Life Science DPL1 information session Dr. Amy Li **Dr. Jessica Tang Dr. Sarah Choy Dr. Vincent Li**

What Is Life? They say it's from B to D. From Birth to Death, But what's between B and D? It's a "C" So what is a "C"? It is a Choice. Our Life is a matter of choices, Live well and it will never GO WRONG.

> What Is Life? Is Death Real? https://www.youtube.com/watch?v=QOCaacO8wus

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 determinating factors
- Environmental factors
- Genetic factors

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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
- Lab practical
- Worksheets
- Class participation
- Final examination



Power of right choices

• 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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