



RoBlood

Automatic Bloodsampling

Ph.d.-student

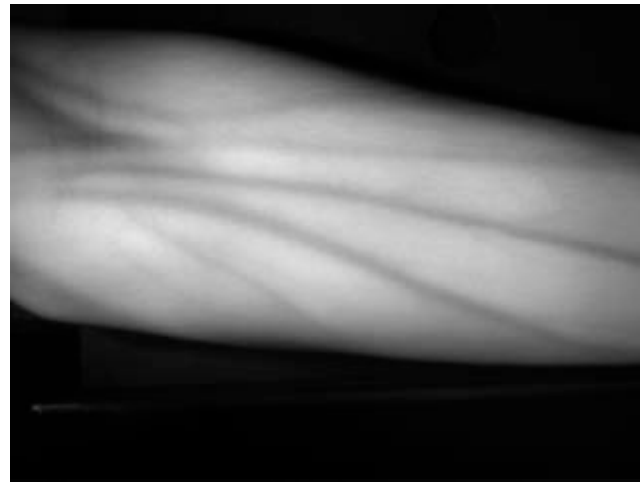
Thiusius Rajeeth Savarimuthu

trs@mmmi.sdu.dk





University of Southern Denmark
Sygehus Lillebælt
Odense University Hospital
RoboCluster
Teknologisk Institut
Kolding Designschool



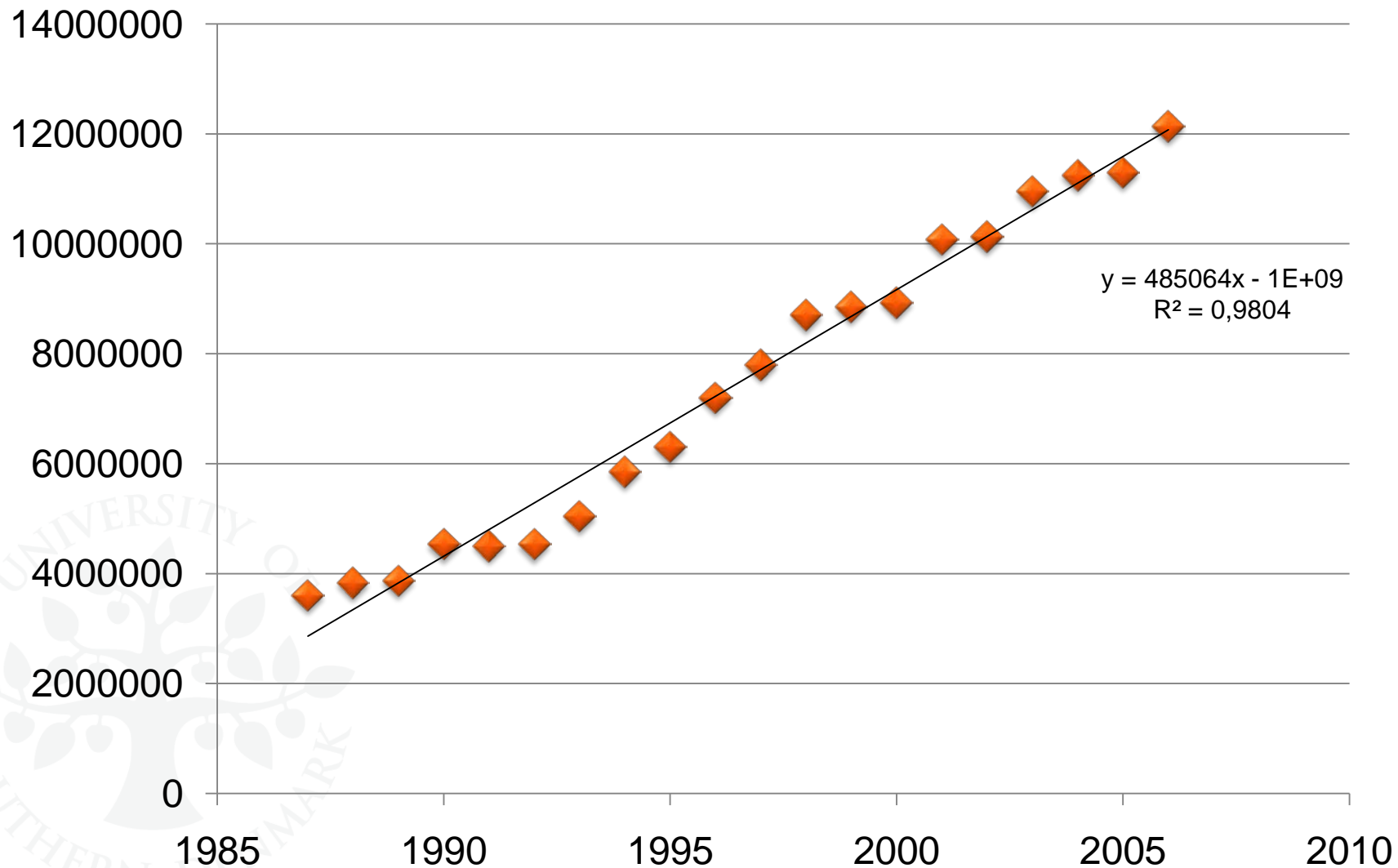


Why are we doing it?





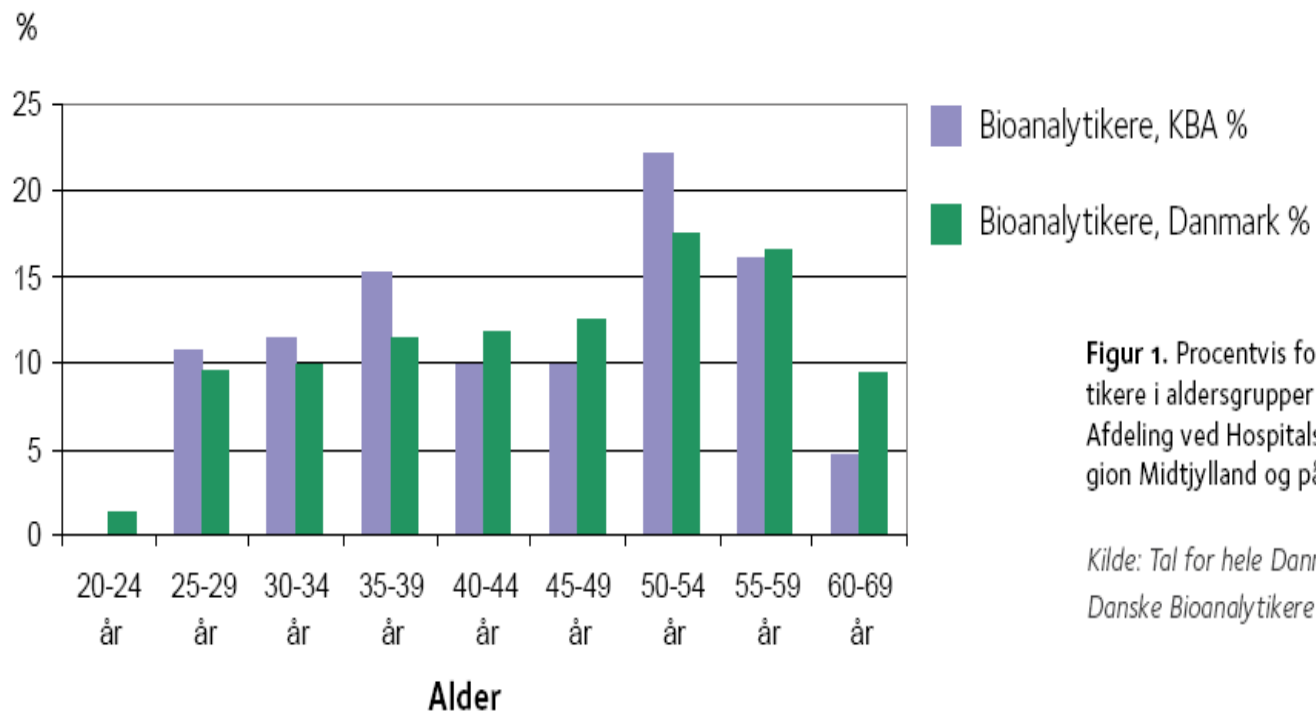
Bloodsamples





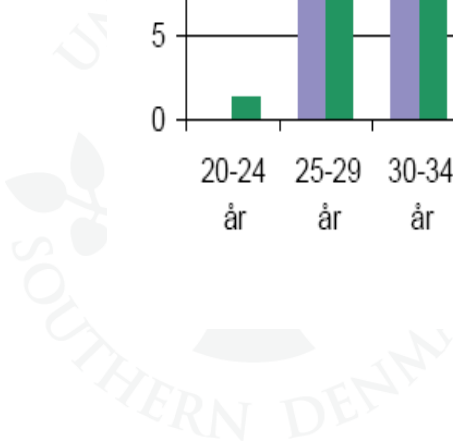
Phlebotomist

BIOANALYTIKERE 2007



Figur 1. Procentvis fordeling af bioanalytikere i aldersgrupper i Klinisk Biokemisk Afdeling ved Hospitalsenheden Vest i Region Midtjylland og på landsplan.

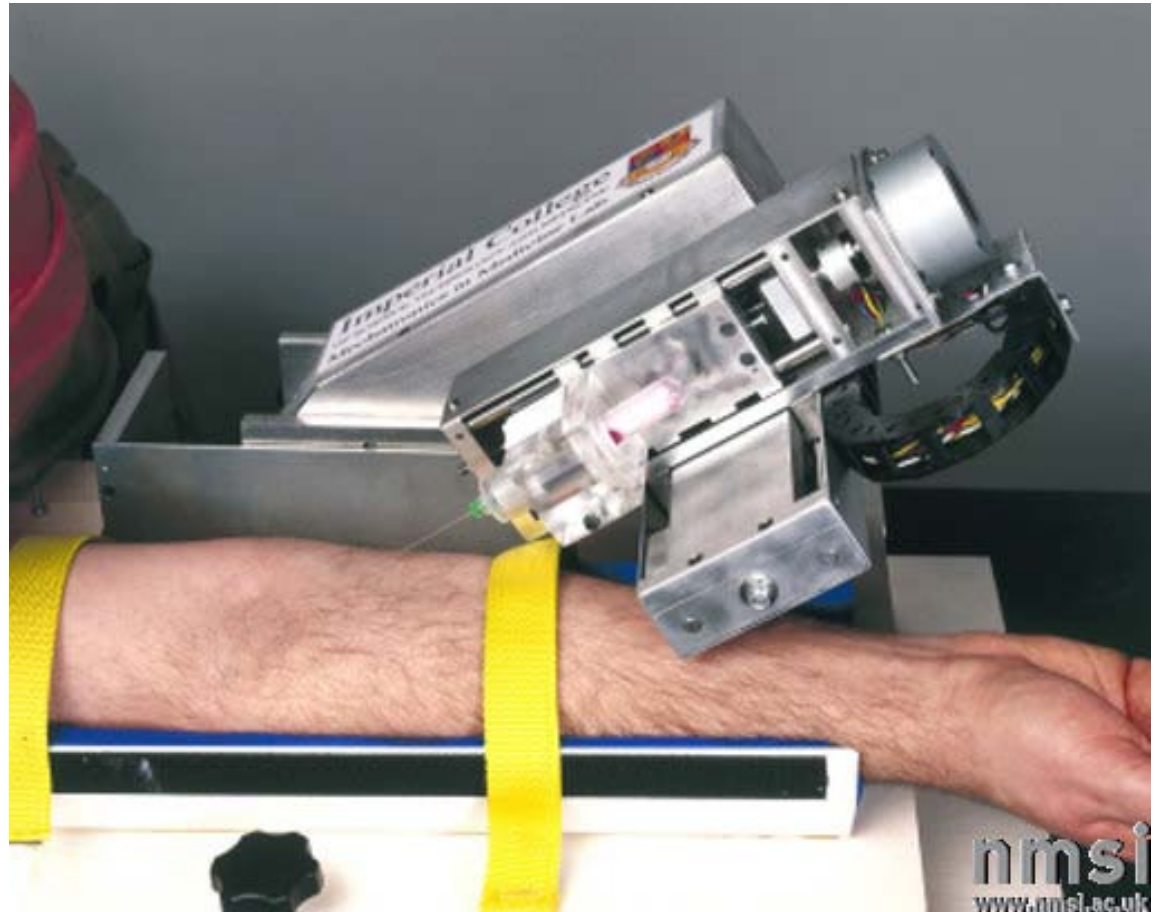
Kilde: Tal for hele Danmark er oplyst af Danske Bioanalytikere (dbio 2007).





BloodBot

B. Davies
&
A. Zivanovic





Luminetx

H. Zeman

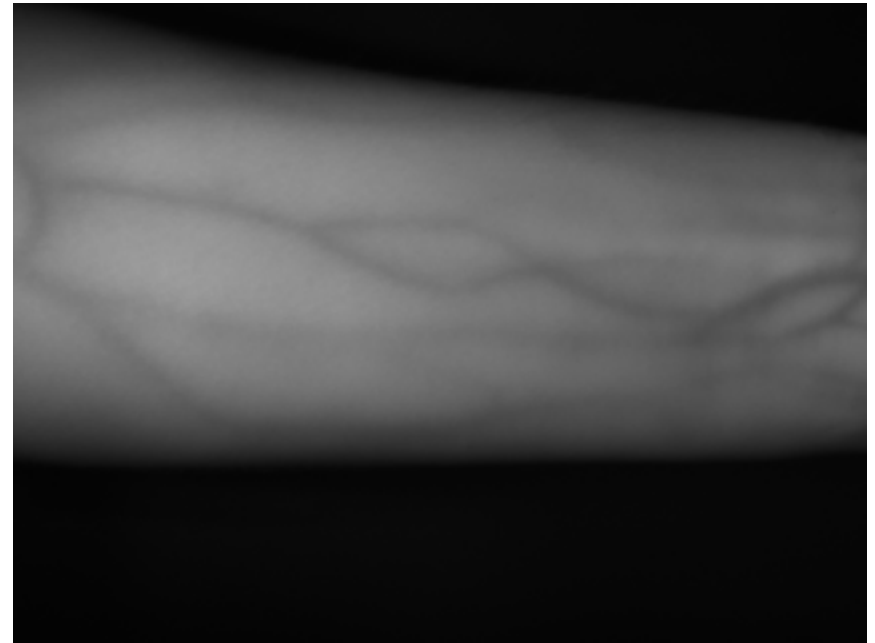




Normal light

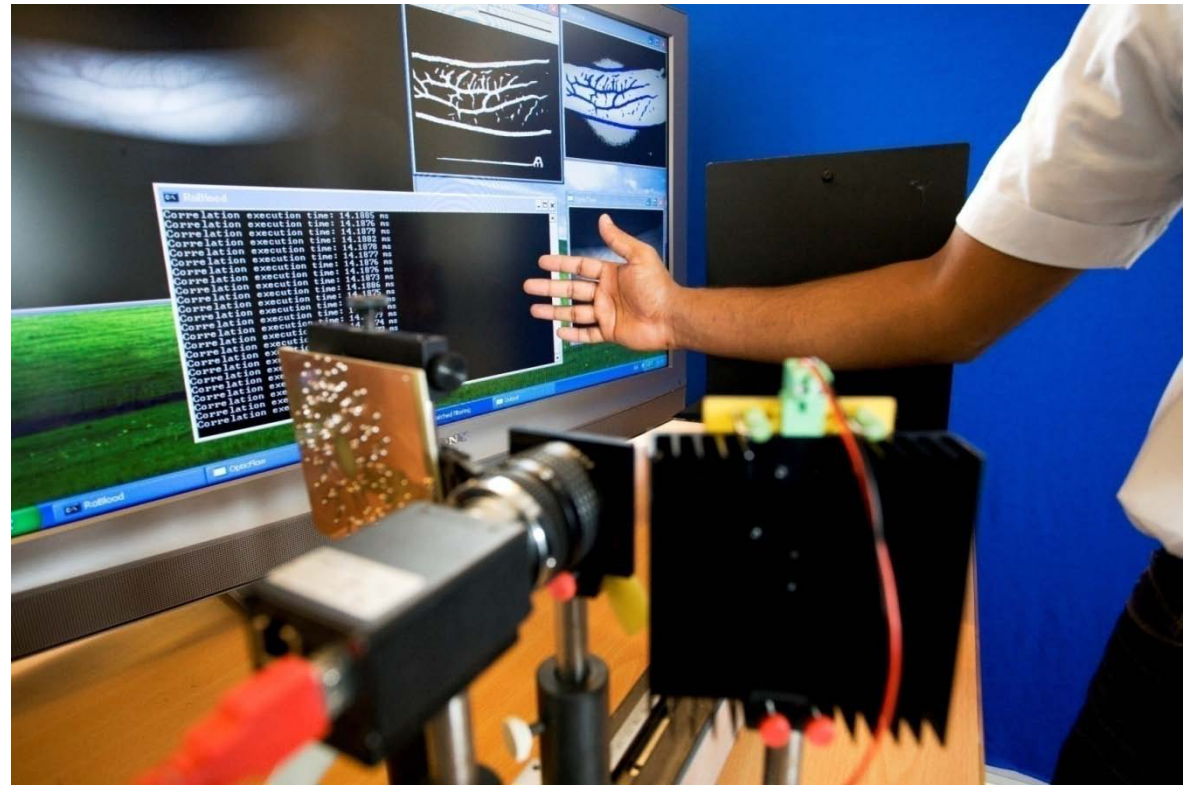


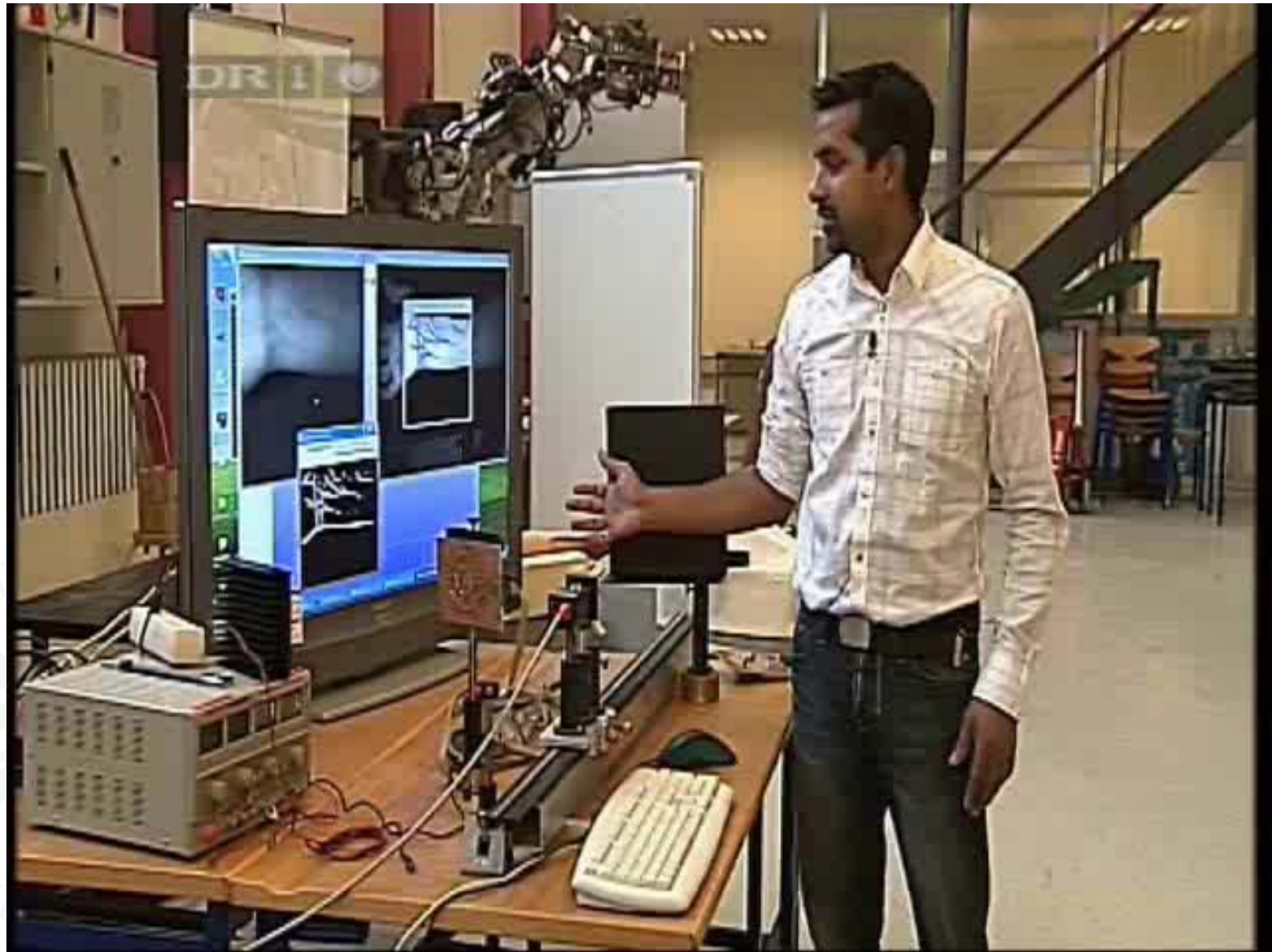
810 nm NIR light





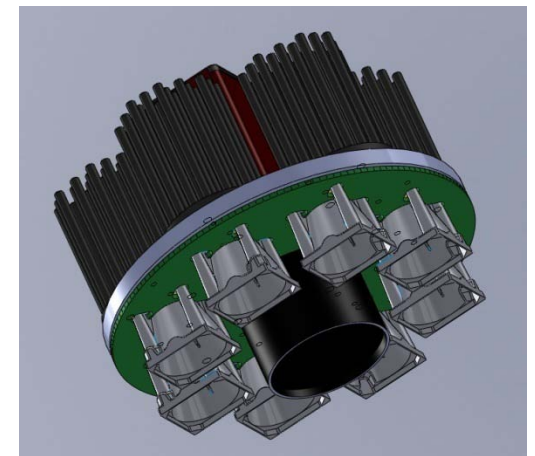
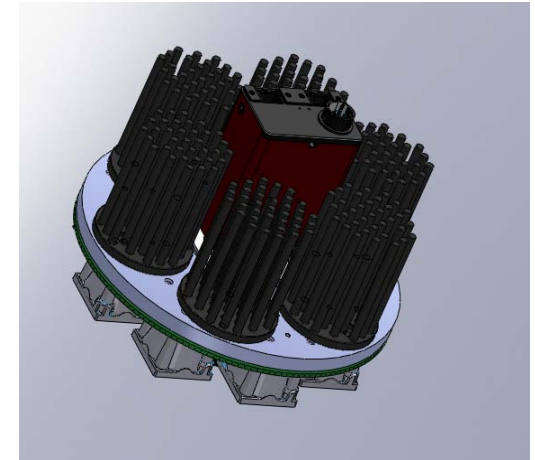
- Speed up by factor 2500
- Patient specific thresholding







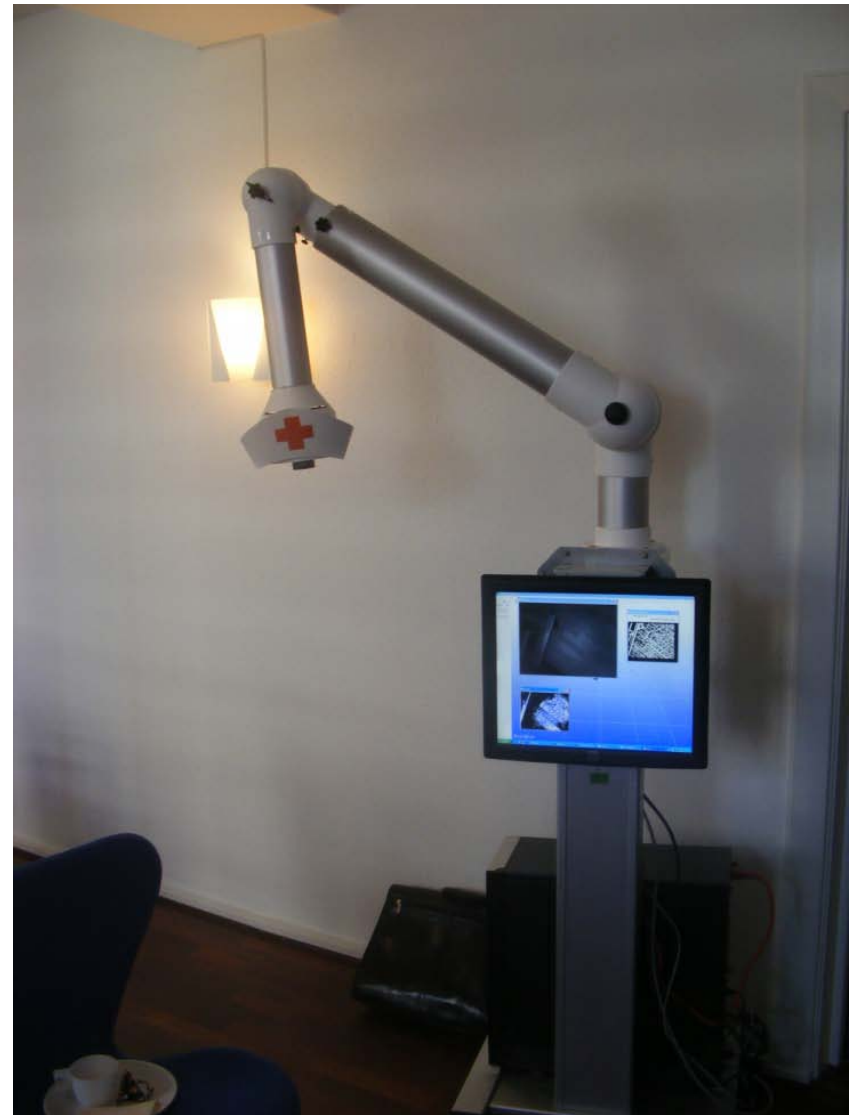
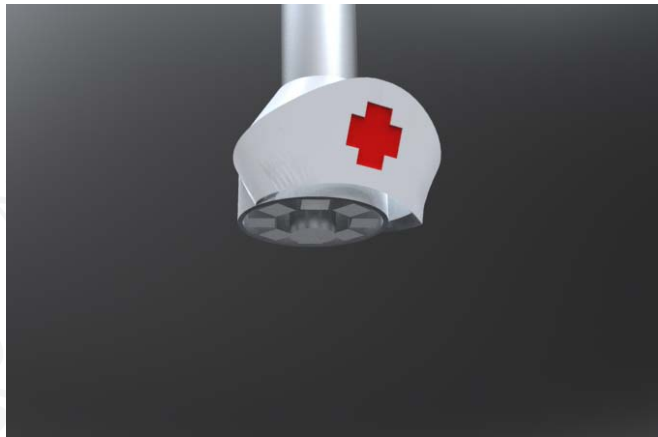
Clinical test





Clinical test

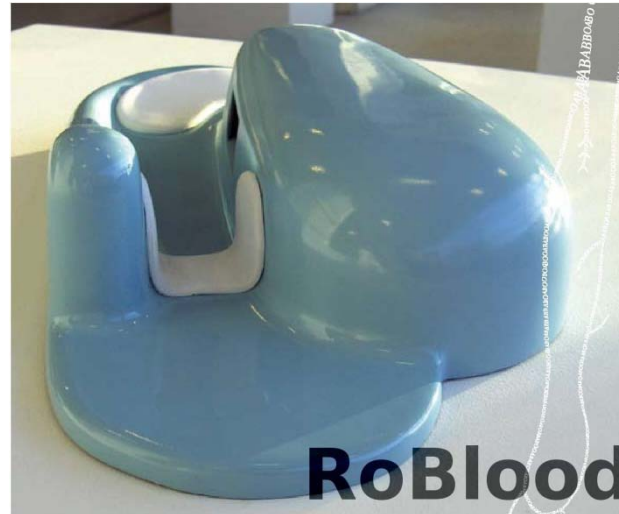
Data from 2000 patients
From 3 hospitals in Denmark starting
at Odense University Hospital





Future work

- Needle insertion
- Mechanical design
- HMI
- More clinical test



DOLPHIN

Torsteinn Laufkvist P. Helgason,
Nils Koster, Johan Gram Kristiansen,
Michael Larsen

Healthcare products





Thank you for your attention

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