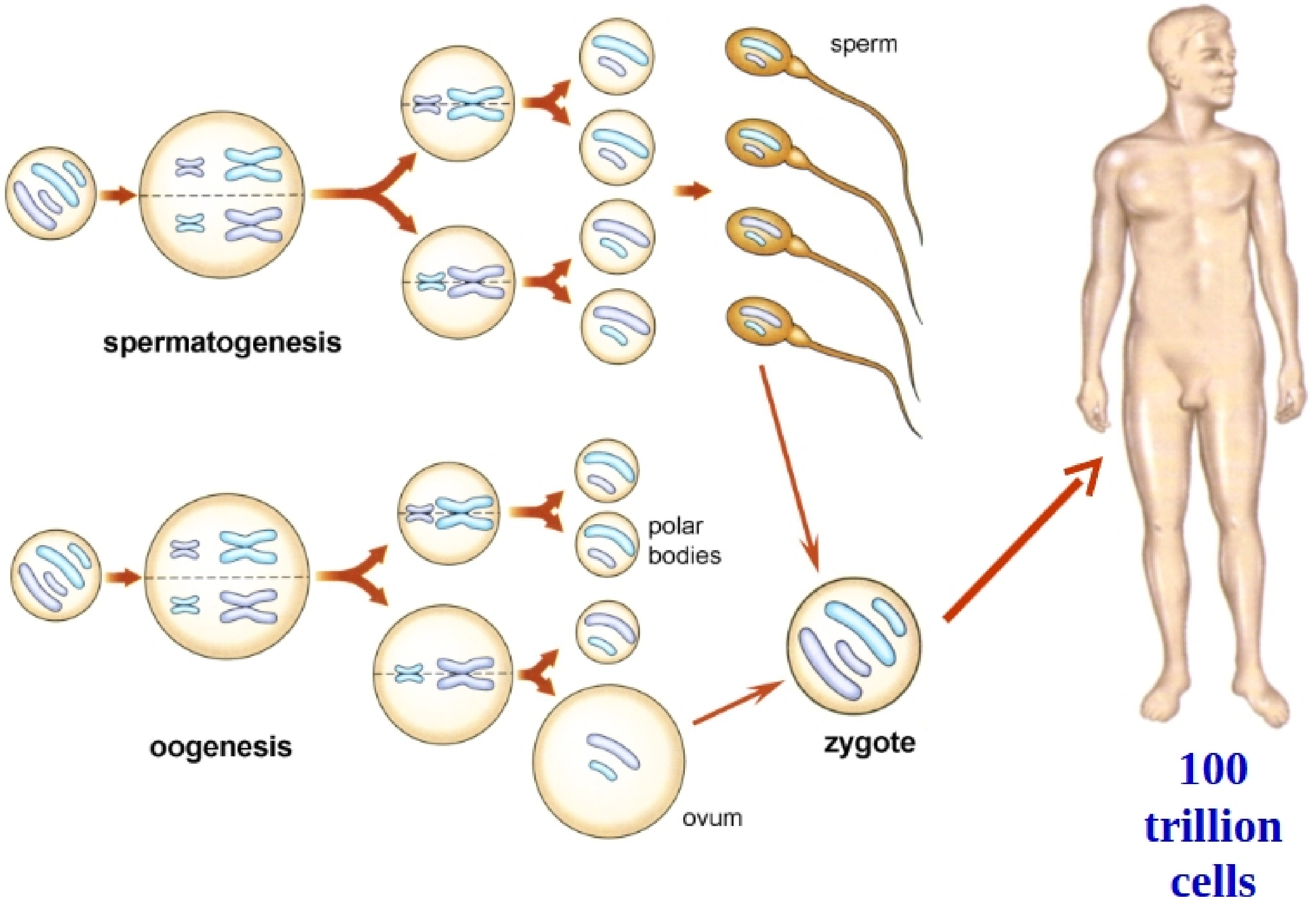


Cell Reproduction and Differentiation

Developmental Biology
and Stem Cells



**100
trillion
cells**

Mitotic Cell Division

- ~ binary fission: one cell becomes two genetically identical cells
- asexual reproduction in unicellular microorganisms
- growth, maintenance, and repair of tissues in multi-cellular organisms
- highly regulated process
- can be defined by a cell cycle