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## Fotoakustik och temporalisarterit

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# Temporalisarterit / Jättecellsarterit

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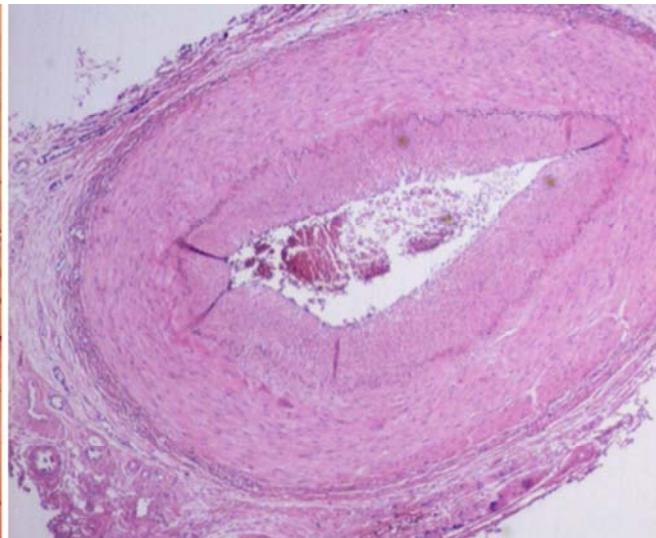
- Vaskulit – inflammation i kärl
- Vanlig men ovanlig – Huvudvärk över 50 år , låg incidens (ca 22/100000/år)
- Fruktade komplikationer – blindhet, stroke
- Hög dos kortison under lång tid – komplikationer
- Ny behandling IL-6-blockad



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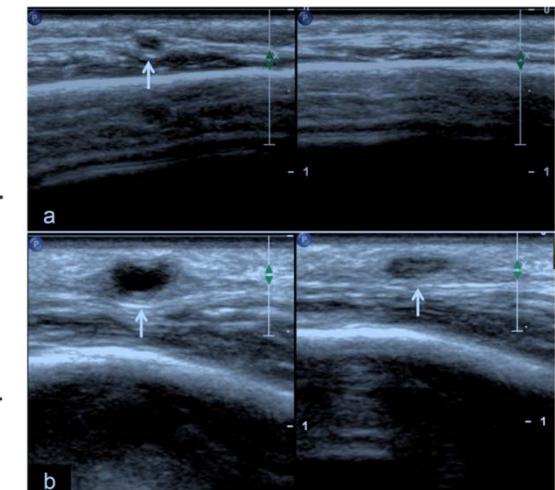
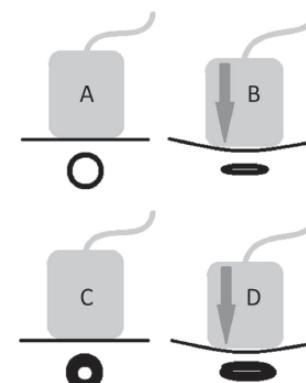
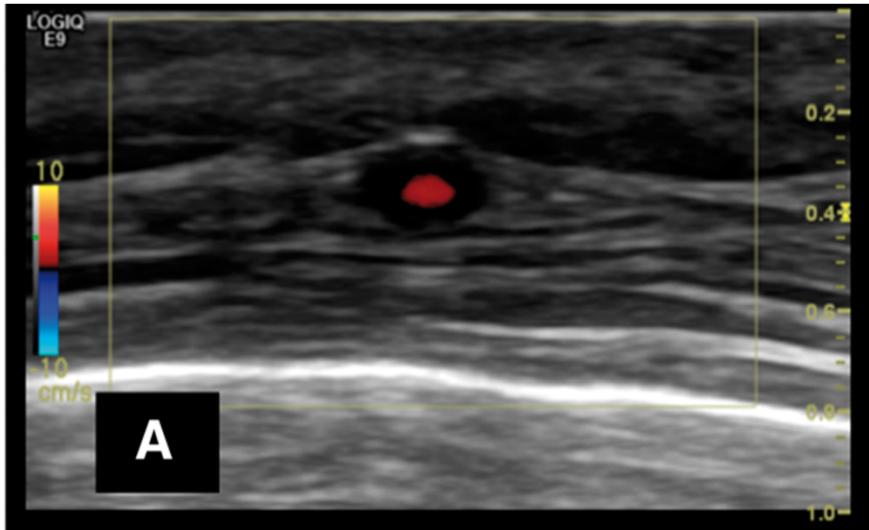
# Temporalisarterit – kirurgisk biopsi

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# Ultraljud - halo sign och compression sign



1. Luqmani R, Lee E, Singh S, Gillett M, Schmidt WA, Bradburn M, et al. The Role of Ultrasound Compared to Biopsy of Temporal Arteries in the Diagnosis and Treatment of Giant Cell Arteritis (TABUL): a diagnostic accuracy and cost-effectiveness study. *Health Technol Assess* 2016;20(90)
2. Santoro L et al. *Rheumatology* 2013;52:622



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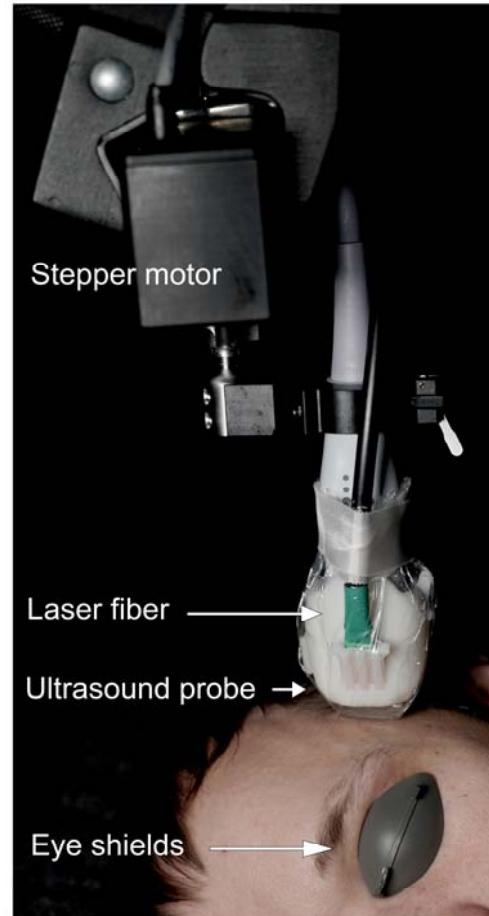
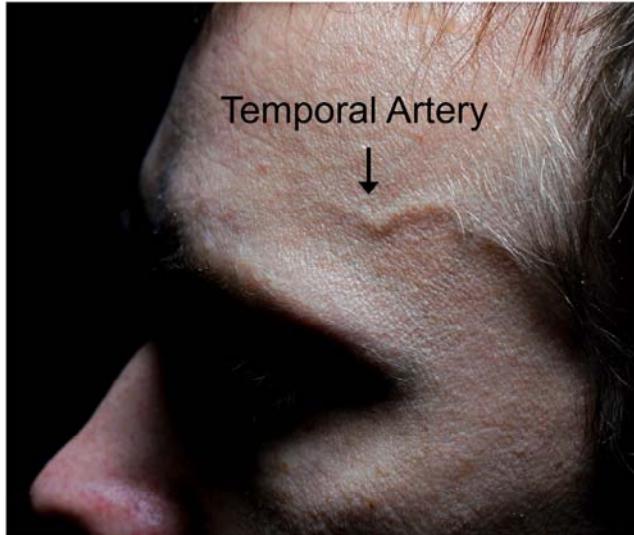
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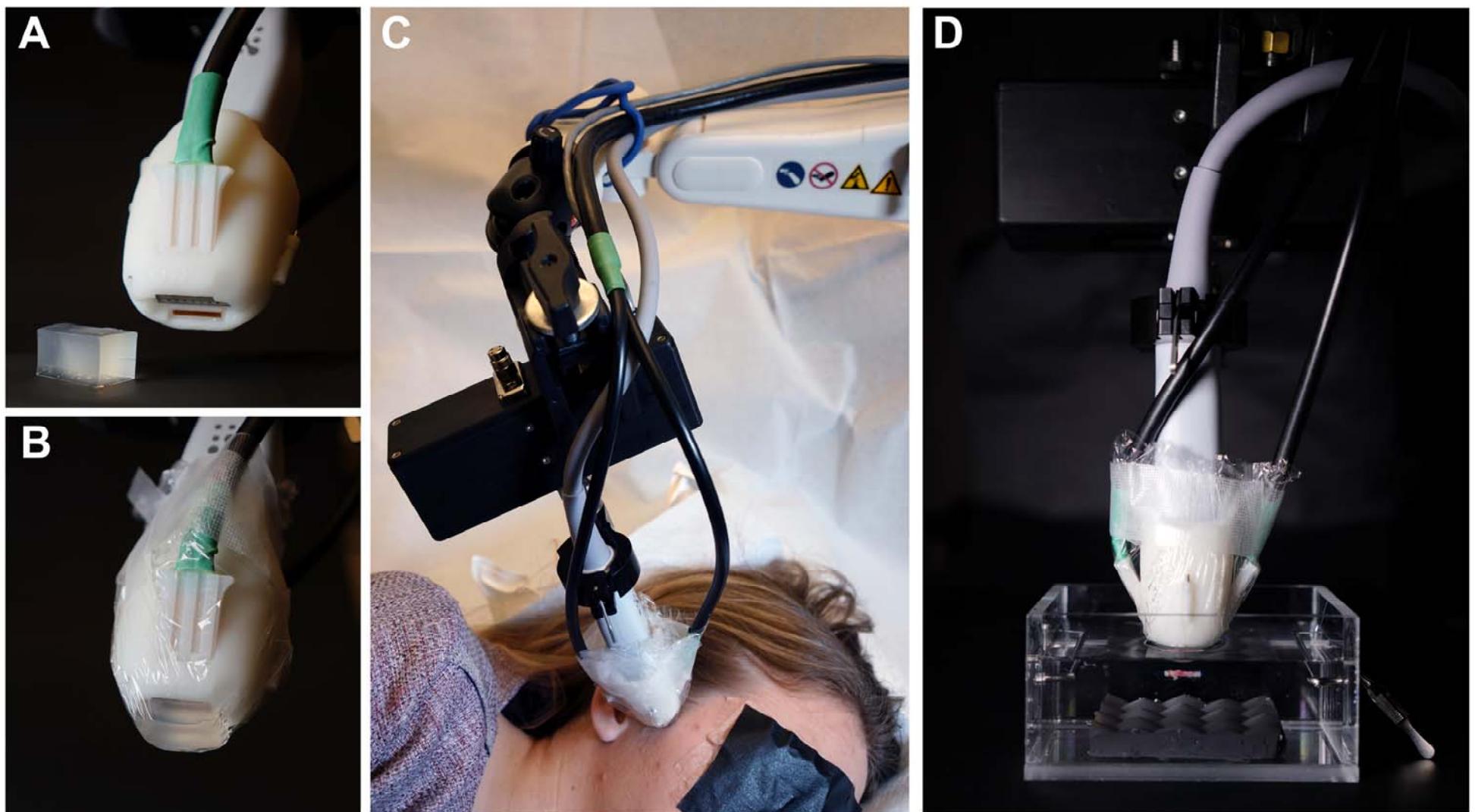
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# Temporal artery examination with PAI

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Sheikh et al. Clinical translation of a novel photoacoustic imaging system for examining the temporal artery , 2018. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control.



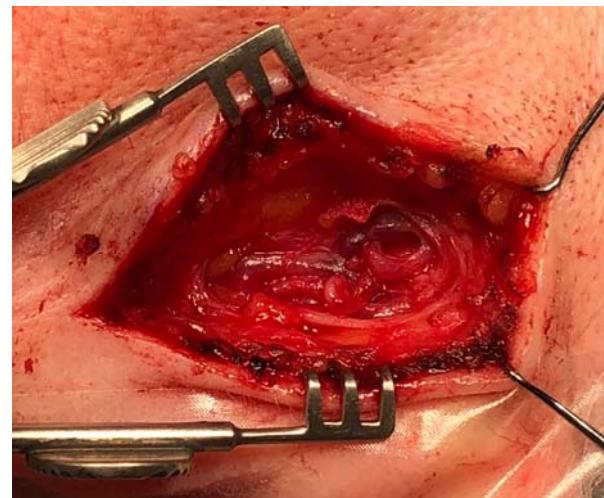
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# Temporal artery examination with PAI

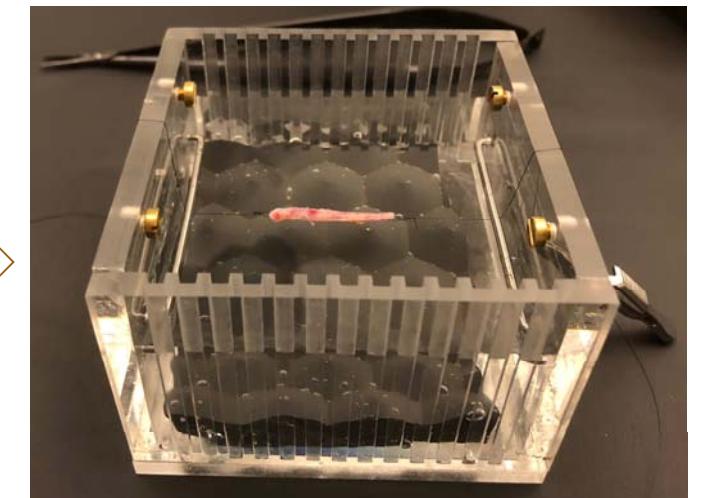
*In vivo* PAI



Surgery



*Ex vivo* PAI



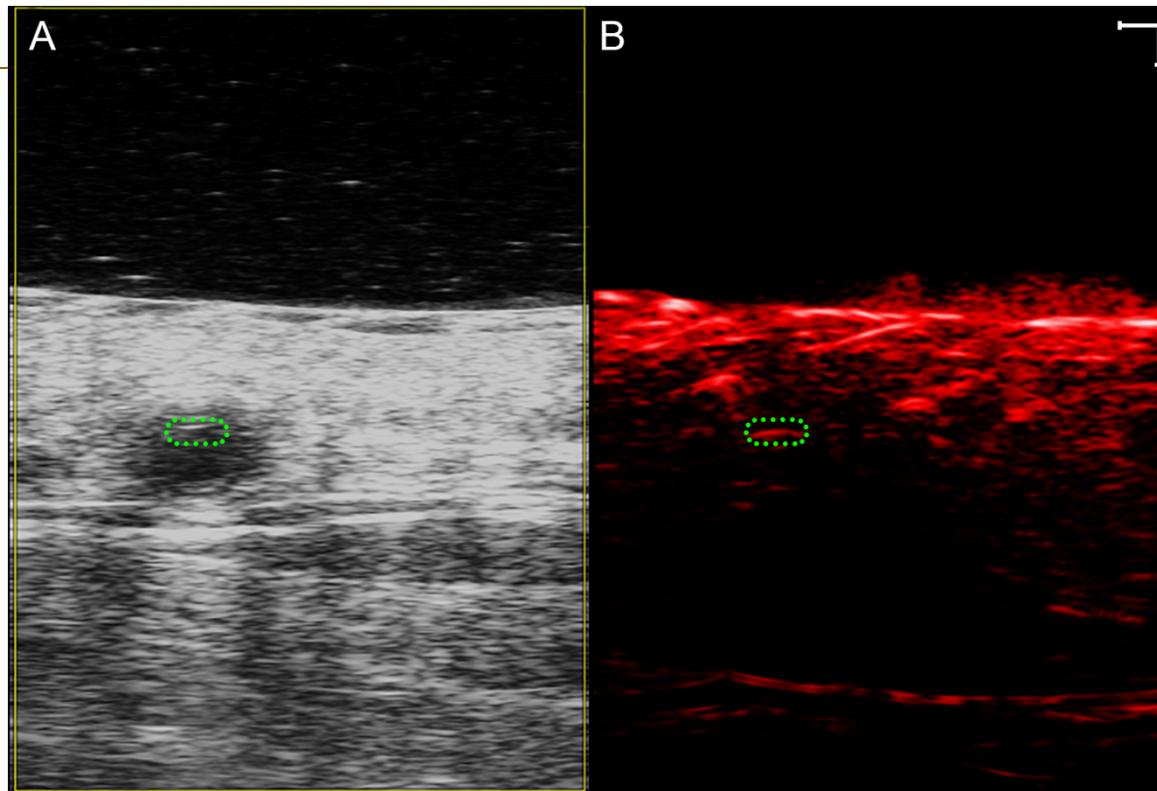
SHEIKH, R., DAHLSTRAND, U., REISTAD, N., ERLÖV, T., CINTHIO, M. & MALMSJÖ, M. 2018. Clinical translation of a novel photoacoustic imaging system for non-invasive diagnostics. *IEEE*. 2018



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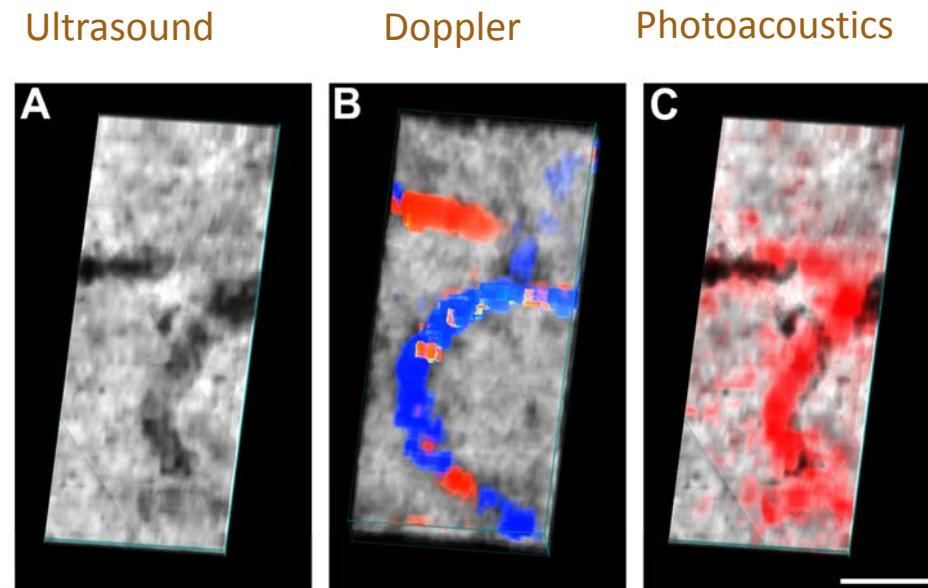
Sheikh et al. Clinical translation of a novel photoacoustic imaging system for examining the temporal artery , 2018. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control.



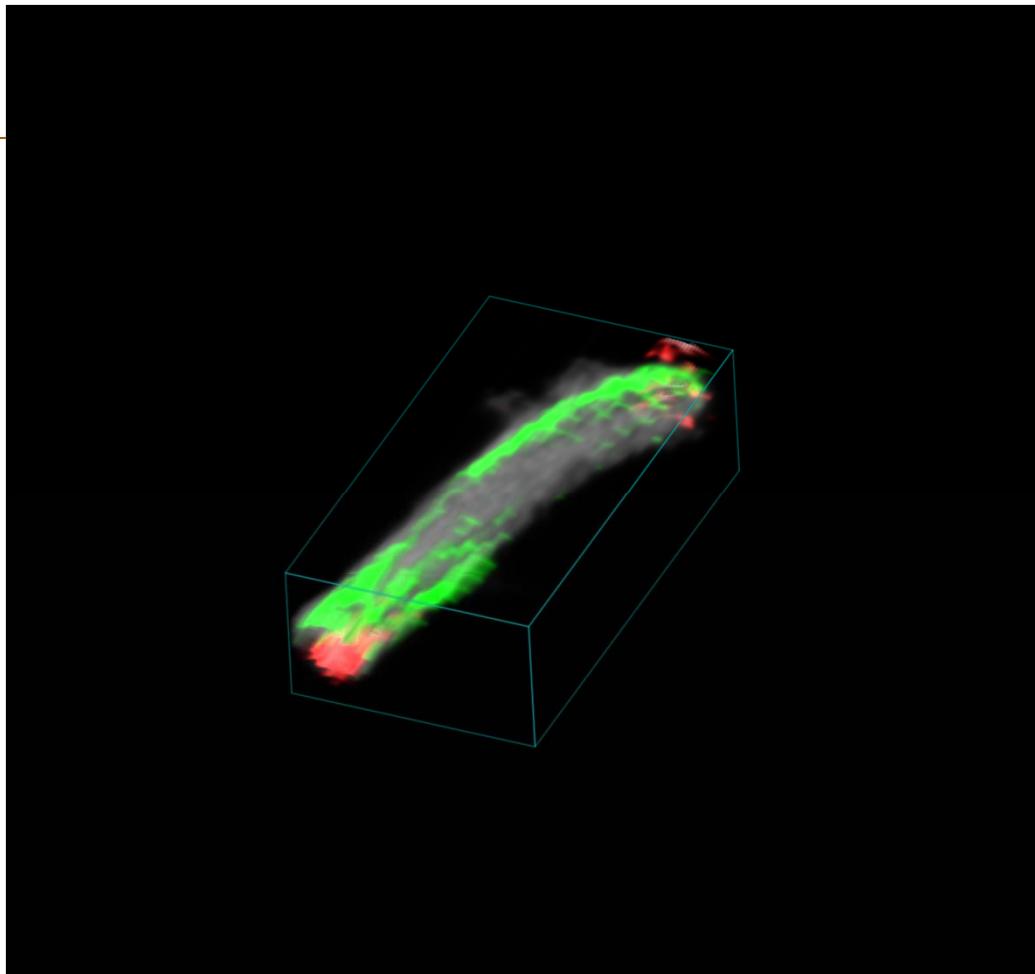
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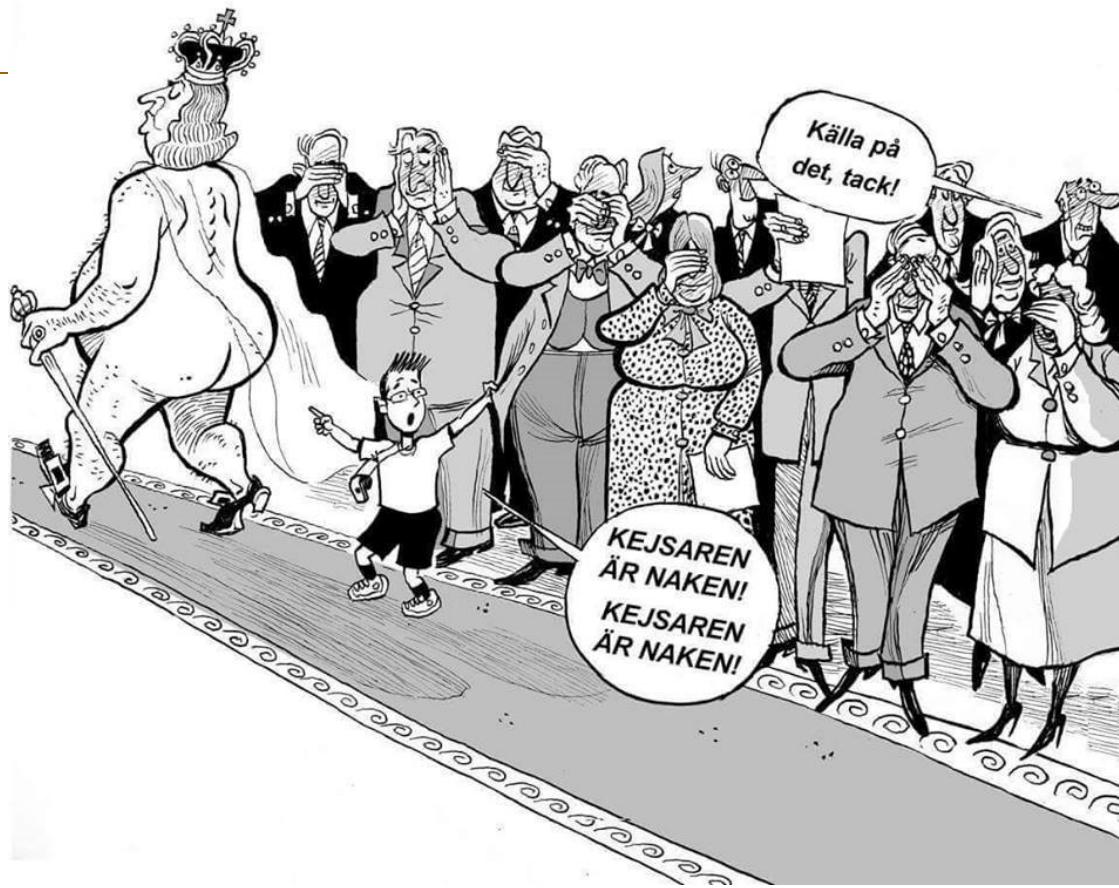
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# Utmaningar

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- In vivo signal, artefakter m.m.
- Prediktionsmodell för GCA? PAI enbart? PAI + allt annat?
- Vad är det egentligen som vi ser i signalen?



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