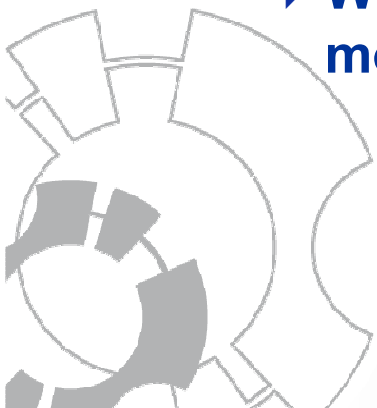
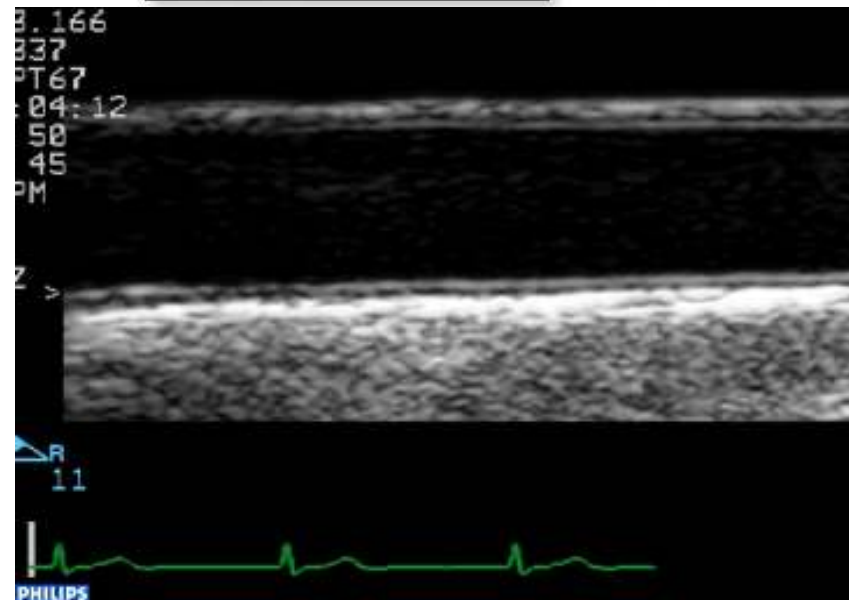
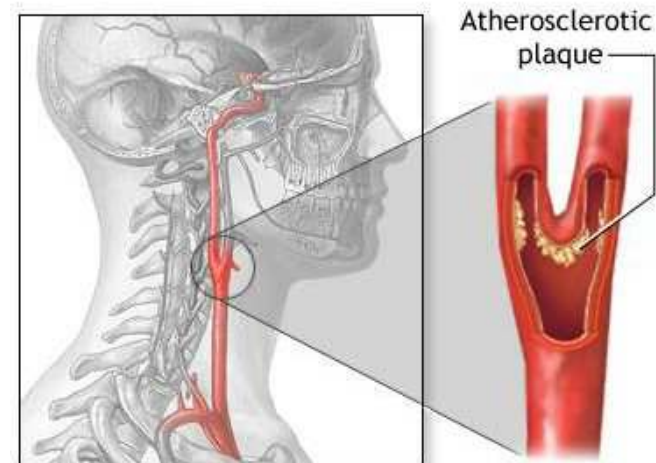


- ✚ High resolution imaging of vascular structure and function
- ✚ Applied to carotid artery, including bulb
- ✚ 3D visualization
 - ➔ Presence, size, shape of plaques
 - ➔ Without out of plane motion



Technology:

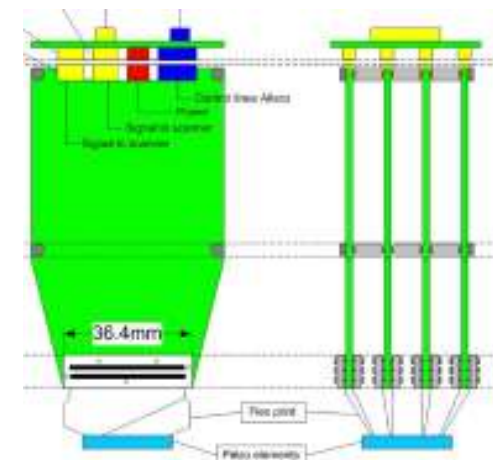
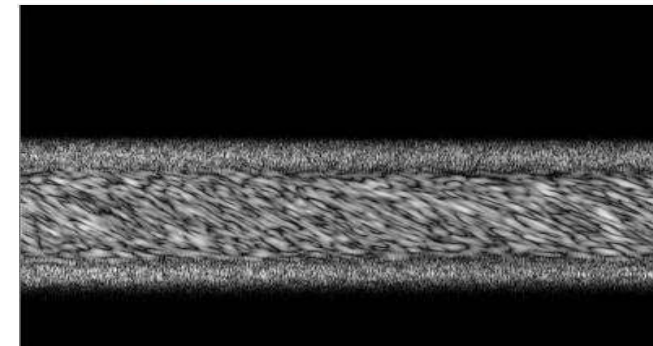
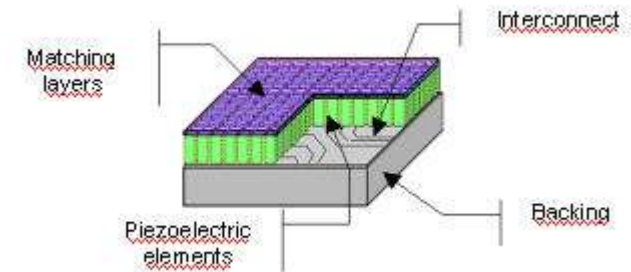
- ➔ 4D Ultrasound research system
- ➔ Ultrasound matrix probe
- ➔ High frame rate 4D ultrasound imaging

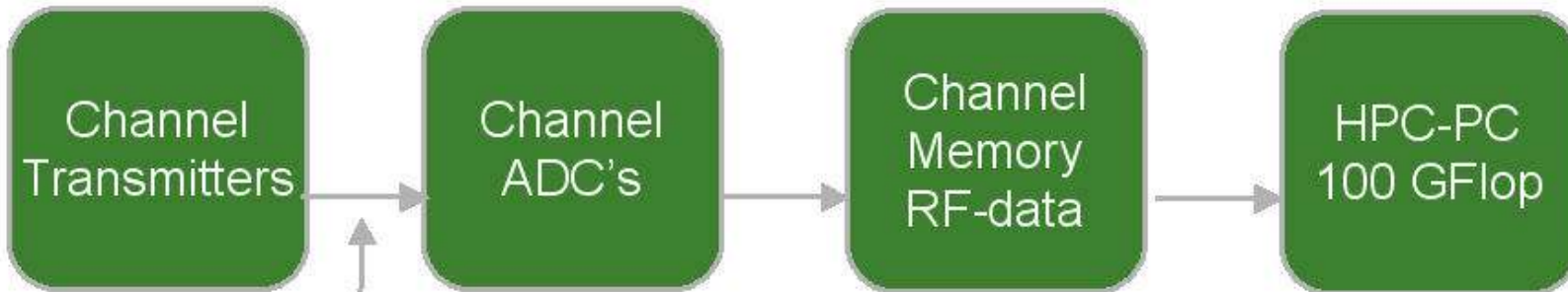
Fundamental Research

- ➔ 3D IMT and stiffness assessment
- ➔ 3D parameter overlay and structure recognition
- ➔ RF-signal simulation

Clinical Research

- ➔ Post stroke patient treatment
- ➔ Plaque volume and composition

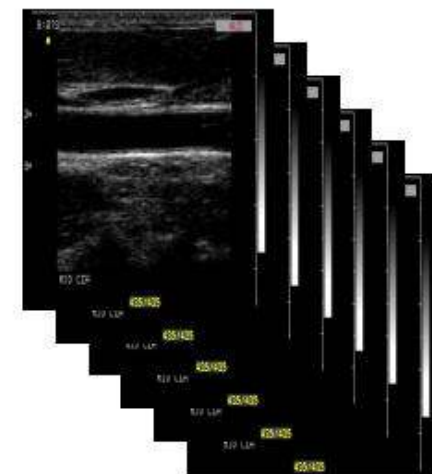
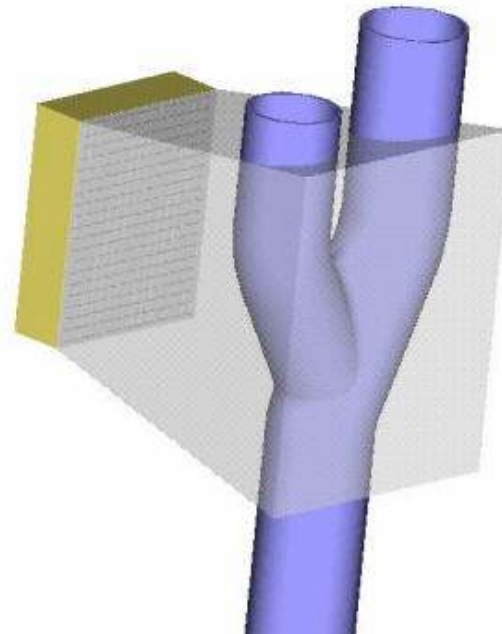




Multiplexer Plane



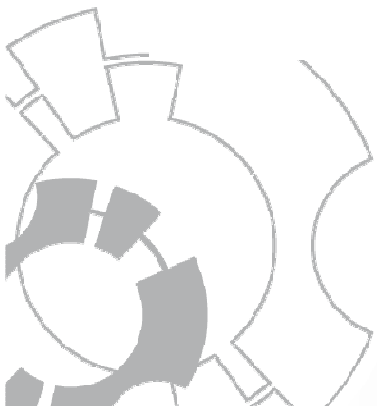
2D Sensor array



3D CCA image



- + Frequency: 7.5 MHz
- + 1024 elements
- + 32 by 32 array
(12.8 by 12.8 mm)



 **The Netherlands** 



→ Erasmus MC, University Medical Center Rotterdam



→ Cardiovascular Research Institute Maastricht (CARIM),
Maastricht University



→ ESAOTE Europe BV, Maastricht



→ Pie Medical Imaging BV, Maastricht

 **France** 



→ Hopital Europeen Georges Pompidou (HEGP), Paris



→ VERMON, Tours

- ✚ **Transducer: final stage**
- ✚ **Cable connection: pending**
- ✚ **Beam forming: pending**
- ✚ **Signal simulation: pending**
- ✚ **Image processing: pending**

