

Insulin and cellular stress induced glucose uptake in 3T3-L1 adipocytes

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Statements

- 1. The t_{1/2} of insulin-induced GLUT4 translocation is roughly 2.5 minutes in 3T3-L1 adipocytes, consequently any phenomenon occurring only after 10 minutes is unlikely to contribute significantly to insulin-induced GLUT4 translocation.

 Maffucci *et al.* EMBO (2003) vol. 22 (16) p. 4178-4189, Ch. V this thesis.
- 2. It is remarkable that washing out a pharmacological agent for 0 minutes has such a dramatic biological effect on the cells.

 Compare Fig. 8 with Fig. 10. Kayali *et al.* Endocrinology (2003) vol.143 (10) p. 3884-3896, Ch. IV this thesis.
- 3. From the perspective of an adipocyte, insulin resistance is merely a temporal adaptation to an adverse extracellular environment.

 J.P.M. Van Putten, Regulation of insulin-sensitive hexose uptake in cultured 3T3 adipocytes. *thesis* (1984), Ch. VII this thesis
- 4. It is highly unlikely that a terminally differentiated cell can be transduced with a retrovirus only capable of infecting dividing cells.

 Bogan *et al.* Nature (2003) vol. 425 p.727-733 Suppl. Fig. 2, Ch. VI this thesis
- 5. "(...) it is unlikely that more than 75% of the adipocytes were productively infected with recombinant-adenovirus (...)". This could indicate any number between 0 and 75%, consequentially these results should be interpreted with caution. Yin *et al.* JBC (2003) vol 278 no 44 p. 43074-43080, Ch. VI this thesis
- 6. The lower the LD₅₀ of a pharmacological inhibitor, the more difficult it is to open the tube without resorting to the use of one's teeth.

 This thesis Ch. 3.
- 7. In the absence of modern supplements Jan Ullrich's physique (as compared to Lance Armstrong) would be a considerable advantage in the Tour de France.

 Tour de France (2000-2004), Ranallo *et al.* Sports Med (1998) vol. 26 no 1, p. 29-42, Fruhbeck *et al.* Am J Physiol Endocrinol Metab (2001) vol. 280 no 6, p. E827-847
- 8. The strength of a proposed hypothesis is determined by the knowledge of the model-system applied: Thus, if this knowledge is flawed, the proposed hypothesis is likely so as well.

 Woo *et al.* Nature (1998) vol. 394, p.700-704, Jiminez *et al.* Nature (1999) vol. 400, p. 81 83
- 9. The beauty of nature can in its totality be wholly appreciated in its smallest entities. (Natura nusquam magis est tota quam in minimis)
 Plinus the younger (62-115), long before the genesis of molecular biology.

10a. The concept of a finite universe (rather than an infinite one) is horrible, for it automatically implies the curiosity driven, scientific acquisition of knowledge itself is finite.

Janna Levine -How the universe got its spots. (2002) ISBN 0 75381 376 9

10b. There is a theory which states that if ever anyone discovers exactly what the universe is for and why it is here, it will instantly disappear and be replaced by something even more bizarre and inexplicable...

There is another theory which states that this has already happened.

Douglas Adams-Hitchhikers Guide to the Galaxy. (1986) ISBN 0 434 009202

11. To venture on poorly trodden paths may be wise for a scientist... but is not so clever for a hill-walker.

Southern Upland Way, Scotland, UK (2002)

12. Philosophy of Gardener:

Brilliant chances are often cleverly disguised as insurmountable problems...

Unfortunately the reverse is true as well.

"Murphy's Law" Edwards Air Force Base (1949)

AFFTC/PA, 1 S. Rosamond Blvd., Edwards AFB, CA 93524, USA

- 13. "Biological Milk". When is milk not biological? Albert Heijn
- 14. Monarchy is a most costly inherited affliction. Amsterdam (02-02-2002)