Tutorial 2a exercise paper

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1 Introduction

This is introduction. Summary is in Section 4

2 Protein structure

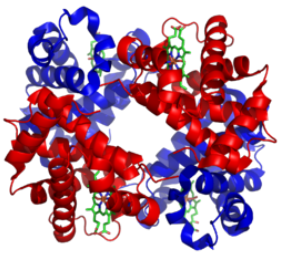

Figure 1: Structure of human hemoglobin

Figure 1 shows the structure of a protein obtained by crystallography . For more details, check the Protein Data Bank [1]

2.1 Levels of protein structure

Tabel 1 lists the different levels of structure in a protein [1]

[1] We can see from figure 1 that hemoglobin has a quaternary structure

Table 1: List of the levels of protein structure

Level of structure	Description
primary	sequence of the amino acids making up the protein chain
secondary	regions of ordered structures in the protein chain
tertiary	three-dimensional shape of the protein
quaternary	held just by protein made up of subunits

3 About mathematics

e^x, A_x,$\lambda \cdot \rho \ldots$

$$\sigma = \sqrt{\frac{1}{N-1}\sum_{i=1}^{N}(x_i - \mu)^2} \tag{1}$$

$$\hat{H}\ \Psi(r,t) = i\frac{h}{2\pi}\frac{\partial}{\partial t}\ \Psi(r,t) \tag{2}$$

Equation 1 is the formula for the sample standard deviation. Equation 2 is the time-dependent Schrödinger equation.

4 Summary

We learned the following:

- Each protein has different levels of structure
- LaTeXis good for:
  1. Structuring very **good looking** documents
  2. Writing equations

```
\usepackage{verbatim}
```

References

[1] Protein Data Bank website: `https://www.rcsb.org/pdb/home/home.do`