

# Nedfrysning af muskel biopsier

Ny metode til indstøbning af muskel biopsier vha epp rør med huller i N2

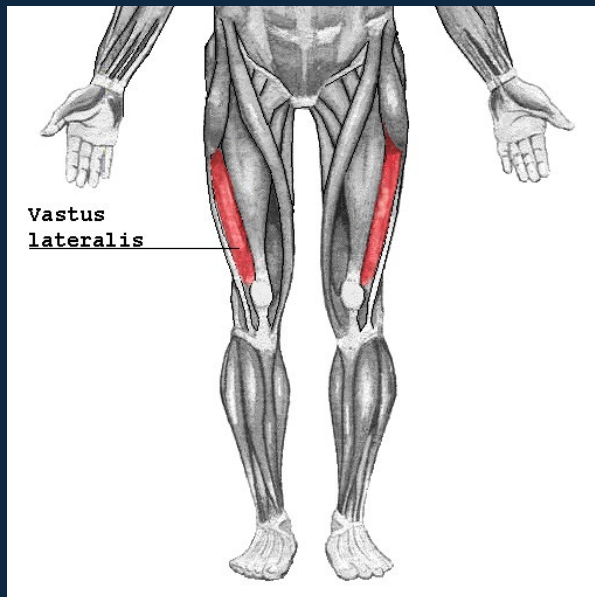


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SDCA forskning  
SDCA Århus

# Muskelbiopsier taget med bergstrøm nål

## Humane studier

Eksempler på humane studier på SDCA: Træning, faste, vægttab, immobilisering, væksthormoner...



OCT indstøbning

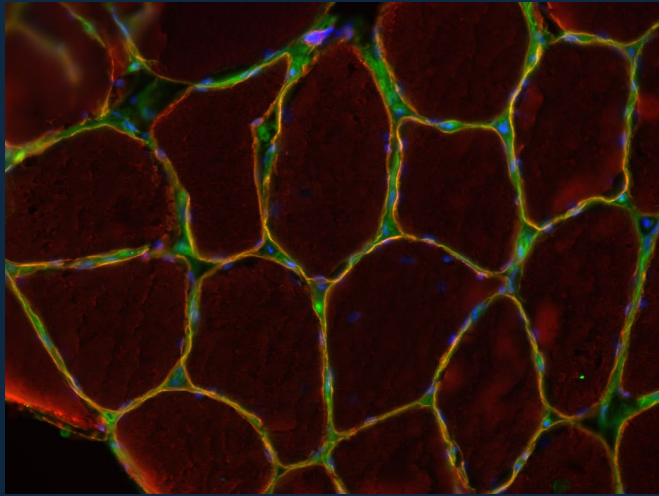
Protein analyser

RNA

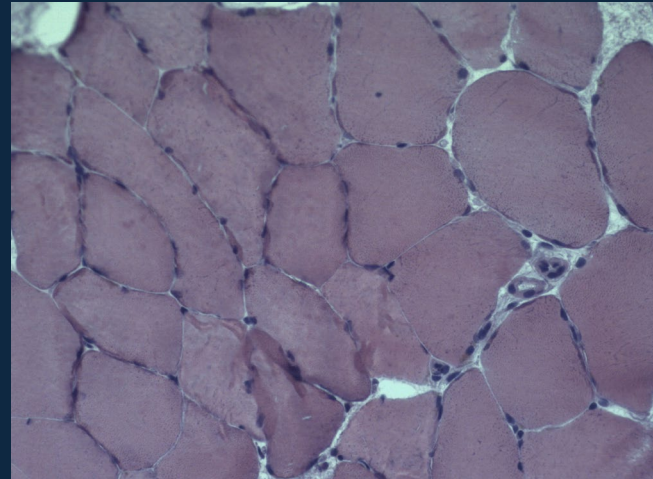
FACS sortering

Spatial transcriptomics.....

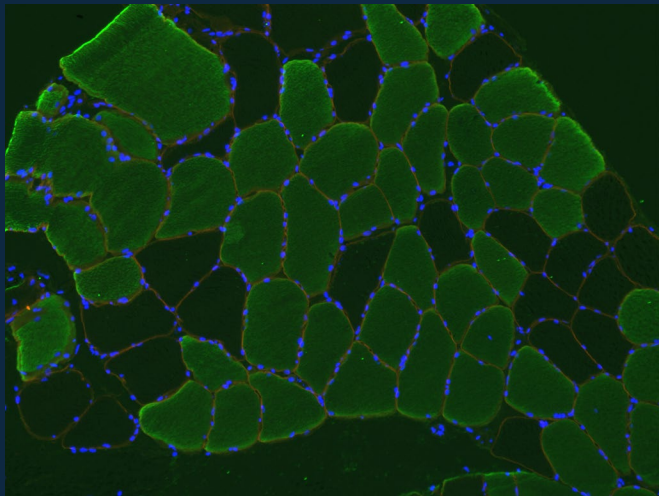
# Eksempler farvninger



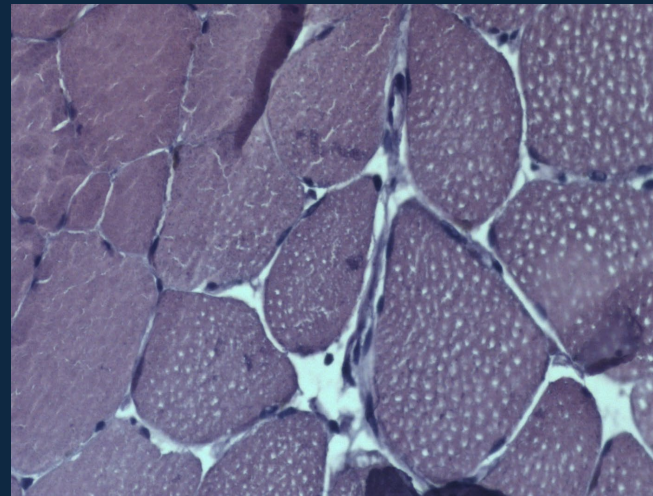
MHC, dystrophin  
WGA, DAPI



HE



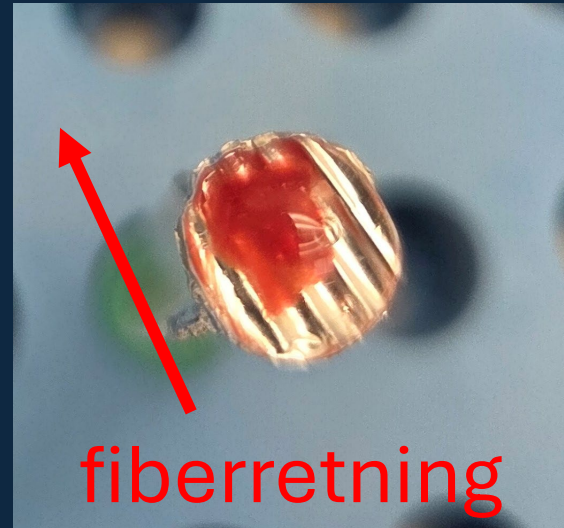
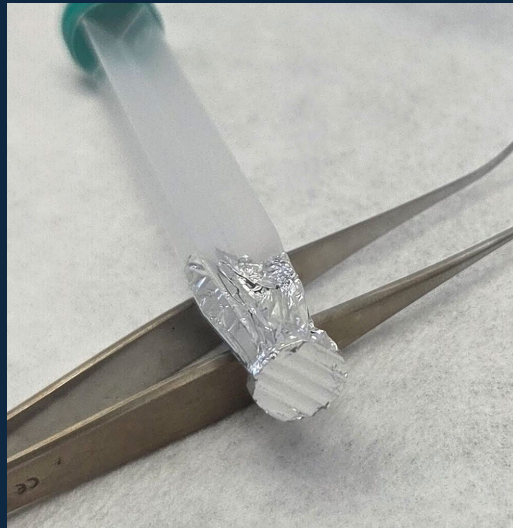
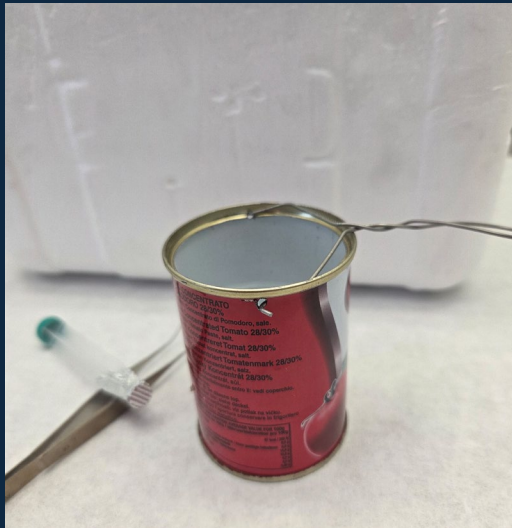
Type I muscle  
Actin, dystrophin,  
DAPI



Eksempel på  
frysesprængninger

# Indstøbning i OCT med isopentan og N2

## Tidligere metode



# Indstøbning i OCT med isopentan og N2



## 2.2 Label elements

### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :

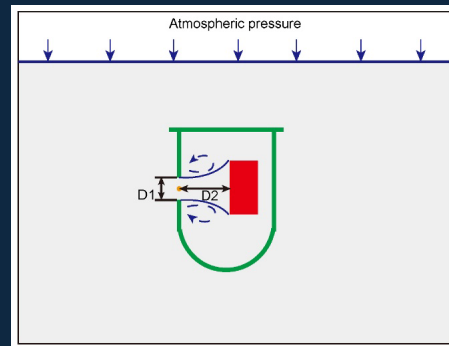
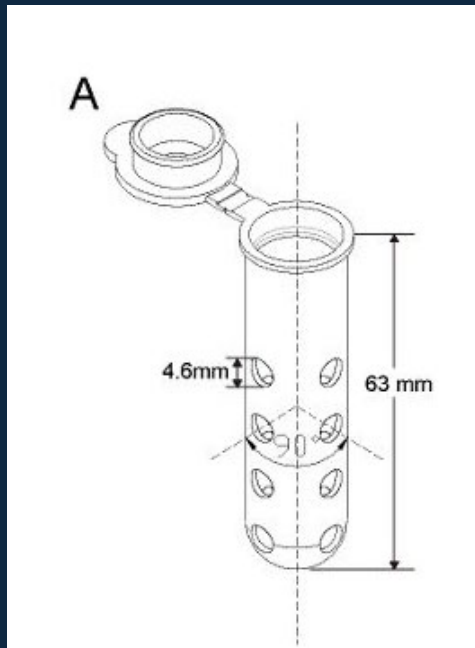


Signal word : Danger

Hazard statements : H224 Extremely flammable liquid and vapour.  
H304 May be fatal if swallowed and enters airways.  
H336 May cause drowsiness or dizziness.  
H411 Toxic to aquatic life with long lasting effects.

Supplemental Hazard Statements : EUH066 Repeated exposure may cause skin dryness or cracking.

# Ny metode til OCT indstøbning vha rør med huller og N2

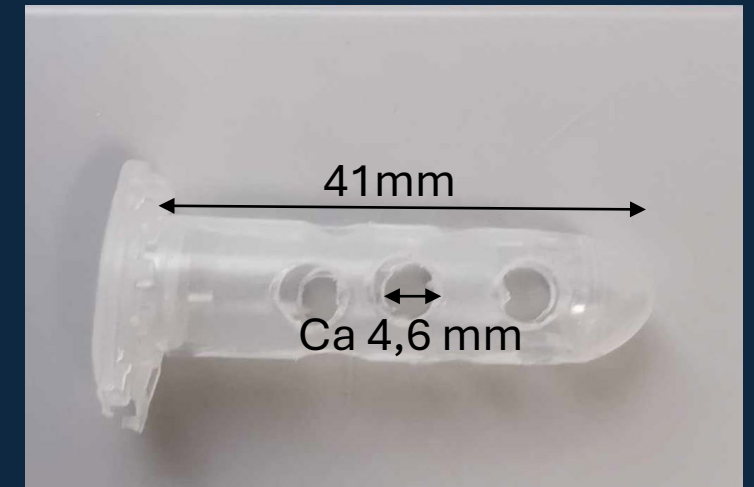
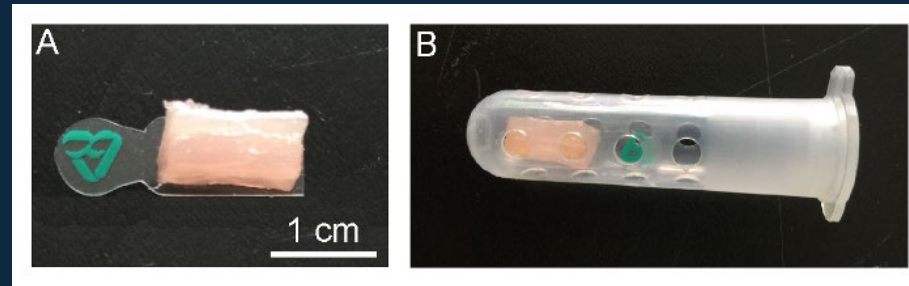
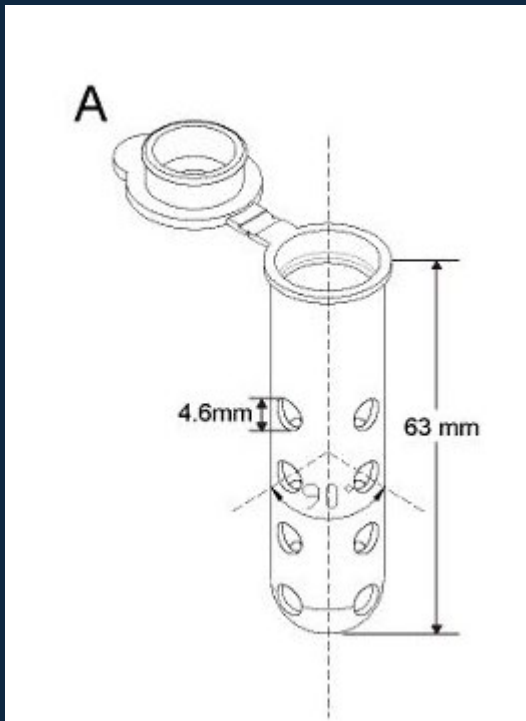


**Figure 5: Liquid Nitrogen Flow through a Sharp-edged Orifice.** When immersing the whole multi-hole cryovial in liquid nitrogen, atmospheric pressure forces liquid nitrogen into the tube through the inlet holes. The presence of the holes makes the flow accelerate through them, thus increasing the velocity. A recirculating flow (in blue) develops immediately downstream of the orifice (in orange).  $D_1$  indicates the diameter of the orifice on the wall of the tube and  $D_2$  represents the distance between the orifice and the muscle sample (in red).

**A Multi-hole Cryovial Eliminates Freezing Artifacts when Muscle Tissues are Directly Immersed in Liquid Nitrogen**

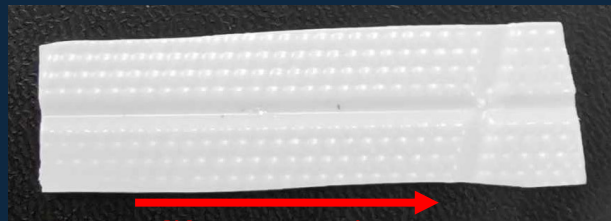
Yizhong Huang<sup>1</sup>, Maozhang He<sup>1</sup>, Qingjie Zeng<sup>1</sup>, Lin Li<sup>1</sup>, Zhen Zhang<sup>1</sup>, Junwu Ma<sup>1</sup>, Yanyu Duan<sup>1</sup>  
<sup>1</sup>State Key Laboratory for Pig Genetic Improvement and Production Technology, Jiangxi Agricultural University

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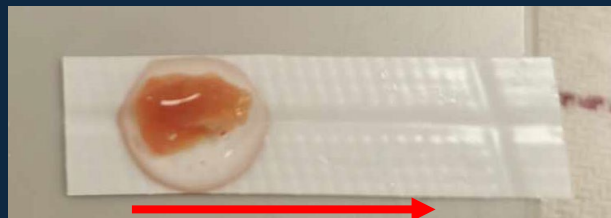
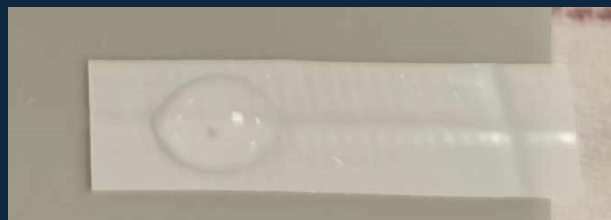


4 x 3 huller i siderne  
1 hul i toppen

# Ny metode til OCT indstøbning vha rør med huller og N2



fiberretning



fiberretning



# Ny metode til OCT indstøbning vha rør med huller og N2

