

Structure of nucleic acids I
Biochemistry 302

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Major classes of macromolecular biopolymers

- **Proteins**
- **Polysaccharides**
- **Nucleic acids**
 - Potential for self-duplication
 - Repositories and transmitters of genetic info
 - Evolutionary importance – origin of life

Central Dogma of Molecular Biology (Cell as a factory analogy)

- **DNA = permanent repository which stores master plans**
- **RNA = temporary repository → copies of certain plans**
 - Some RNAs (e.g. rRNA, tRNA, snRNA, miRNA) are tools/machines.
 - Other RNAs (mRNAs) are just plans.
- **Protein = working machinery**

