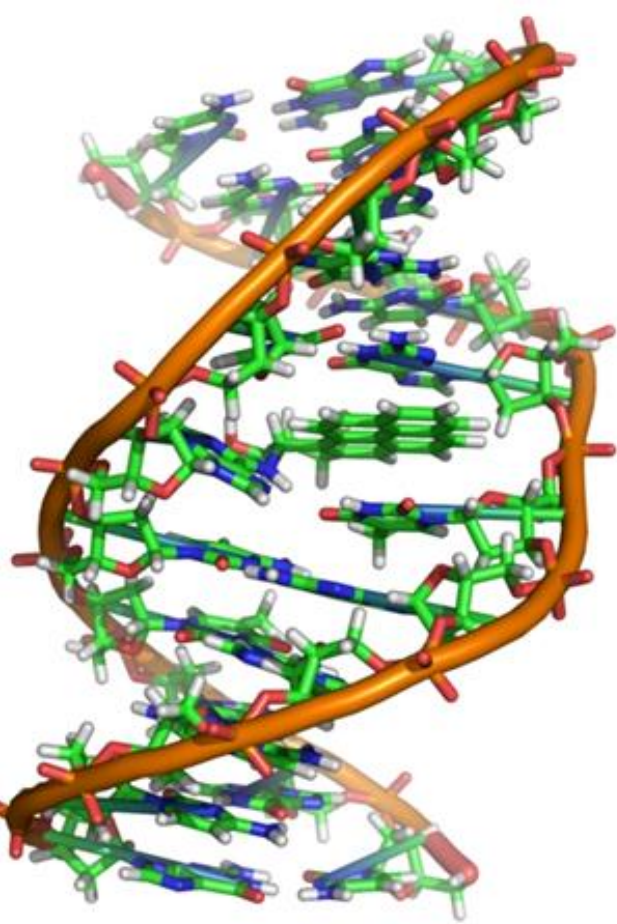
Behaviors are “conserved” across species



Lecture + Tutorial

Topics:

- Biochemistry of Life
- Cells and Cell Structures
- Enzymatic reactions
- Respiration
- Cell cycle and Genetic Controls
- Embryonic Development and Aging
- Human Anatomy
- Human Diseases





Assignments & Assessments

- Group Presentation
- Worksheets/ Quizzes
- Class participation
- Final examination



- An inspirational quote by John Maxwell about the value of Right Choices: ***“Life is a matter of choices, and every choice you make makes you.”***

- Biological Decision: internal factors + environmental factors

Every choice influences us, it also has the potential to shape our communities and the planet.

By learning about **the mechanisms of life and the power of right choices**, we equip ourselves to make **positive contributions** to the world around us and at least to yourselves.

Join us on this journey of discovery!



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