The use of a dipole trap in a cold-atom electron source



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A thesis submitted for the degree of $Masters\ of\ Science$

October 2012

1. Reviewer: Name	
2. Reviewer:	
Day of the defense:	
	Signature from head of PhD committee:

Abstract

Put your abstract or summary here, if your university requires it.

Acknowledgements

I would like to acknowledge the thousands of individuals who have coded for the LaTeX project for free. It is due to their efforts that we can generate professionally typeset PDFs now.

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Introduction

1.1 put section name here

Write your text without any further commands, like this:.... Any organised system requires energy, be it a machine of some kind or a live organism. Energy is needed to win the uphill battle against entropy and pull together lifeless molecules to be able to do something in this world, like complete a PhD.

1.1.1 Name your subsection

Different organised systems have different energy currencies. The machines that enable us to do science like sizzling electricity but at a controlled voltage. Earth's living beings are no different, except that they have developed another preference. They thrive on various chemicals.

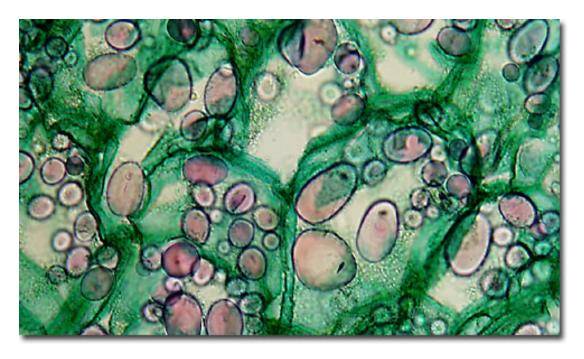
Most organisms use polymers of glucose units for energy storage and differ only slightly in the way they link together monomers to sometimes gigantic macromolecules. Dextran of bacteria is made from long chains of α -1,6-linked glucose units.

Starch of plants and glycogen of animals consists of α -1,4-glycosidic glucose polymers (1). See figure 1.2 for a comparison of glucose polymer structure and chemistry.

Two references can be placed separated by a comma (1, 2).

Insulin stimulates the following processes:

• muscle and fat cells remove glucose from the blood,



 $\begin{tabular}{ll} \textbf{Figure 1.1: A common glucose polymers - The figure shows starch granules in potato cells, taken from Molecular Expressions.} \end{tabular}$

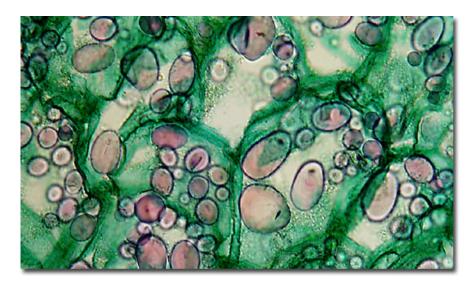


Figure 1.2: Title - Caption

- cells breakdown glucose via glycolysis and the citrate cycle, storing its energy in the form of ATP,
- liver and muscle store glucose as glycogen as a short-term energy reserve,
- adipose tissue stores glucose as fat for long-term energy reserve, and
- cells use glucose for protein synthesis.

\mathbf{Gene}	GeneID	Length
human latexin	1234	14.9 kbps
mouse latexin	2345	$10.1~\mathrm{kbps}$
rat latexin	3456	9.6 kbps

Table 1.1: title of table - Overview of latexin genes.

1. INTRODUCTION

Aims of the project

2.1 Final aim

Our ultimate goal is... $\,$

2.2 Preliminary aims

There will be several preliminary scientific targets to be accomplished on the way...

2. AIMS OF THE PROJECT

chaptername

3. CHAPTERNAME

chaptername

4. CHAPTERNAME

chaptername

5. CHAPTERNAME

chaptername

6. CHAPTERNAME

Discussion

7. DISCUSSION

Materials & methods

8. MATERIALS & METHODS

Glossary

- **DEPC** diethyl-pyro-carbonate; used to remove RNA-degrading enzymes (RNAases) from water and laboratory utensils
- **DMSO** dimethyl sulfoxide; organic solvent, readily passes through skin, cryoprotectant in cell culture
- **EDTA** Ethylene-diamine-tetraacetic acid; a chelating (two-pronged) molecule used to sequester most divalent (or trivalent) metal ions, such as calcium (Ca^{2+}) and magnesium (Mg^{2+}) , copper (Cu^{2+}) , or iron (Fe^{2+} / Fe^{3+})

POOOOOO poo poo poo pooooop

GLOSSARY

References

- $[1]\ \ Lastname.$ Title. Journal of Sth, 2007. 1
- [2] Name. Title. Journal of Sth, 2006. 1

Declaration

I herewith declare that I have produced this paper without the prohibited assistance of third parties and without making use of aids other than those specified; notions taken over directly or indirectly from other sources have been identified as such. This paper has not previously been presented in identical or similar form to any other German or foreign examination board. The thesis work was conducted from XXX to YYY under the supervision of PI at ZZZ.

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