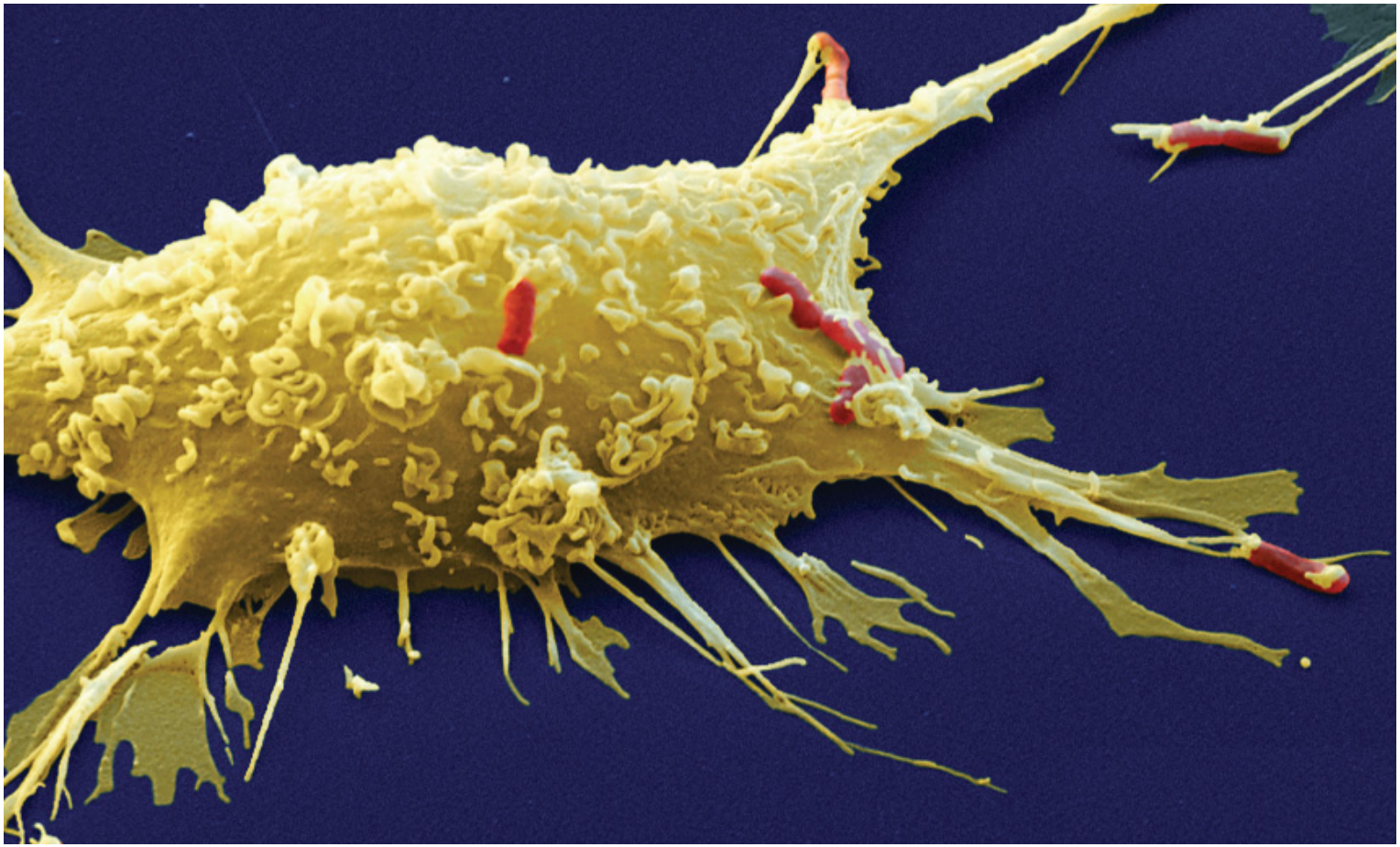
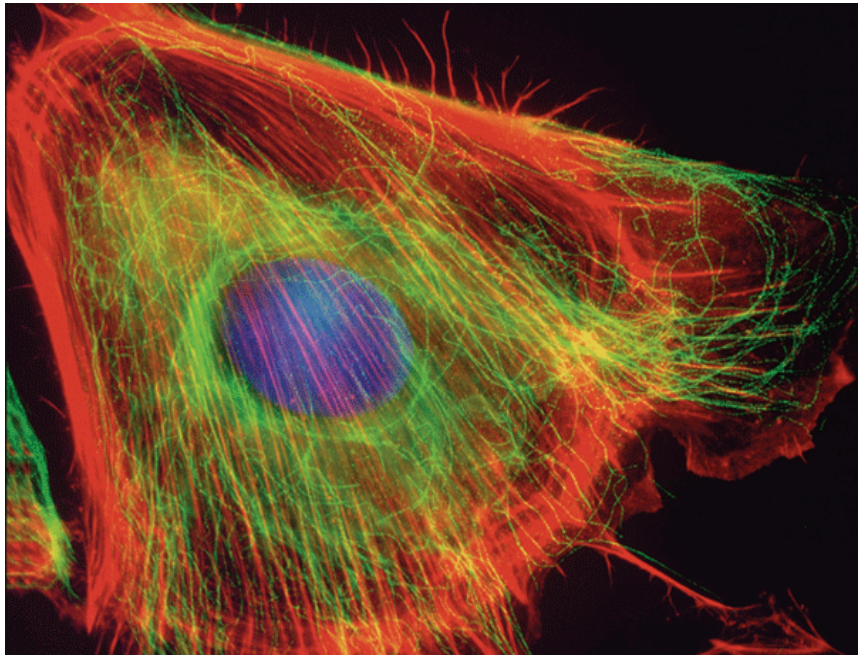
3.2 Cell Organelles

KEY CONCEPT **Eukaryotic cells share many similarities.**



3.2 Cell Organelles

- **Cells have an internal structure.**



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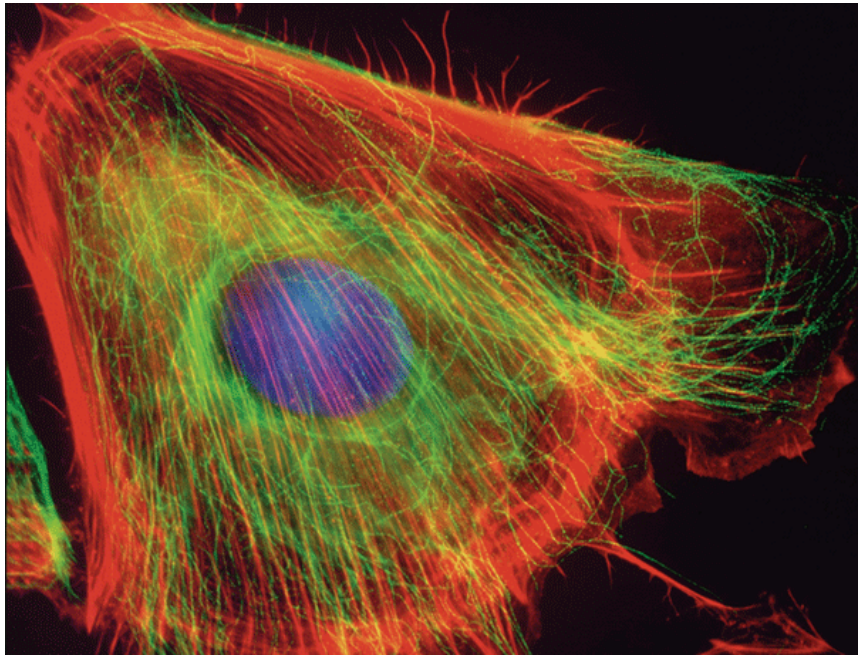
- **Cells have an internal structure.**
  - The cytoskeleton has many functions.



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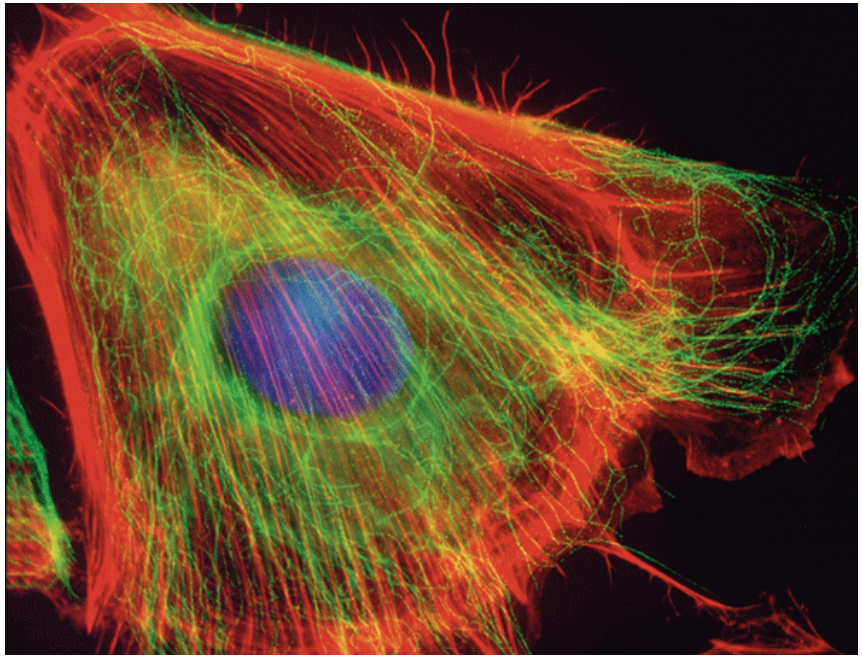
    - supports and shapes cell



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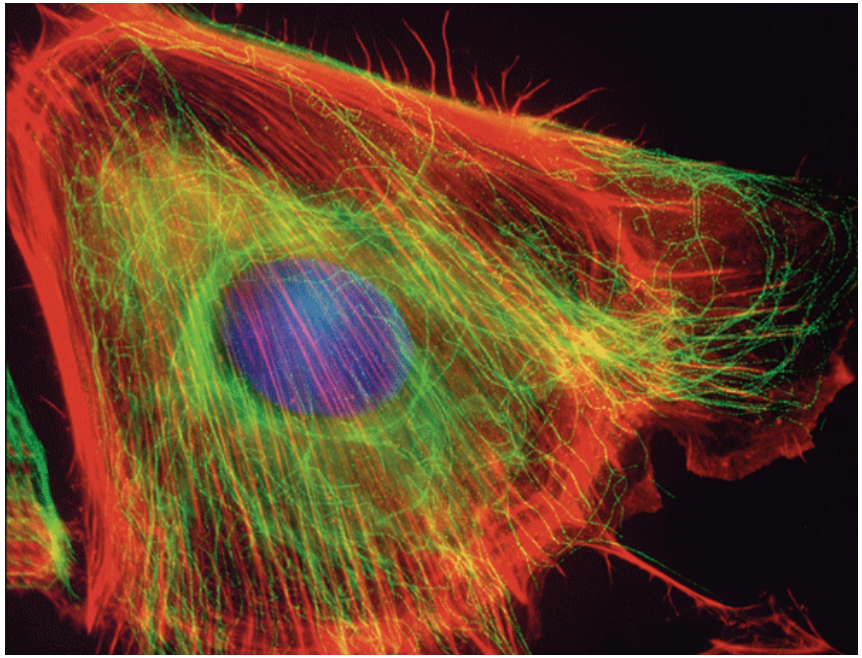
  - The cytoskeleton has many functions.
    - supports and shapes cell
    - helps position and transport organelles



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    - helps position and transport organelles
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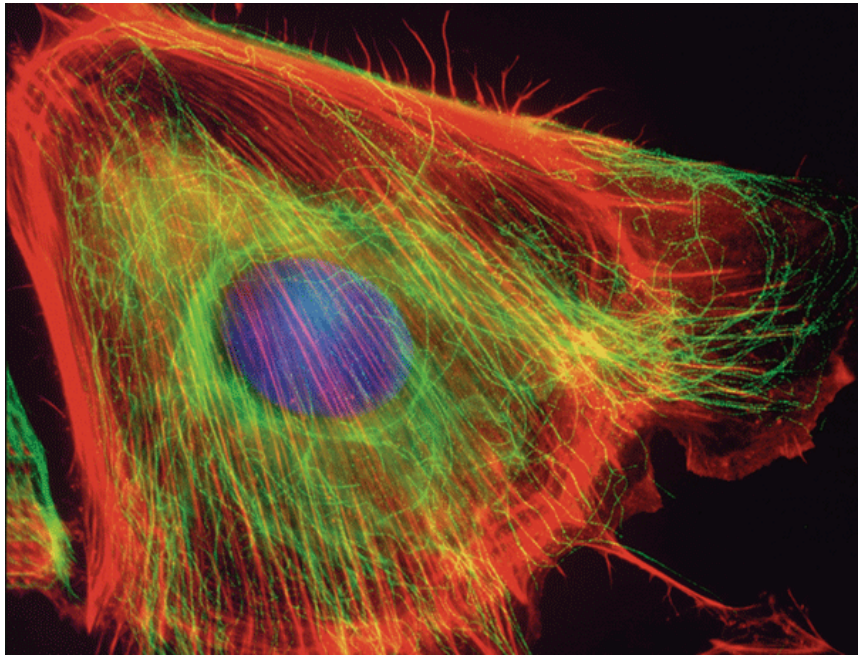

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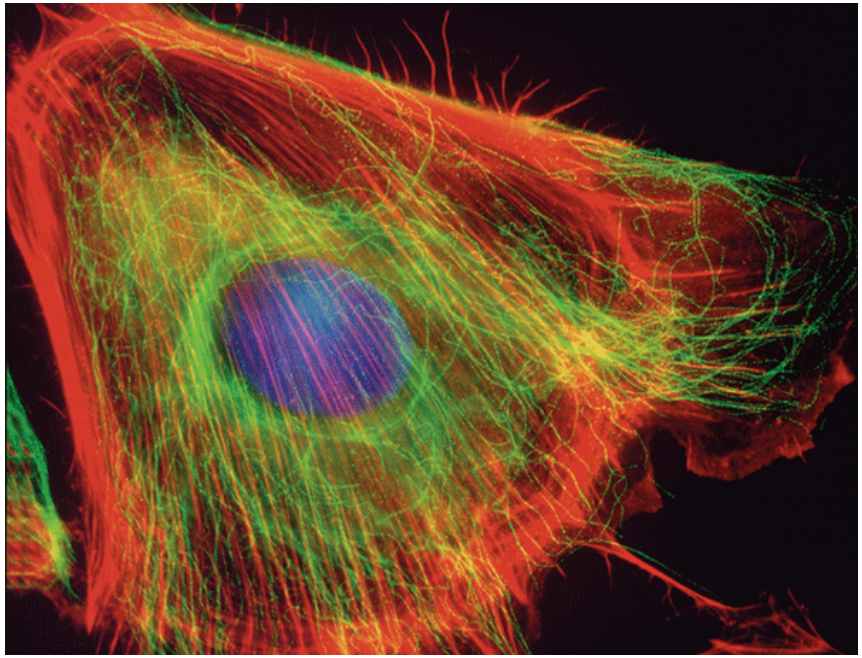
    - assists in cell division



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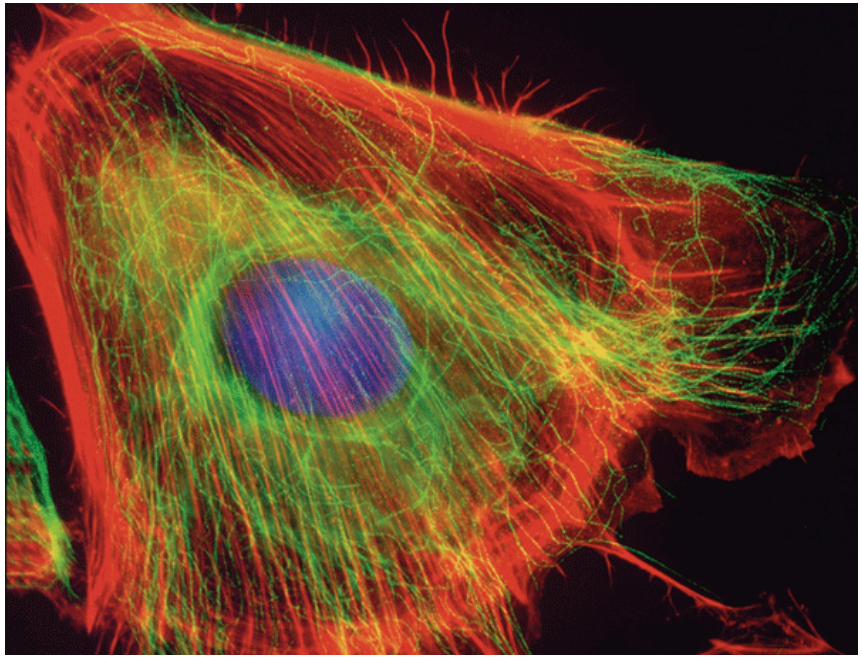
    - provides strength
    - assists in cell division
    - aids in cell movement



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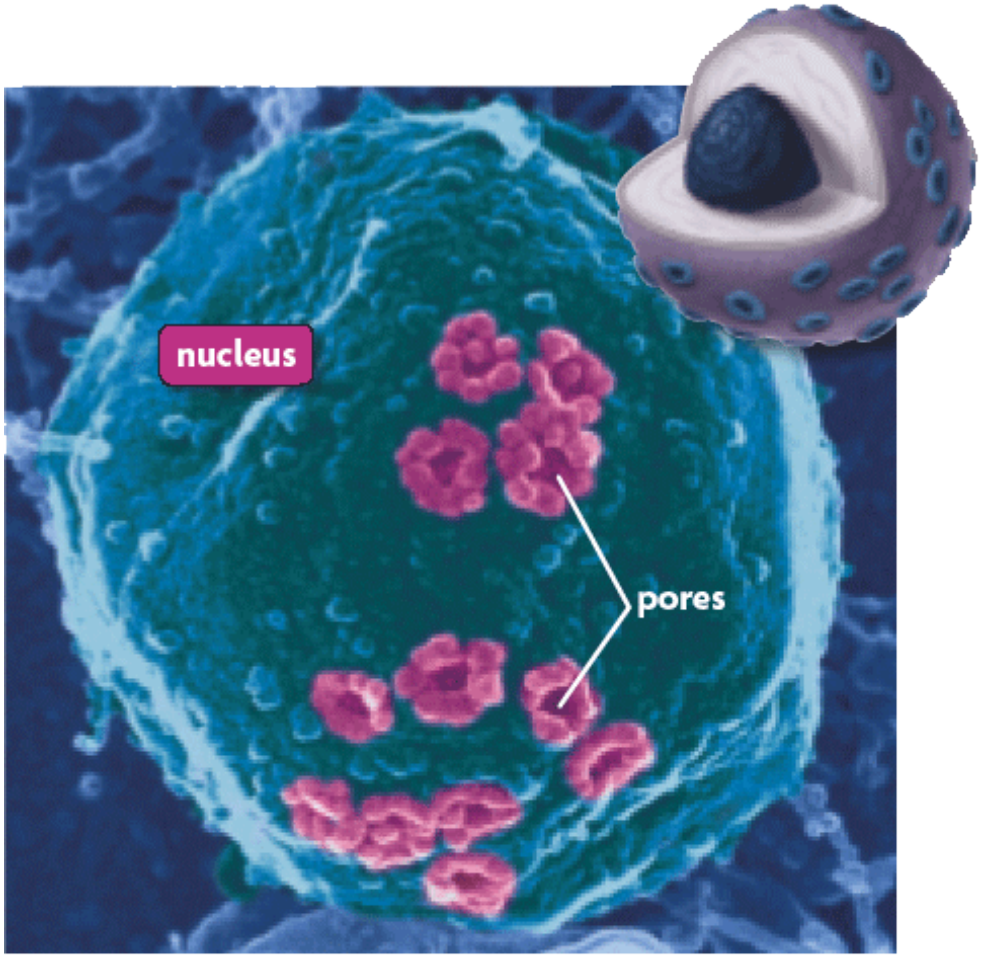

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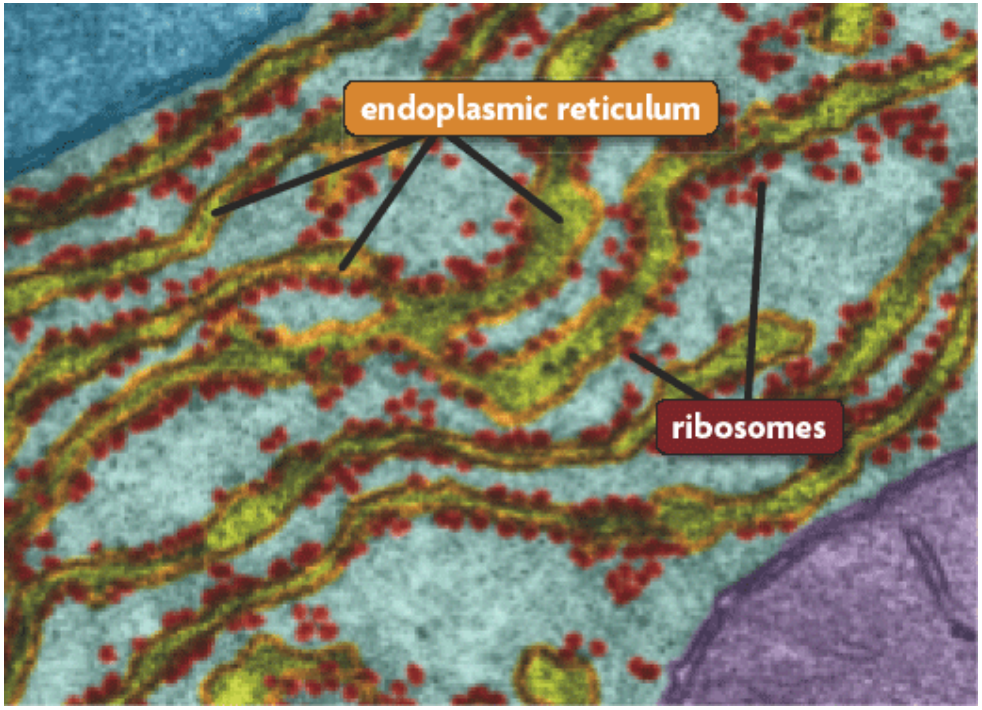
  - Many processes occur in the endoplasmic reticulum.



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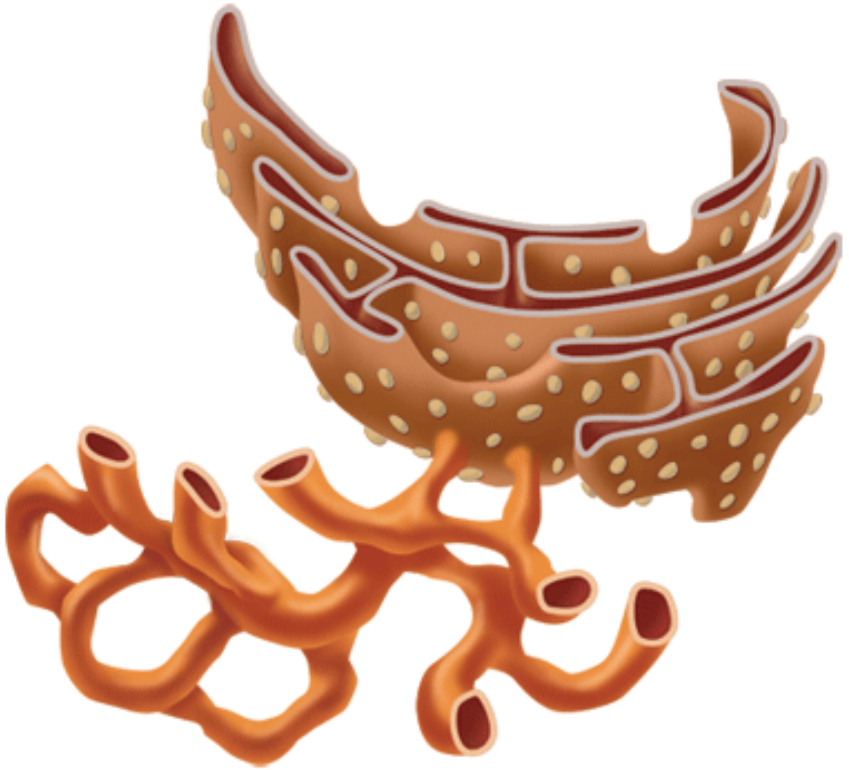
  - There are two types of endoplasmic reticulum.



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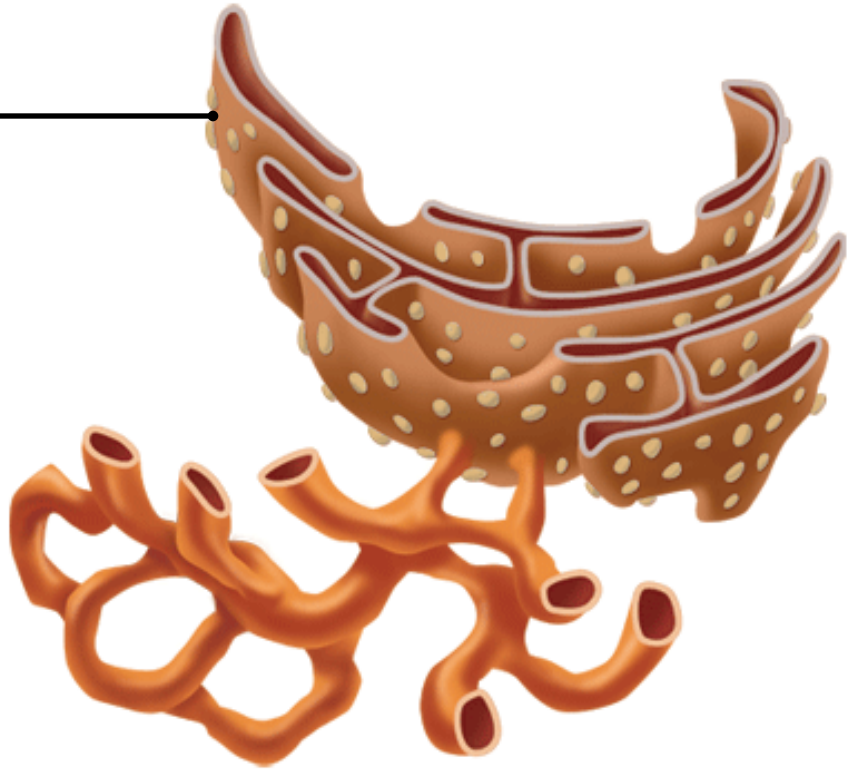

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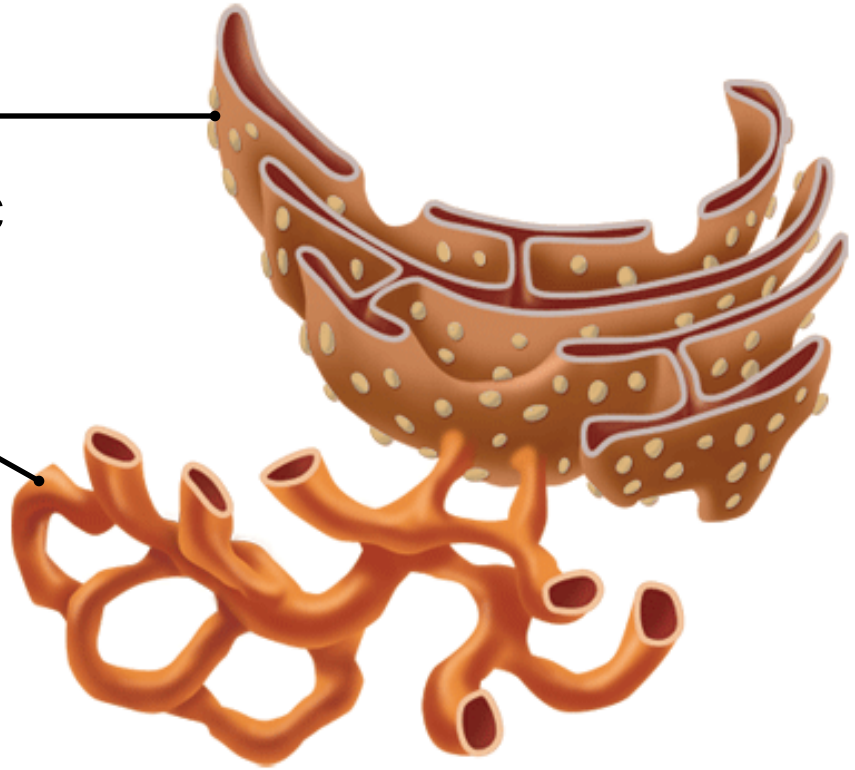

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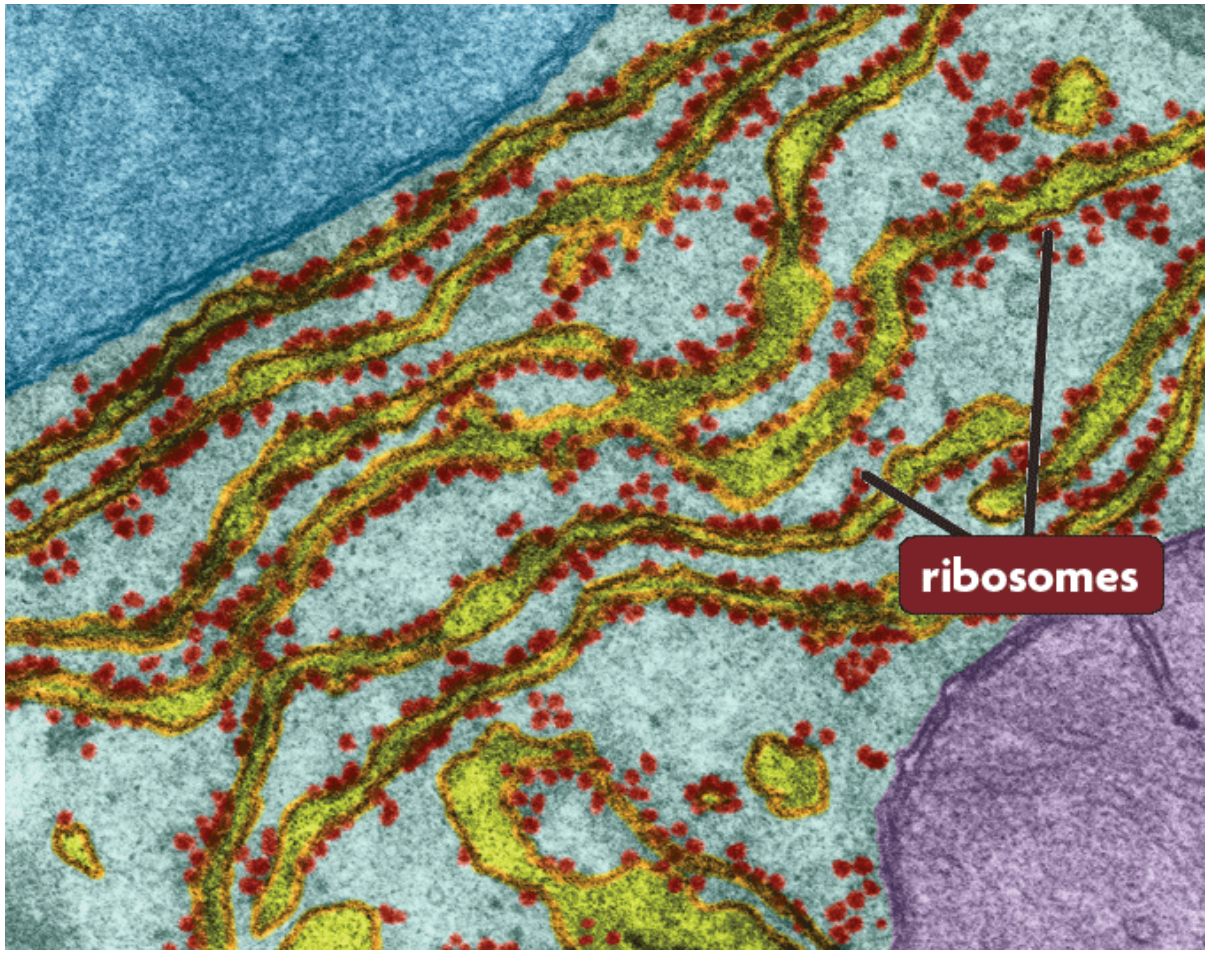
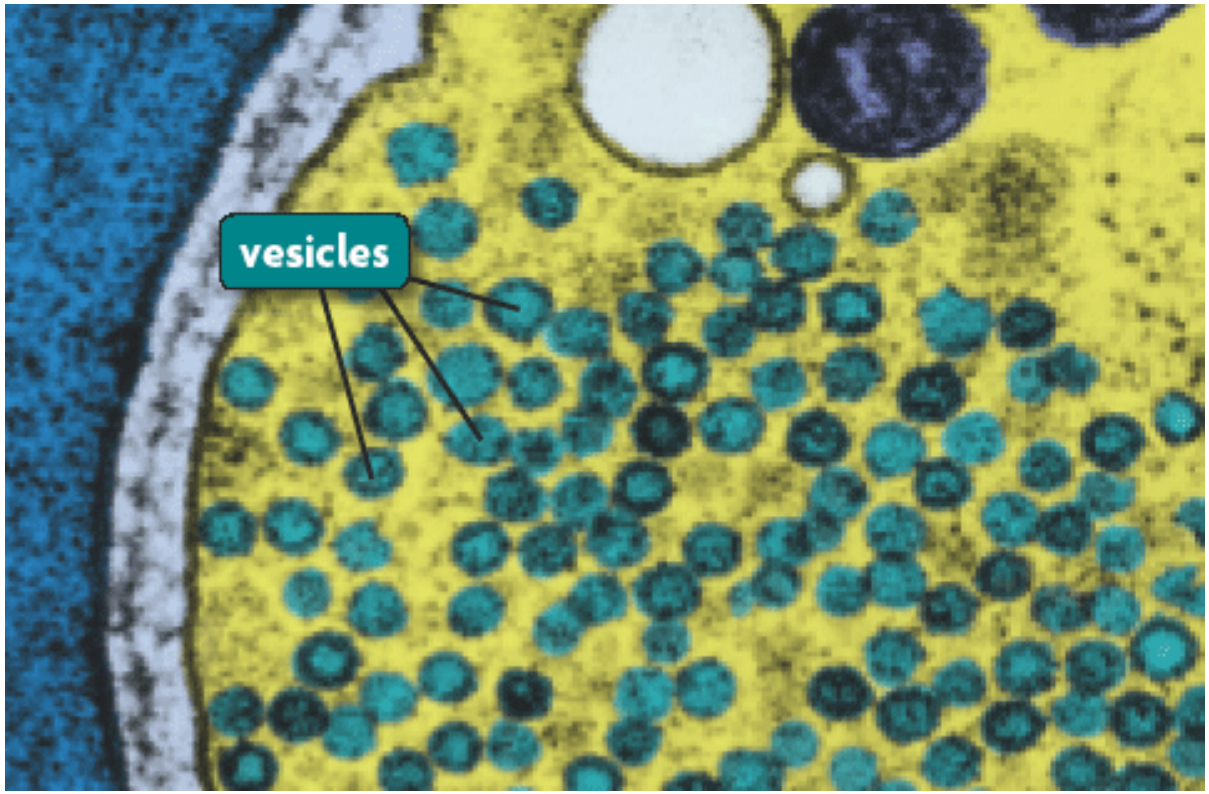


3.2 Cell Organelles

- **Several organelles are involved in making and processing proteins. (continued)**
  - Ribosomes link amino acids to form proteins.
  - Vesicles are membrane-bound sacs that hold materials.



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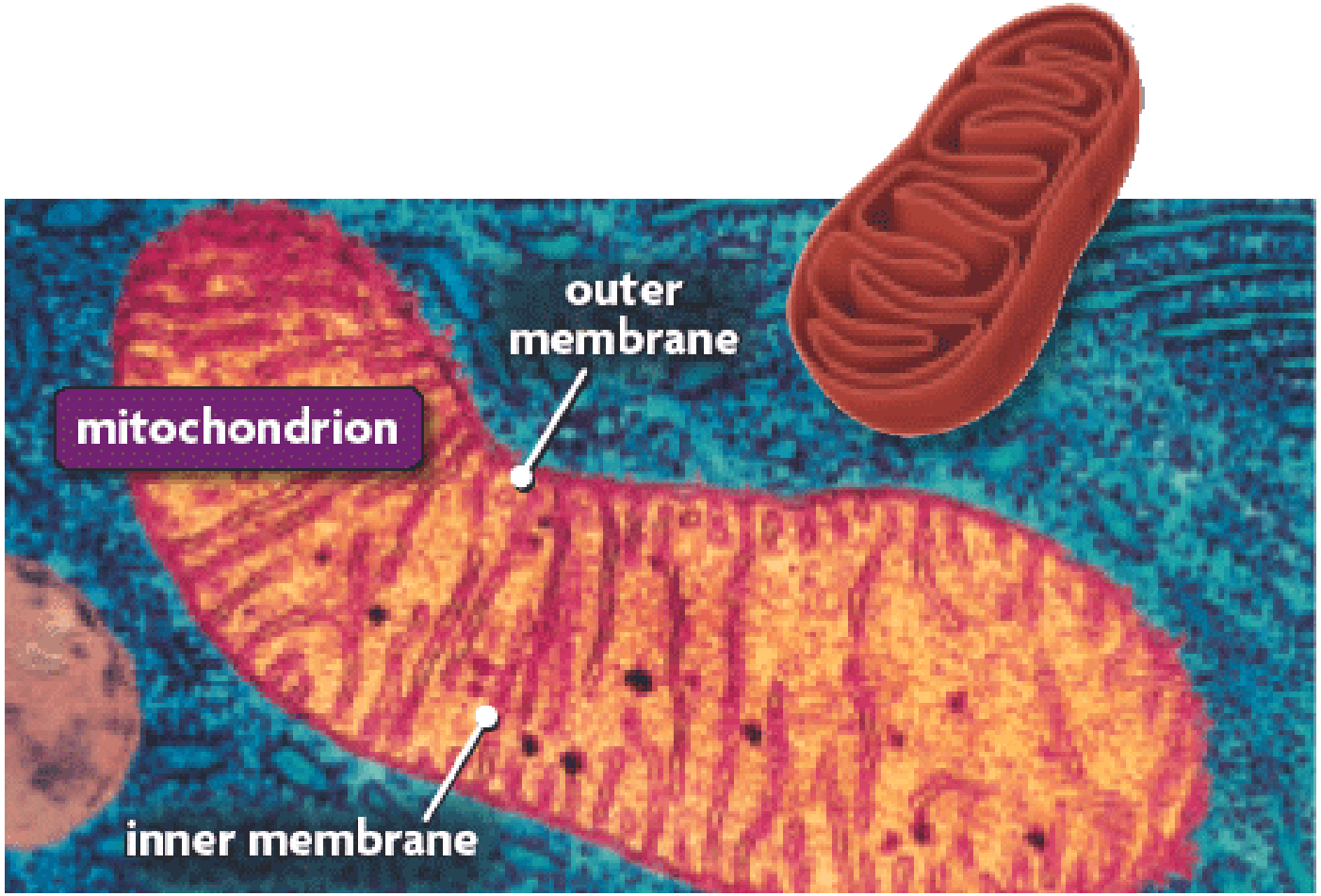

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- **Other organelles have various functions.**
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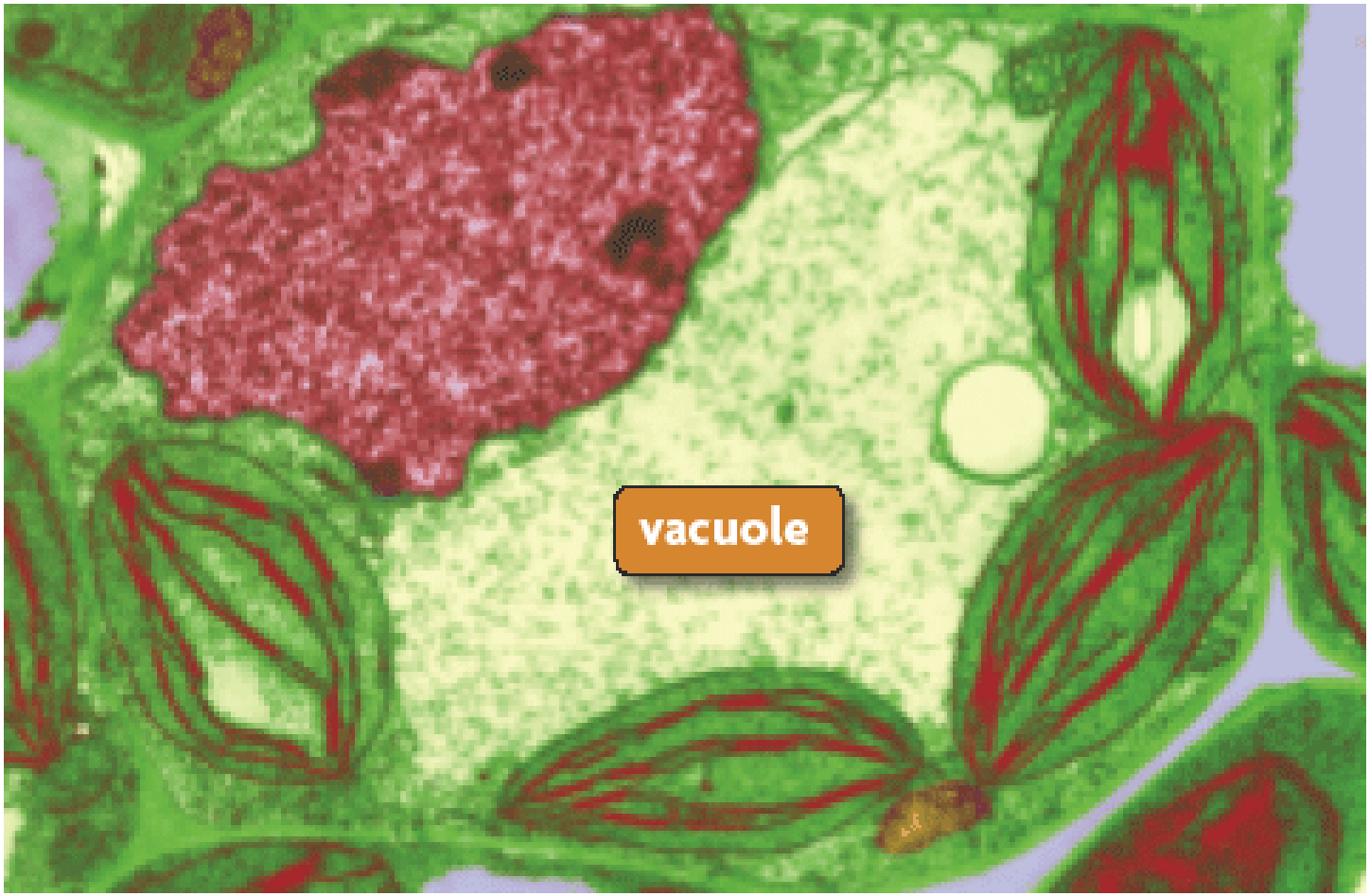
  - Vacuoles are fluid-filled sacs that hold materials.



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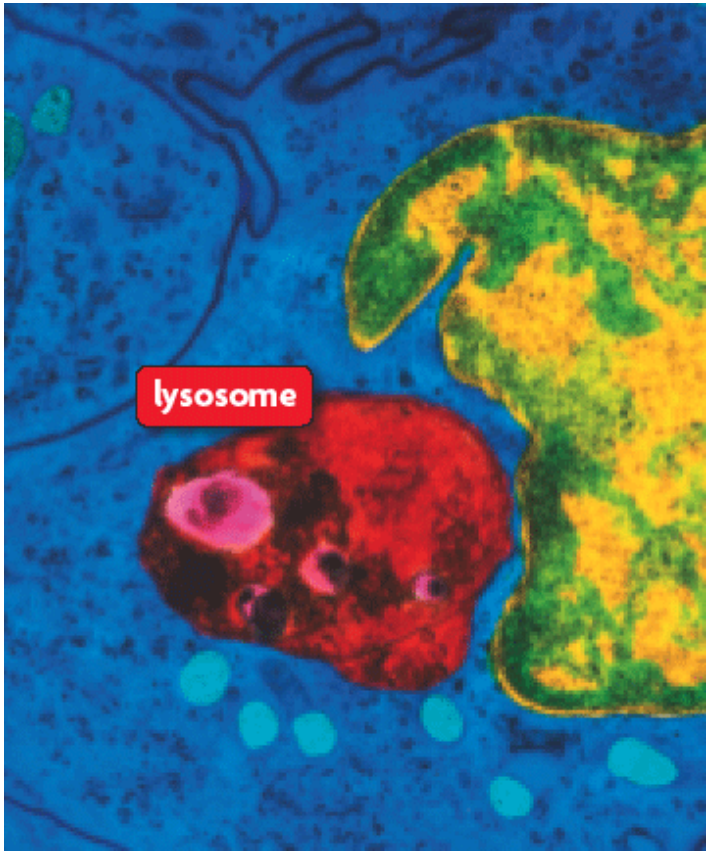

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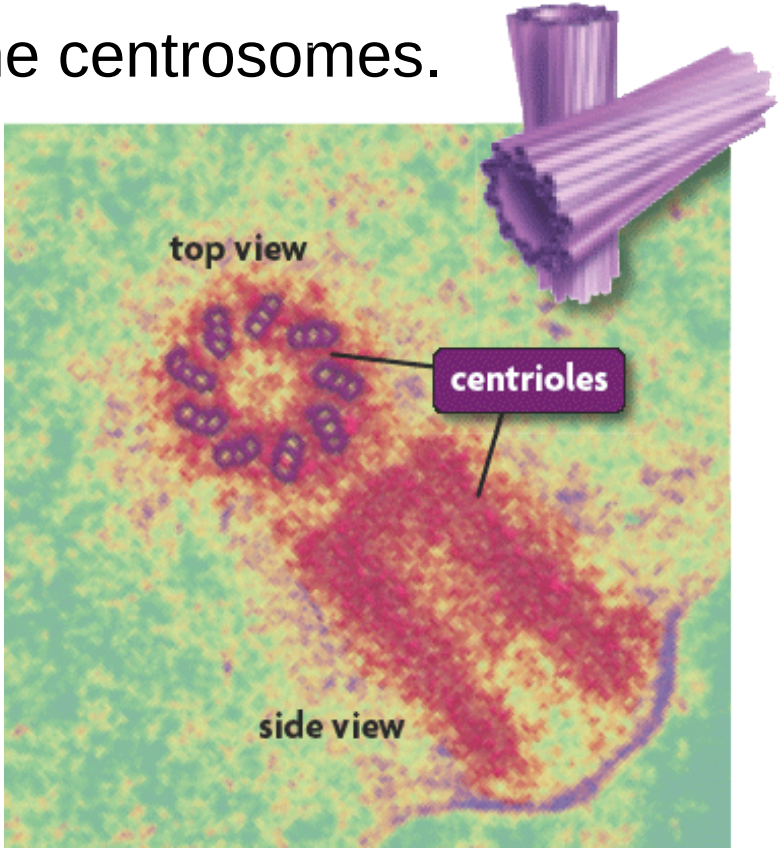

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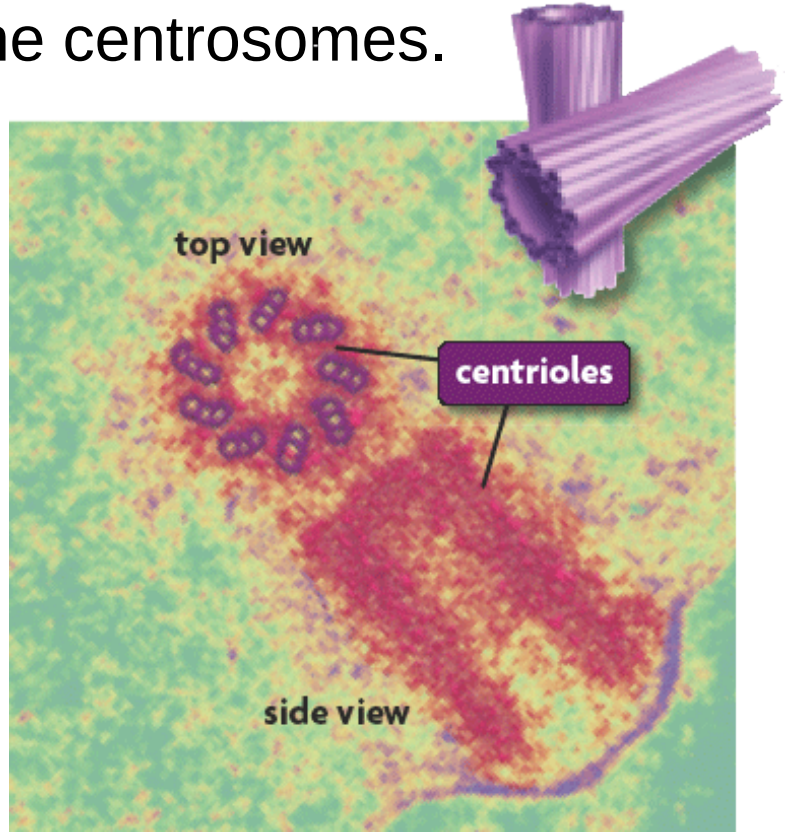

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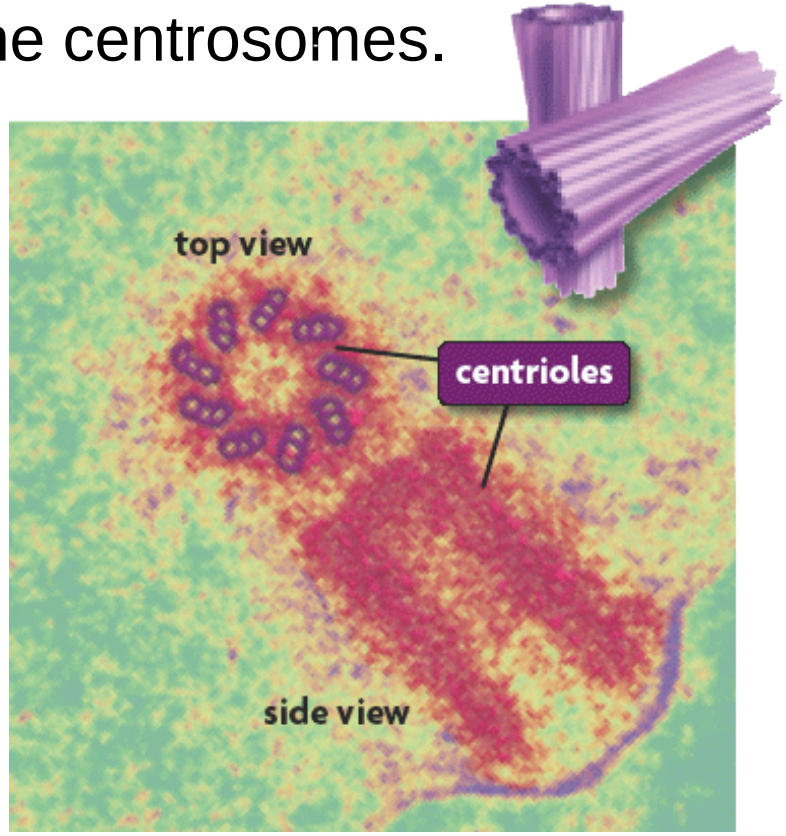
    - Centrioles form cilia and flagella.



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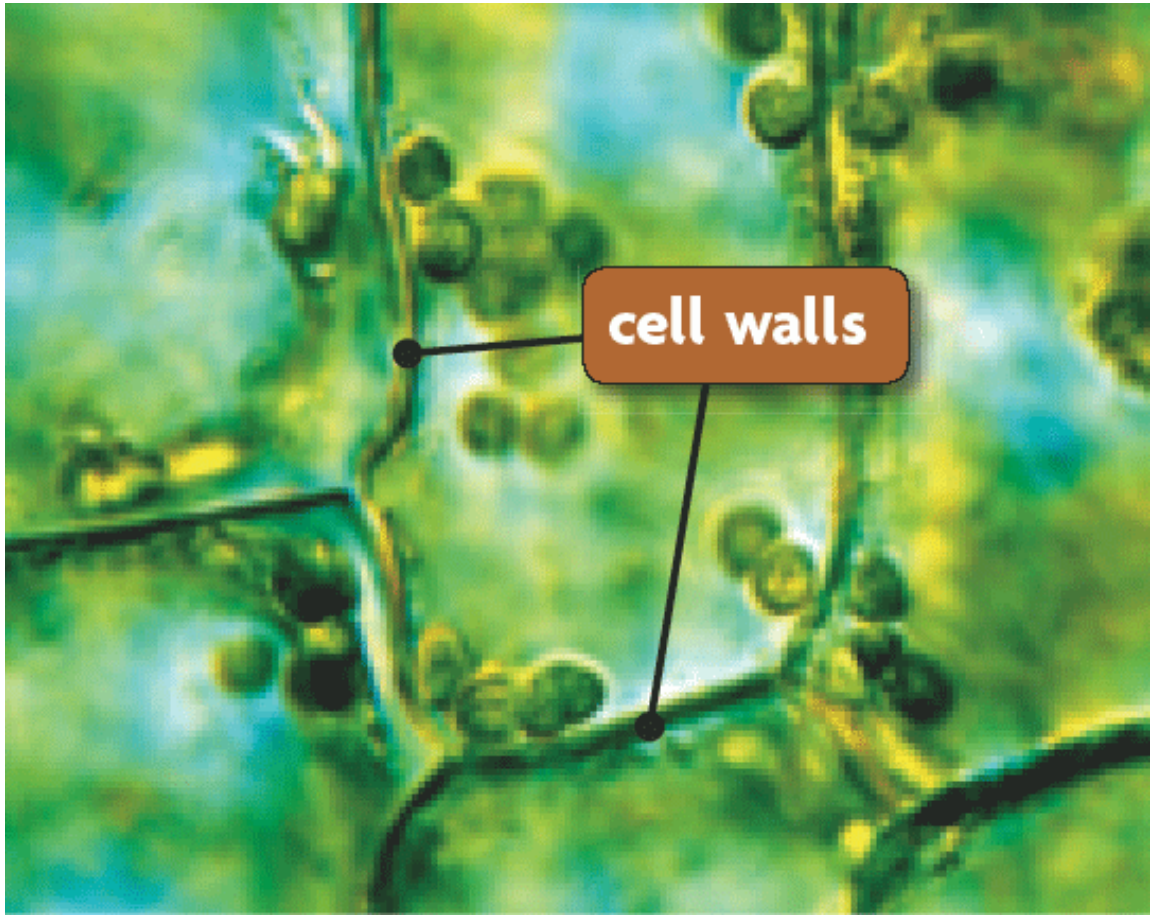

3.2 Cell Organelles

- **Plant cells have cell walls and chloroplasts.**
  - A cell wall provides rigid support.
  - Chloroplasts convert solar energy to chemical energy.