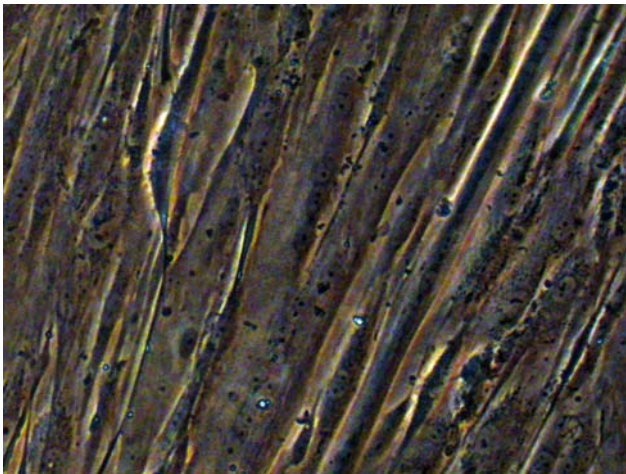


# Glucose uptake *in vitro*

CIM workshop 2008

# Glucose uptake in vitro

Insulin, IL-6



Differentiated myotubes



Glucose uptake?

- Serum starve cells ~2-3h
- Incubate with insulin/IL-6
- Change to glucose –free media
- Add radioactive glucose [ $H^3$ ]
- Lyse the cells
- Transfer lysates to scintillation tubes with scintillation fluid
- Count in a scintillation counter

# Practical work in the cell lab

- Working sterile
  - EtOH, gloves, short sleeves
  - Closed room (not today)
- Working with  $^3\text{H}$ 
  - Skin will protect from radiation ( $\beta$ -radiation)
  - Not good if gets inside the body
  - Gloves, isolated workspace, special waste