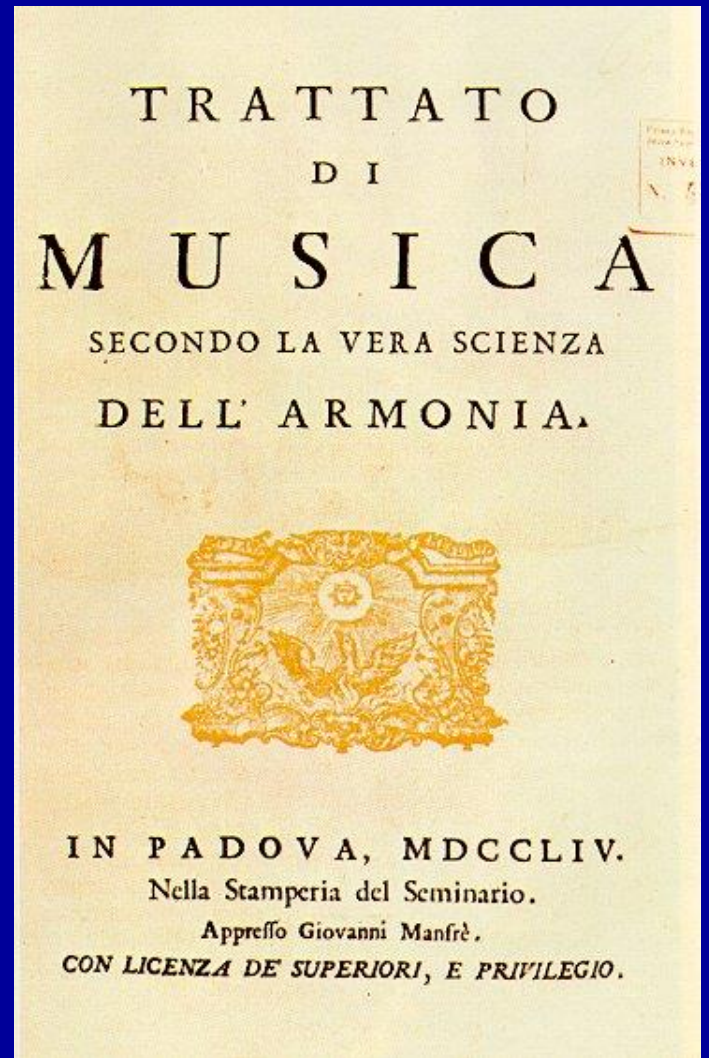


Onderwerpen

- Geluid > zenuwactiviteit
- Lawaai
- Ziekte van Menière
- Ototoxiciteit – antibiotica & cytostatica
- Cochleaire implantaten

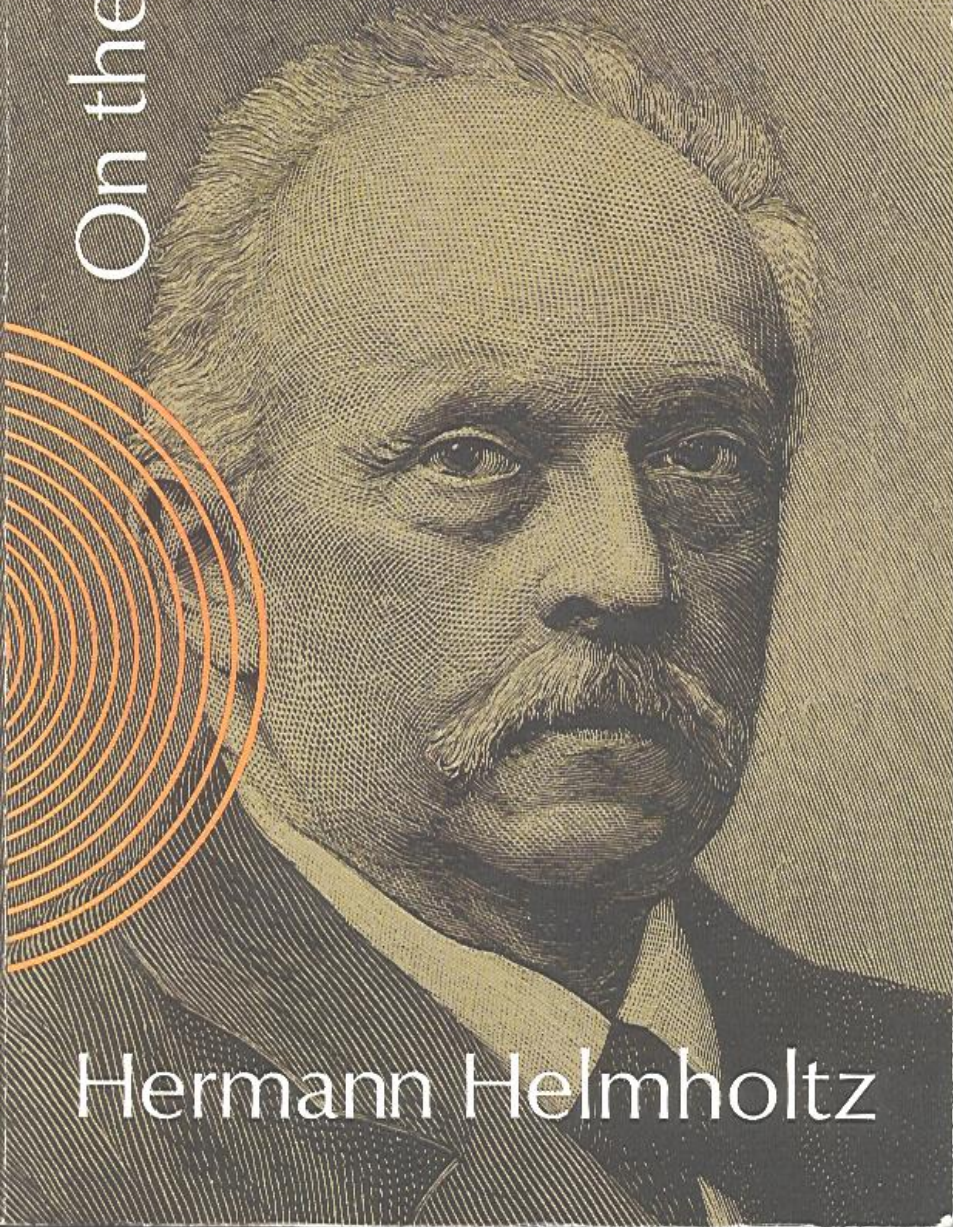


Tartini 1714 "terceiro som"

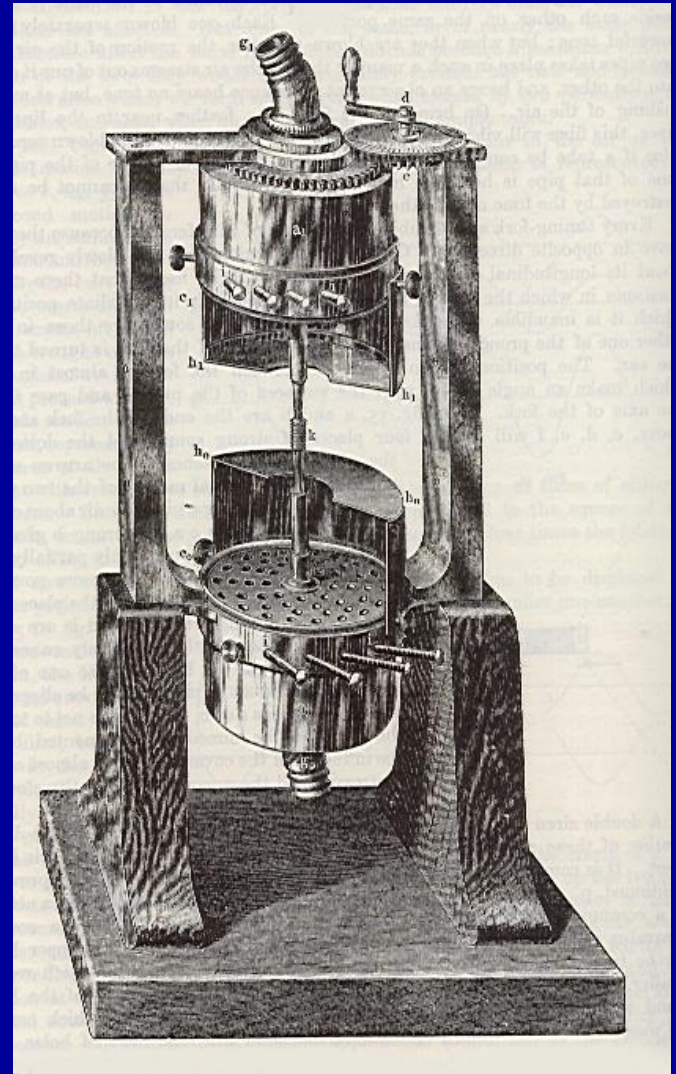


Sensations of Tone

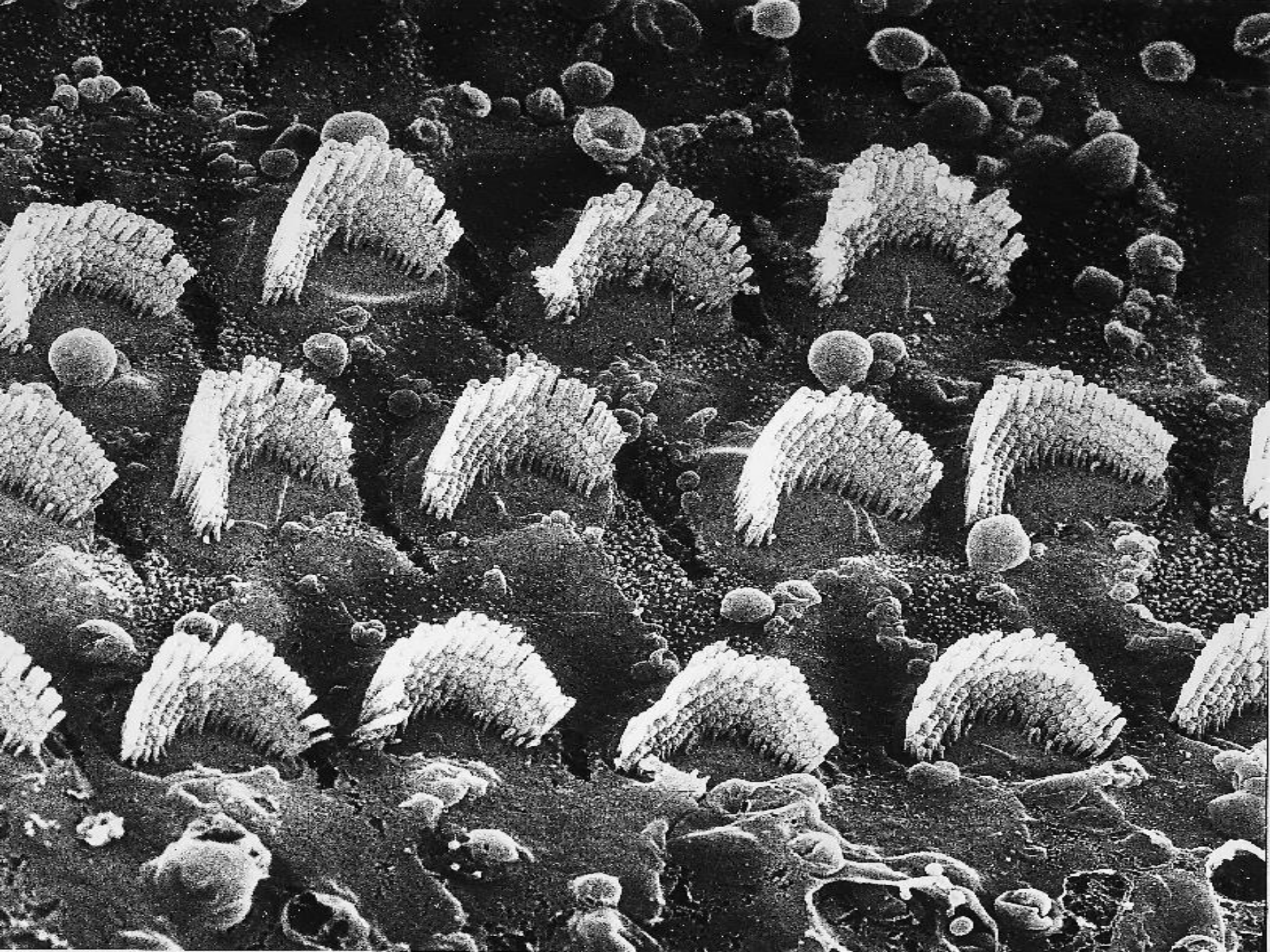
On the



Hermann Helmholtz



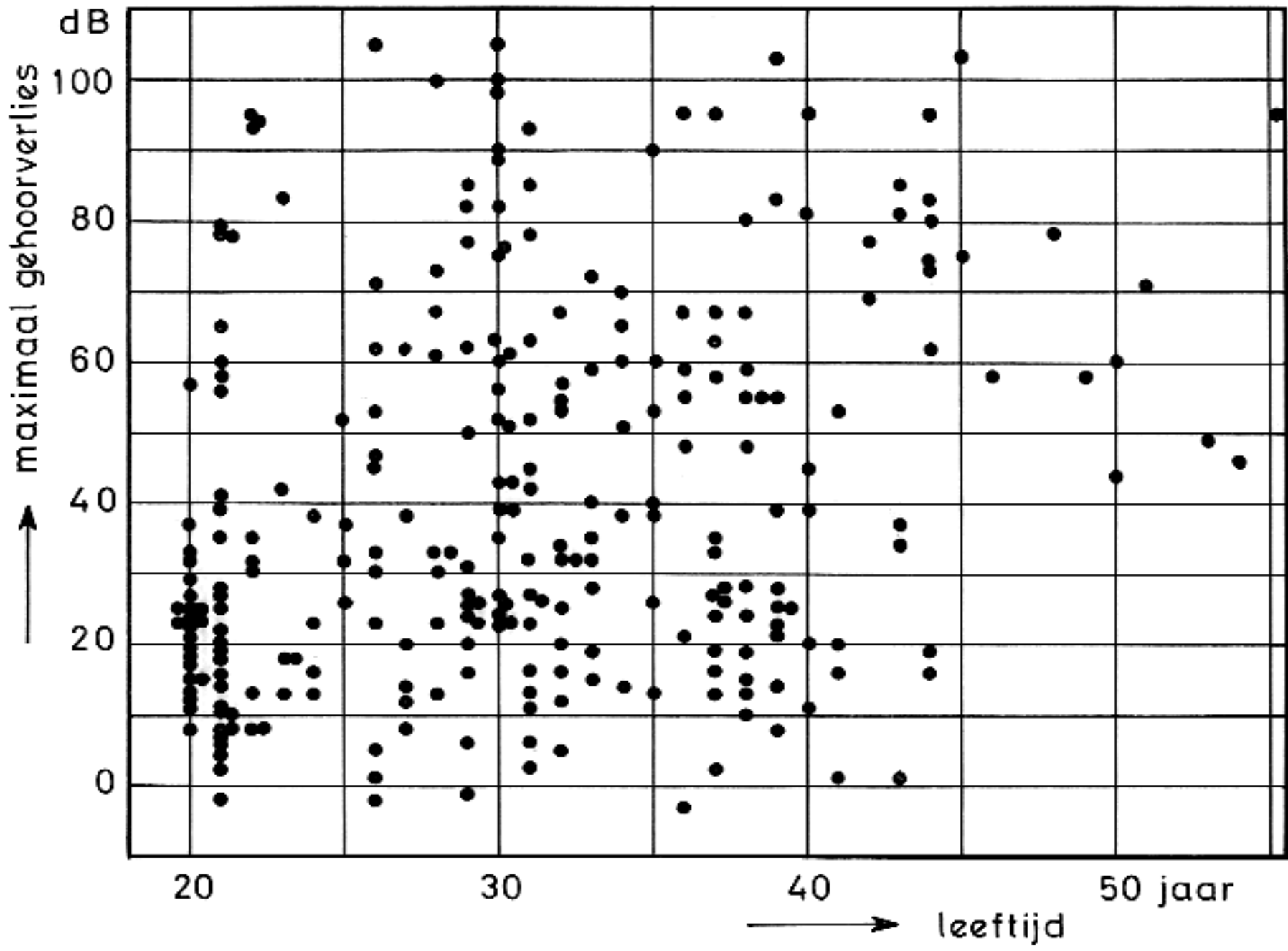
Geluidvorming
door overbelasting

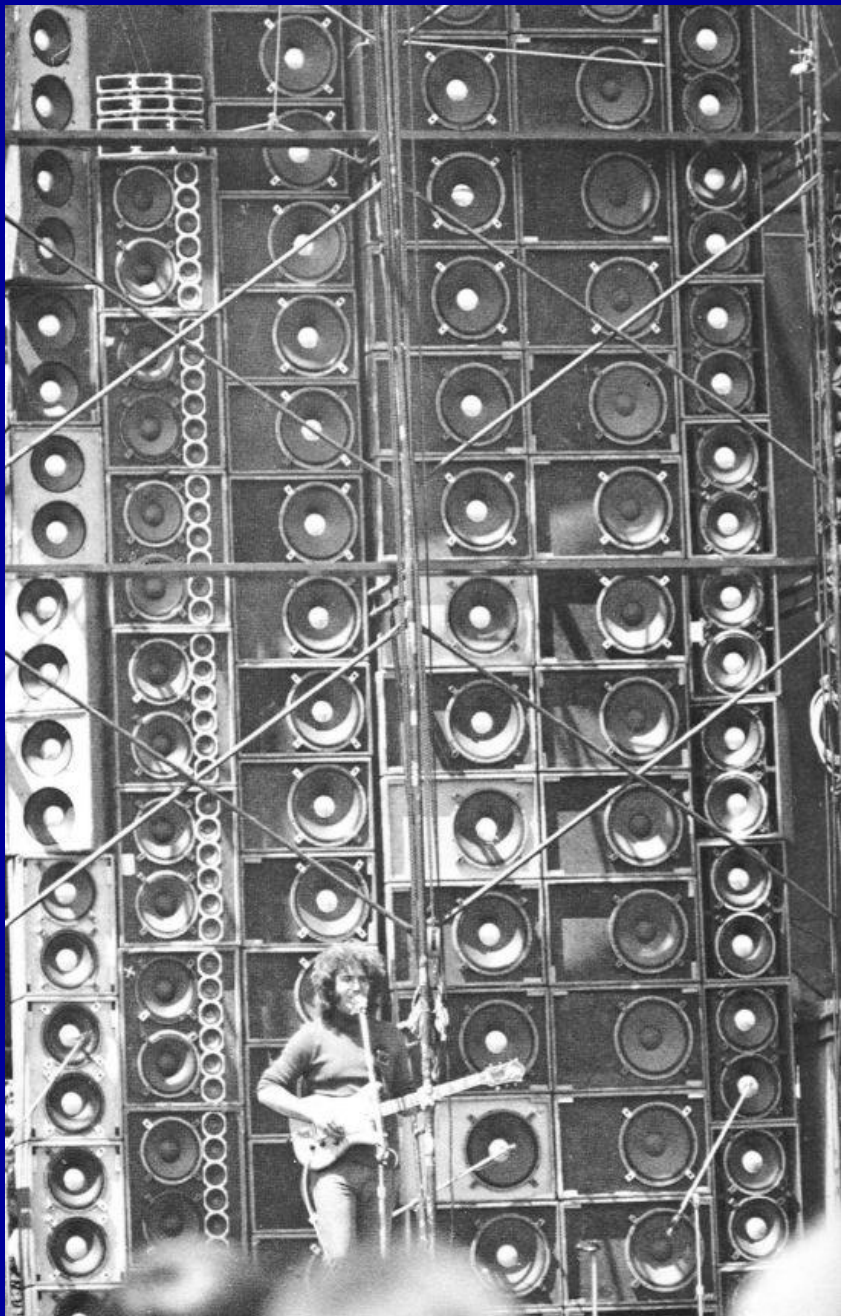




Onderwerpen

- Geluid > zenuwactiviteit
- Lawaai
- Ziekte van Menière
- Ototoxiciteit – antibiotica & cytostatica
- Cochleaire implantaten



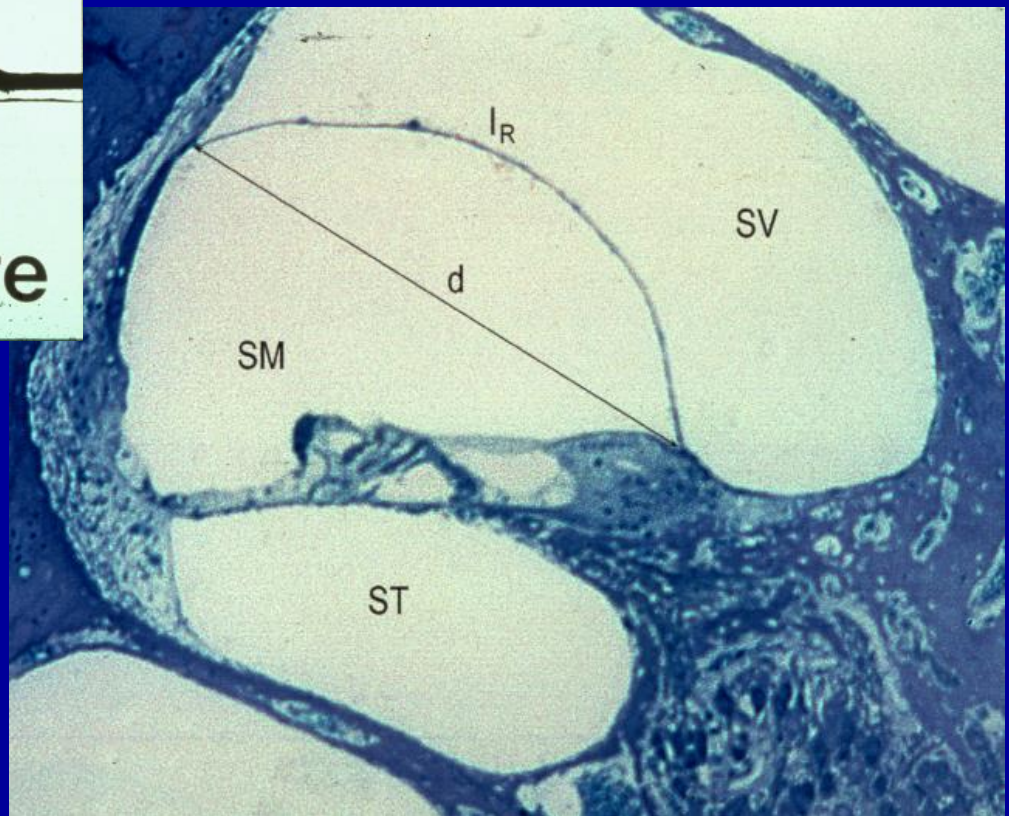
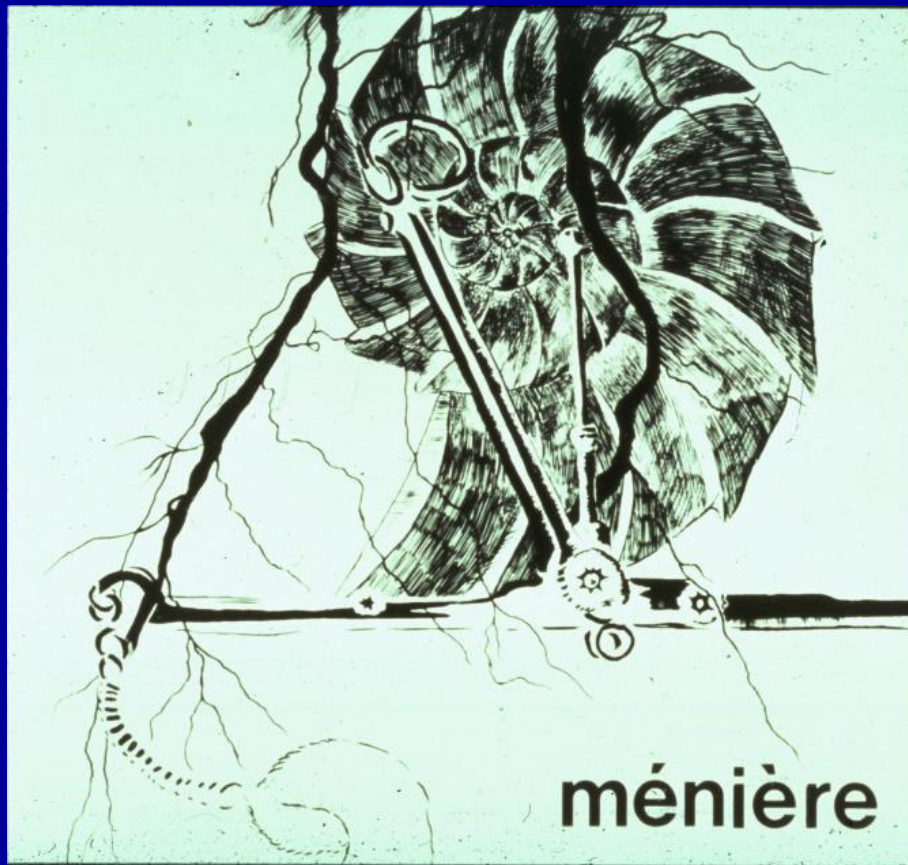


*Zet je muziek maar lekker hard.
dan wordt het vanzelf stil.*

STRE

Onderwerpen

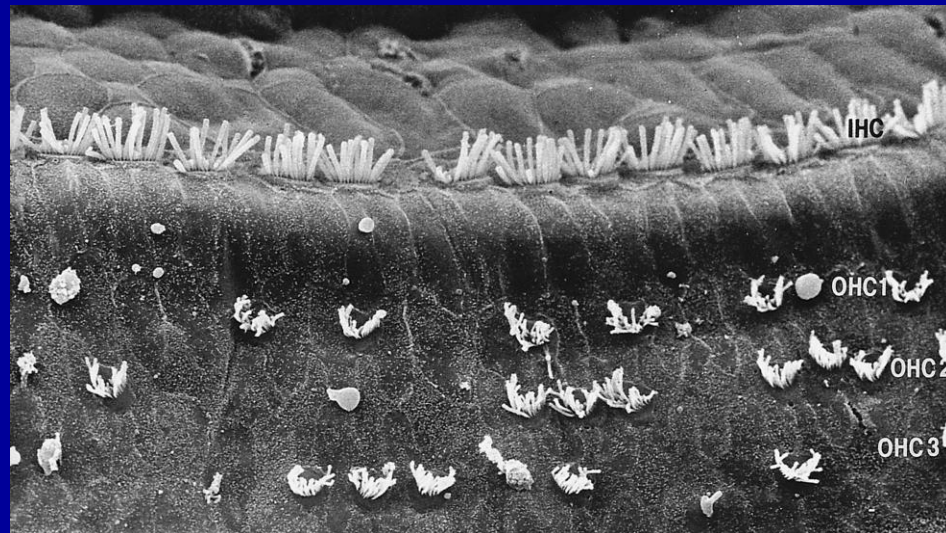
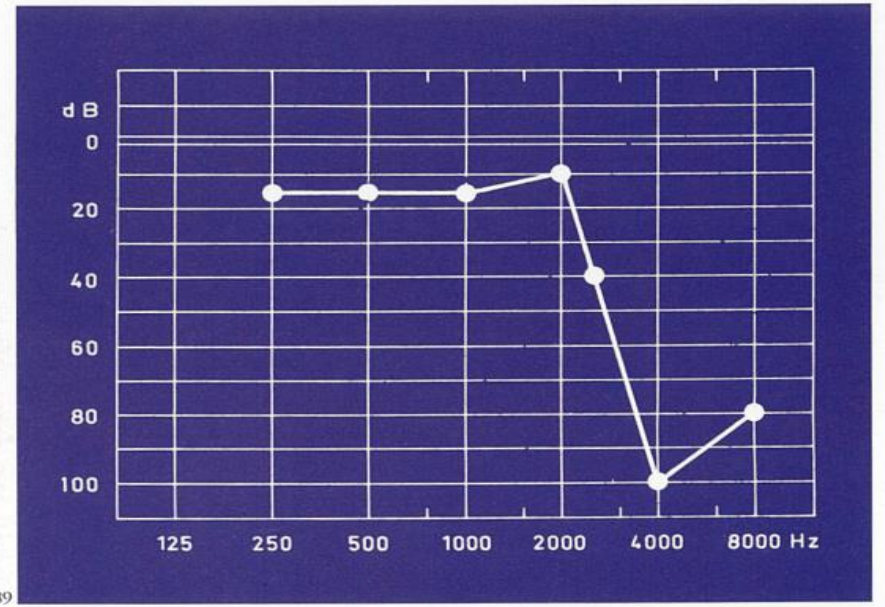
- Geluid > zenuwactiviteit
- Lawaai
- Ziekte van Menière
- Ototoxiciteit – antibiotica & cytostatica
- Cochleaire implantaten



Onderwerpen

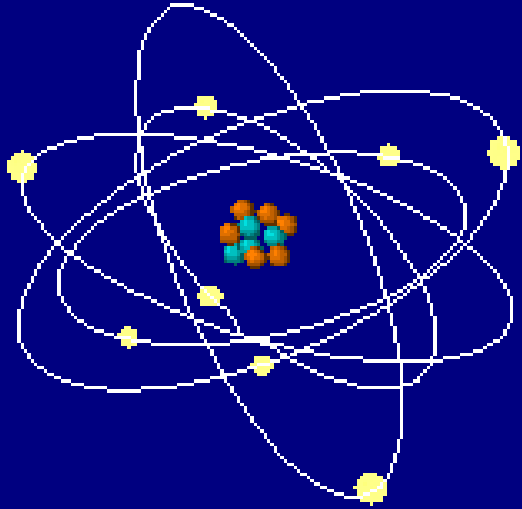
- Geluid > zenuwactiviteit
- Lawaai
- Ziekte van Menière
- Ototoxiciteit – antibiotica & cytostatica
- Cochleaire implantaten

Schade door gentamycine

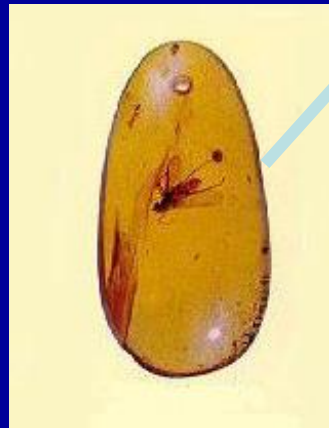


Onderwerpen

- Geluid > zenuwactiviteit
- Lawaai
- Ziekte van Menière
- Ototoxiciteit – antibiotica & cytostatica
- *Cochleaire implantaten*

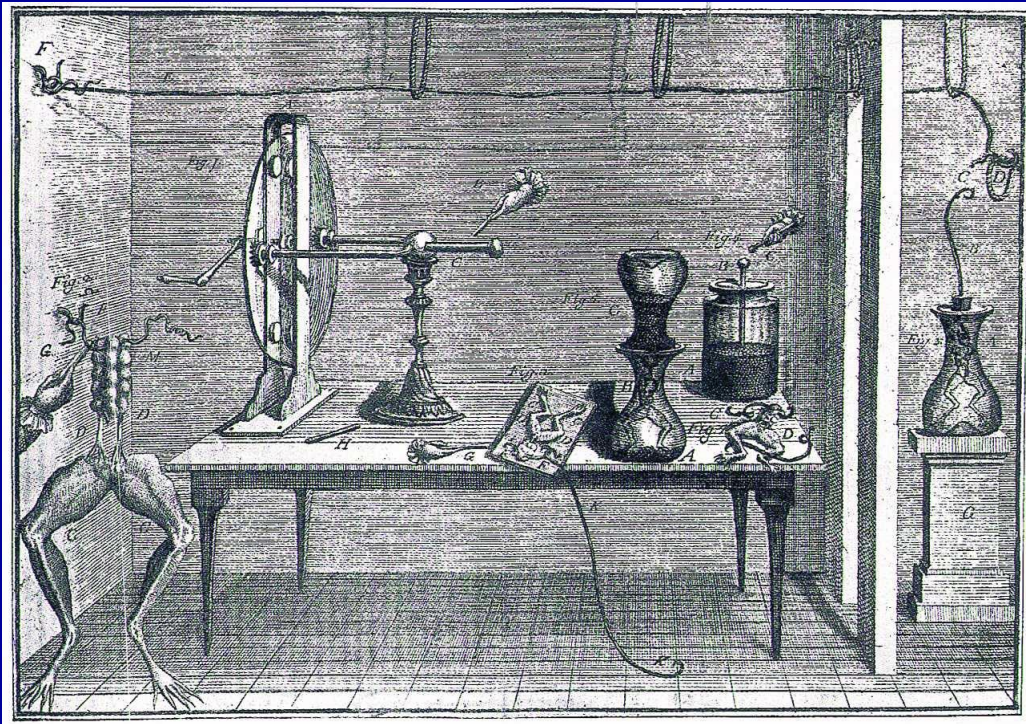


elektron



Luigi Galvani

Bologna 1737- 1798

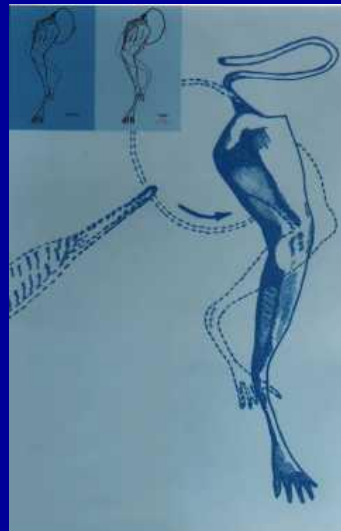


*De viribus electricitatis in
motu musculari*





Alessandro Volta
1745-1827



Luigi Galvani
1737 - 1798



Alessandro Volta
1745-1827



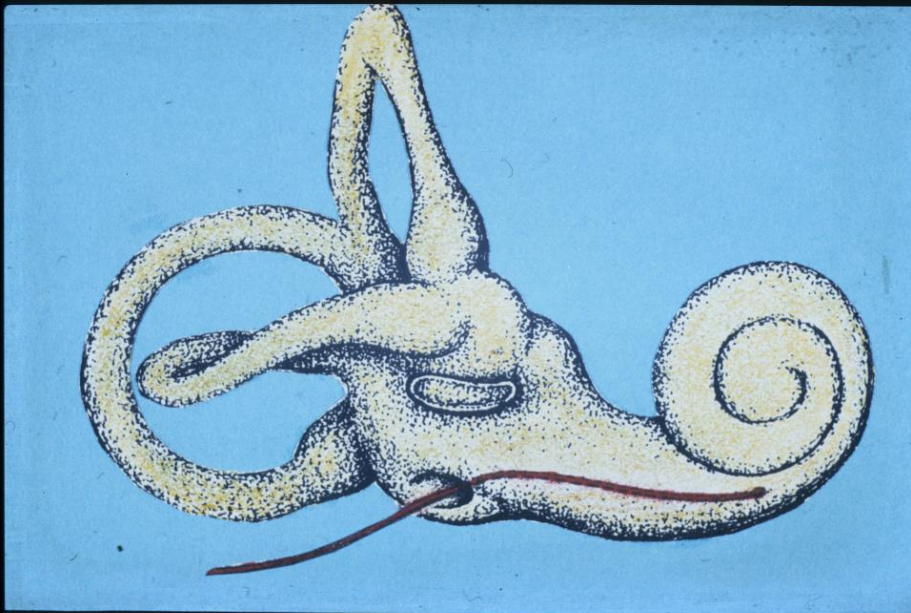
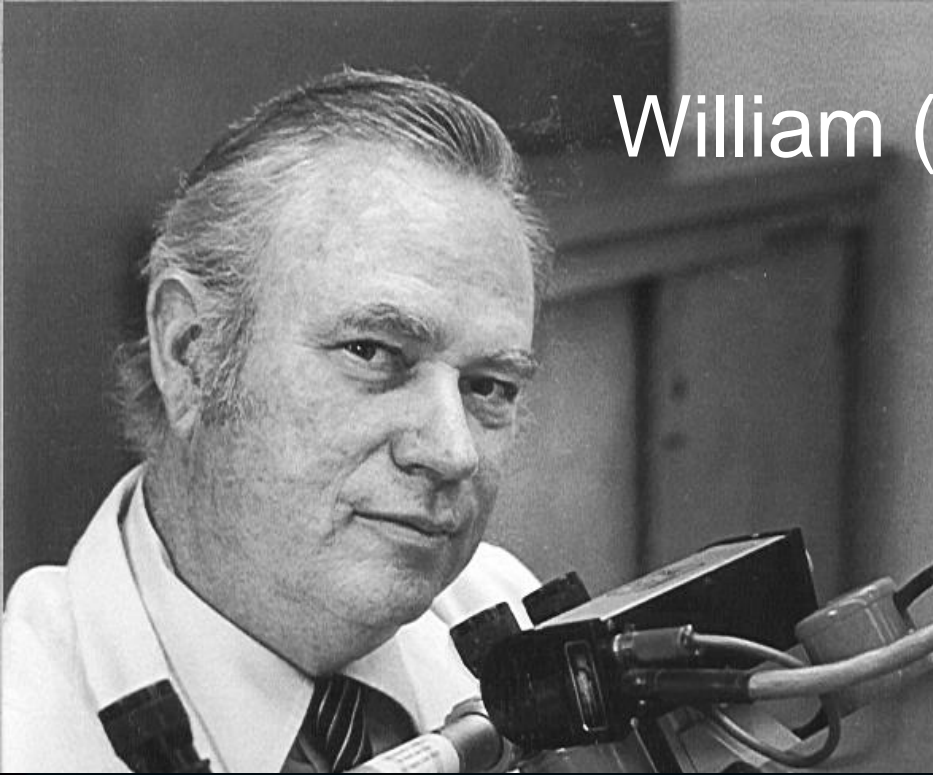
*Premiers essais d'excitation électrique du nerf auditif
chez l'homme,
par micro-appareils inclus à demeure,*

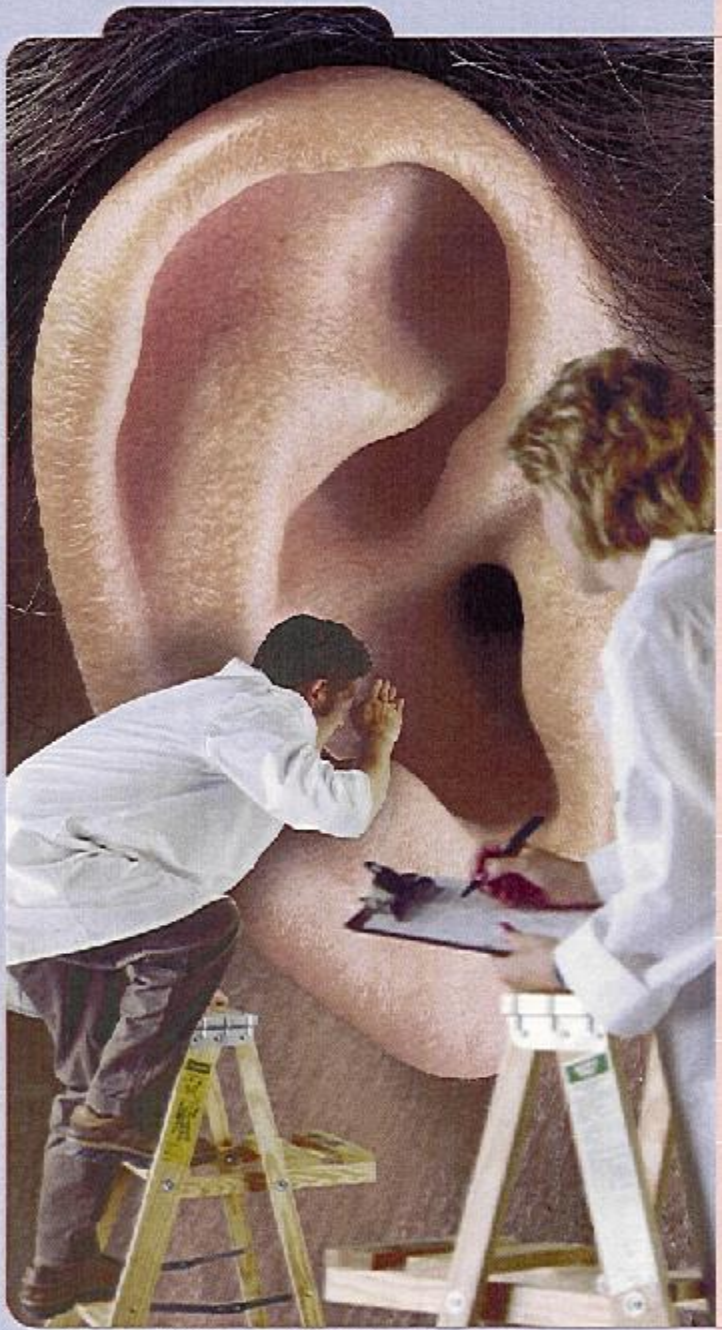
par MM. **André Djourno, Charles Eyriès et Bernard Vallancien**
(avec la collaboration technique de M^{lle} **D. Kayser**). **1957**

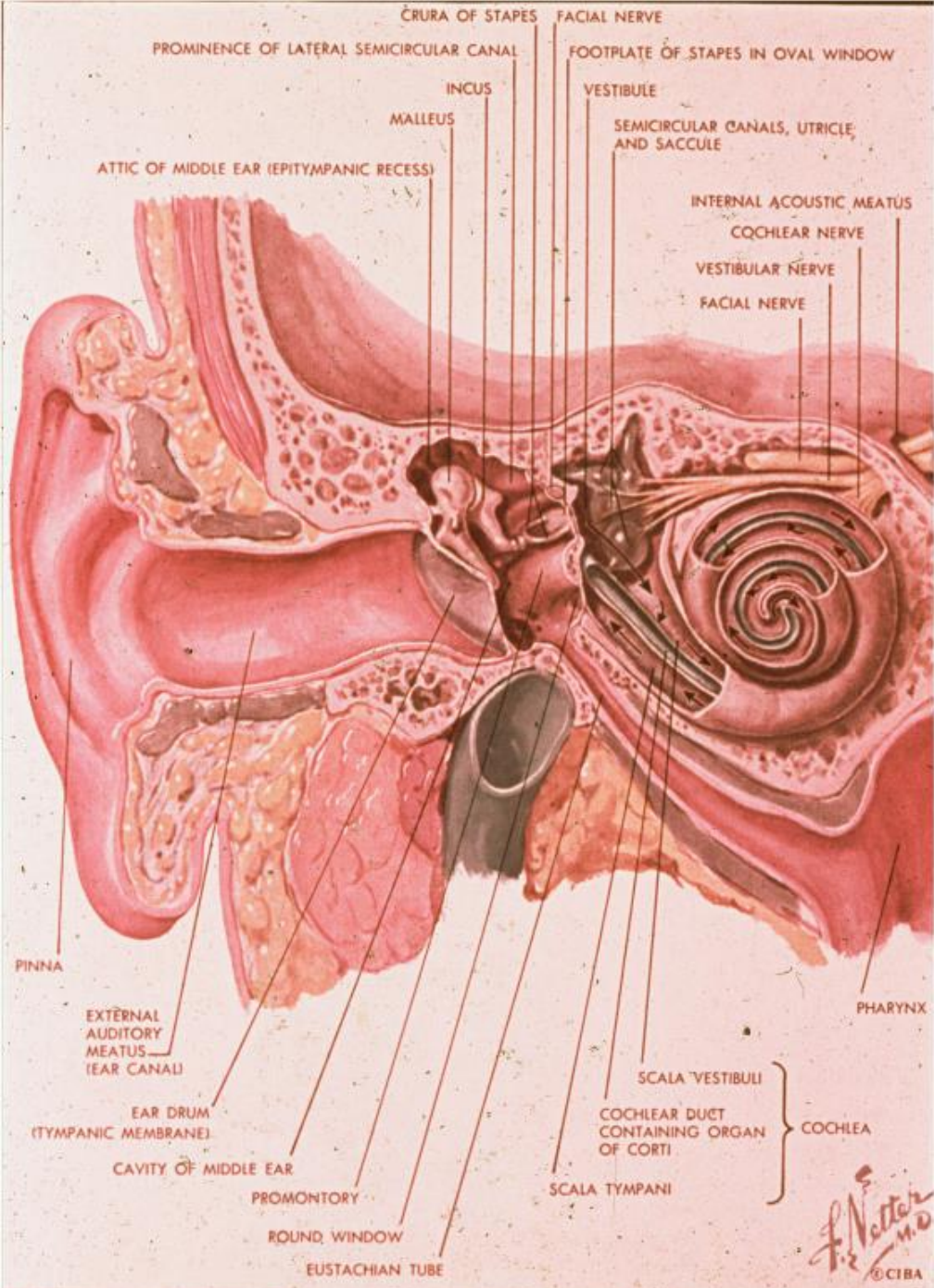
1° Impulsions ou courants alternatifs de très basse fréquence (300 cycles par seconde au maximum) : impression analogue au cri du grillon lorsque le signal est faible, de sifflet à roulette s'il est puissant. A mesure que la fréquence augmente, le sujet perçoit des chocs séparés, puis une tonalité assez aiguë mais jamais désagréable, dont la modulation en intensité décrite ci-dessus, la « rugosité » comme dit le patient, devient de moins en moins

b) La parole est entendue comme une succession d'éclats rapprochés : il est évident que le sujet traduit bien les amplitudes et mal les fréquences. Toutefois, il établit rapidement une correspondance, une sorte de « codage », entre les syllabes et les mots, et ses perceptions déformées. Il a pu distinguer immédiatement l'un de l'autre les mots « papa » et « maman », puis les identifier sans difficulté, enfin augmenter progressivement le nombre des mots reconnus, jusqu'à sa sortie de l'hôpital, il y a environ un mois. Il doit du reste y revenir, et subir une nouvelle intervention.

William (Bill) House



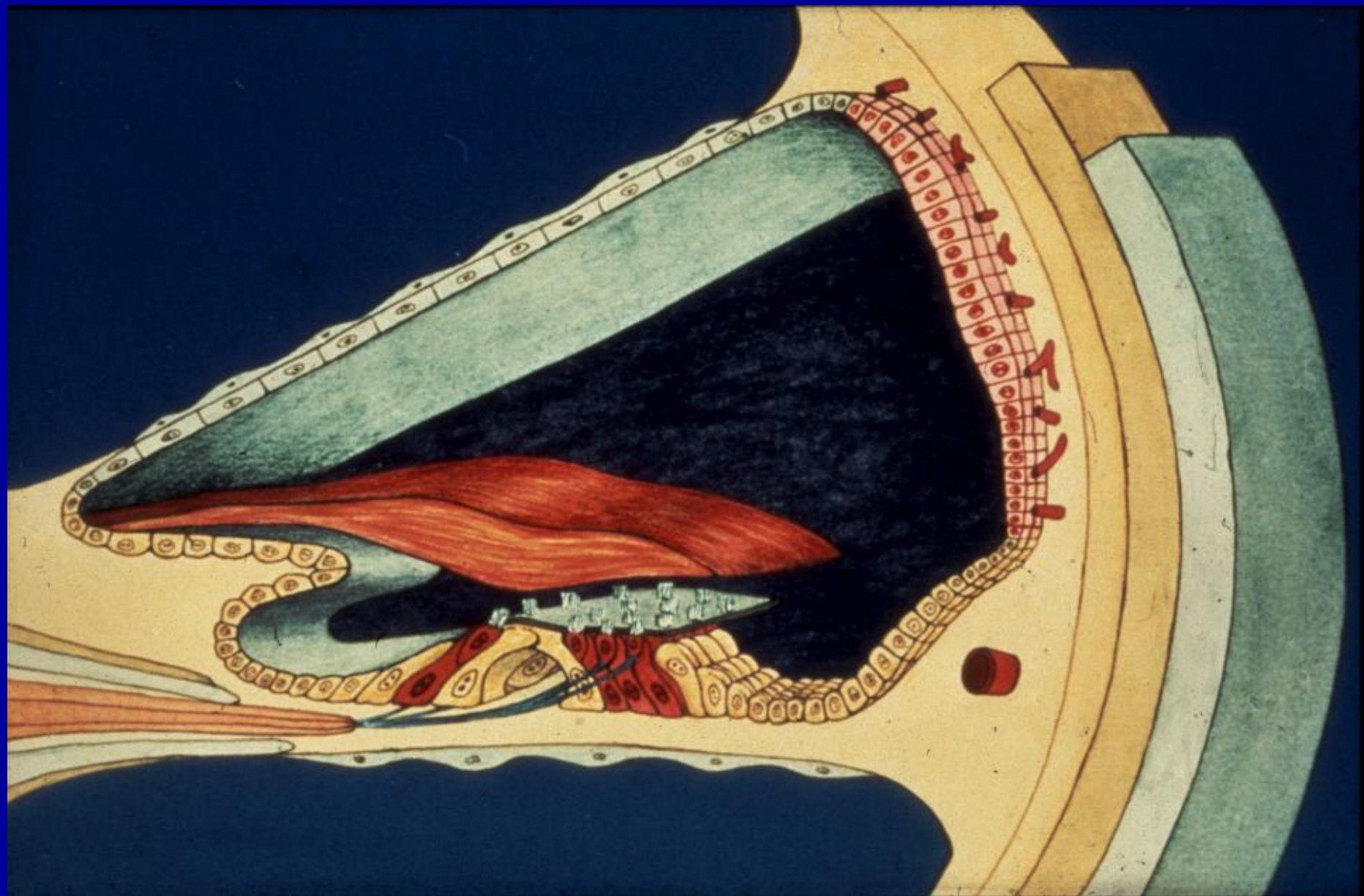


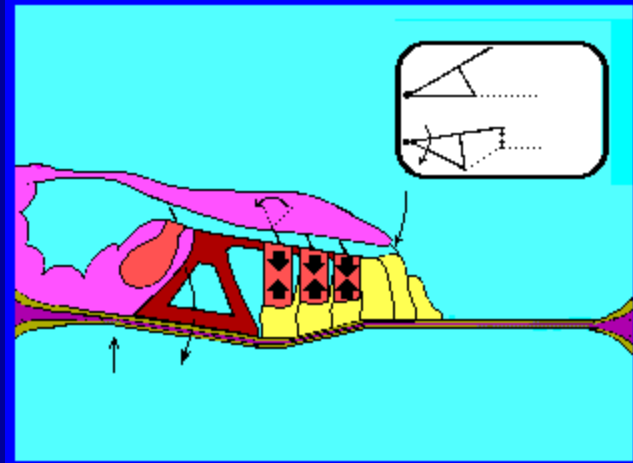
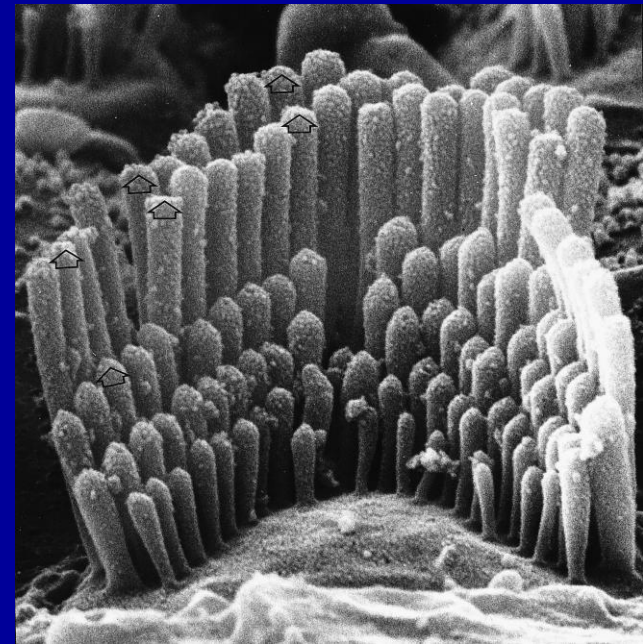
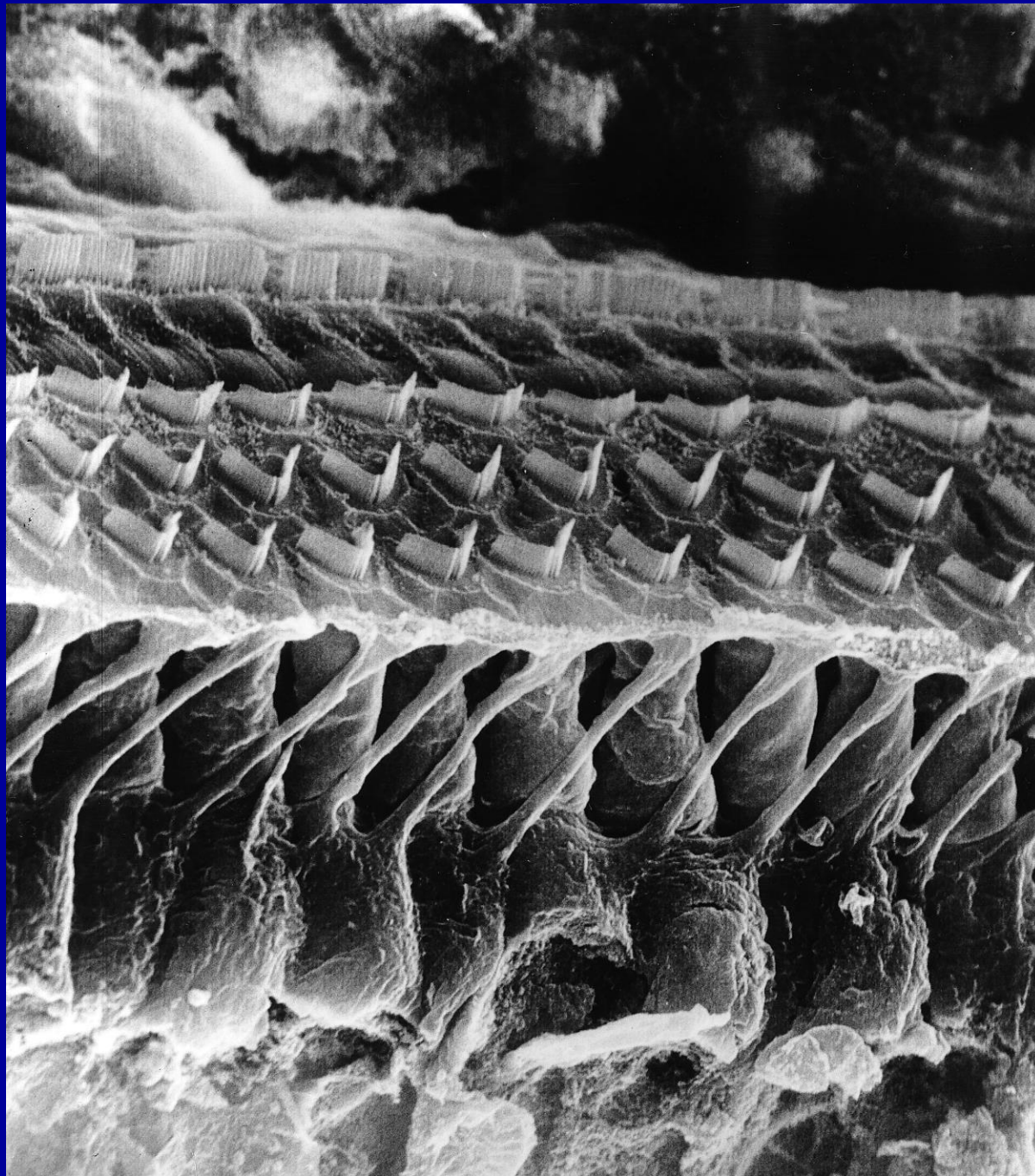


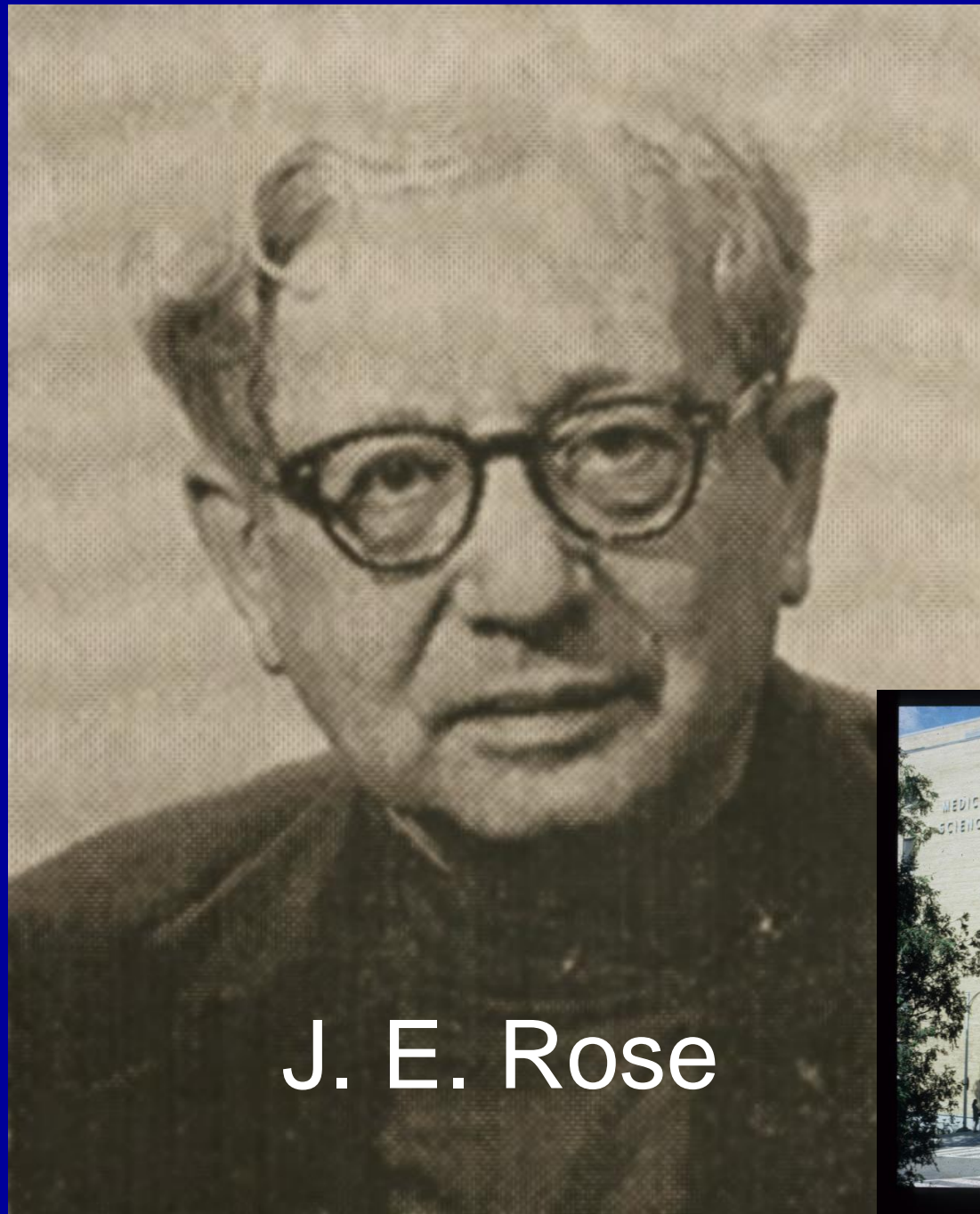
1161. PATHWAY OF SOUND RECEPTION



1162. CROSS SECTION OF COCHLEA

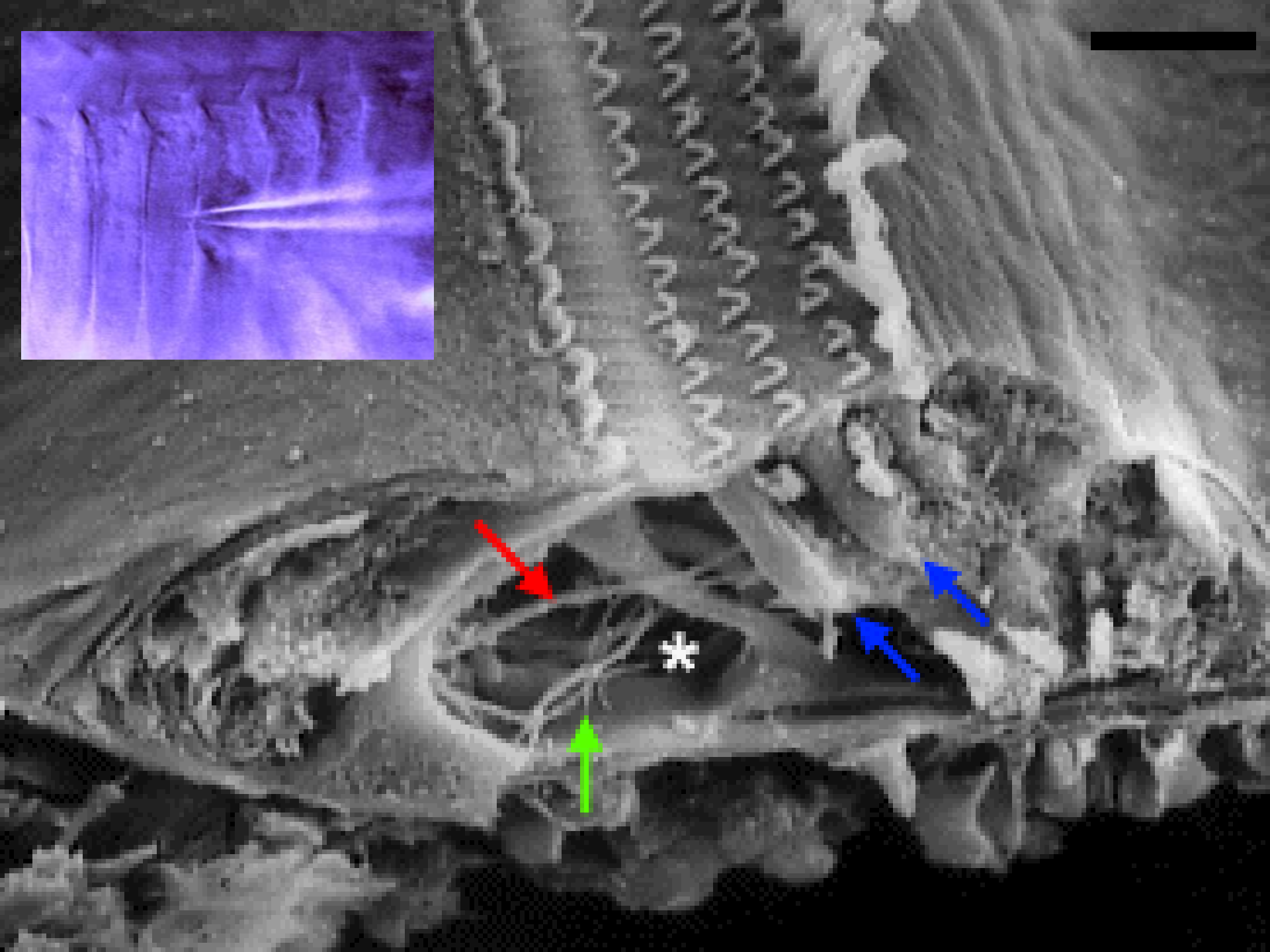
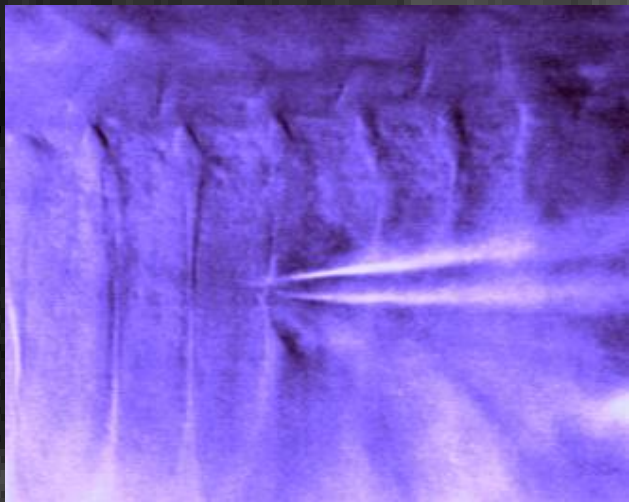


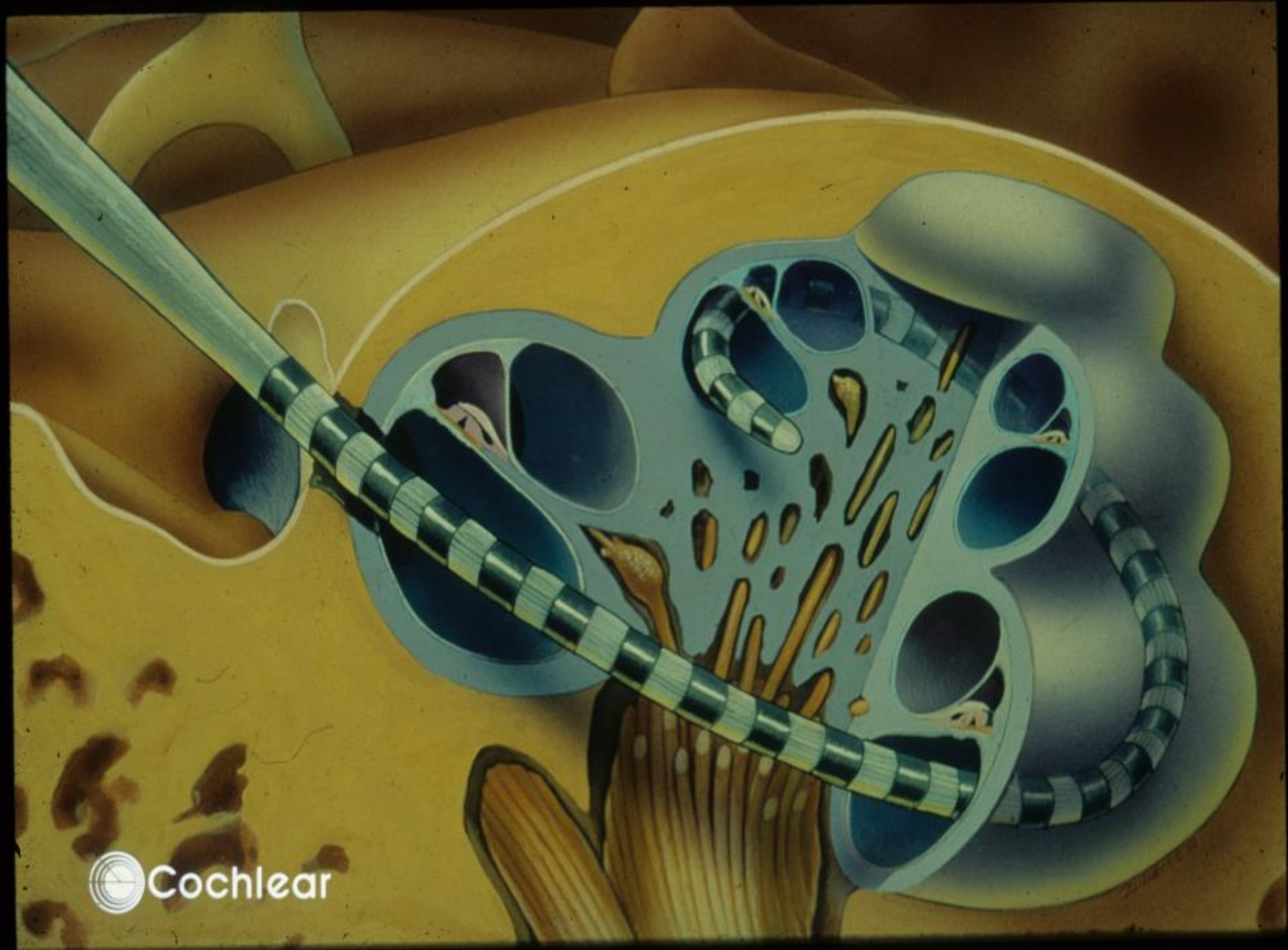




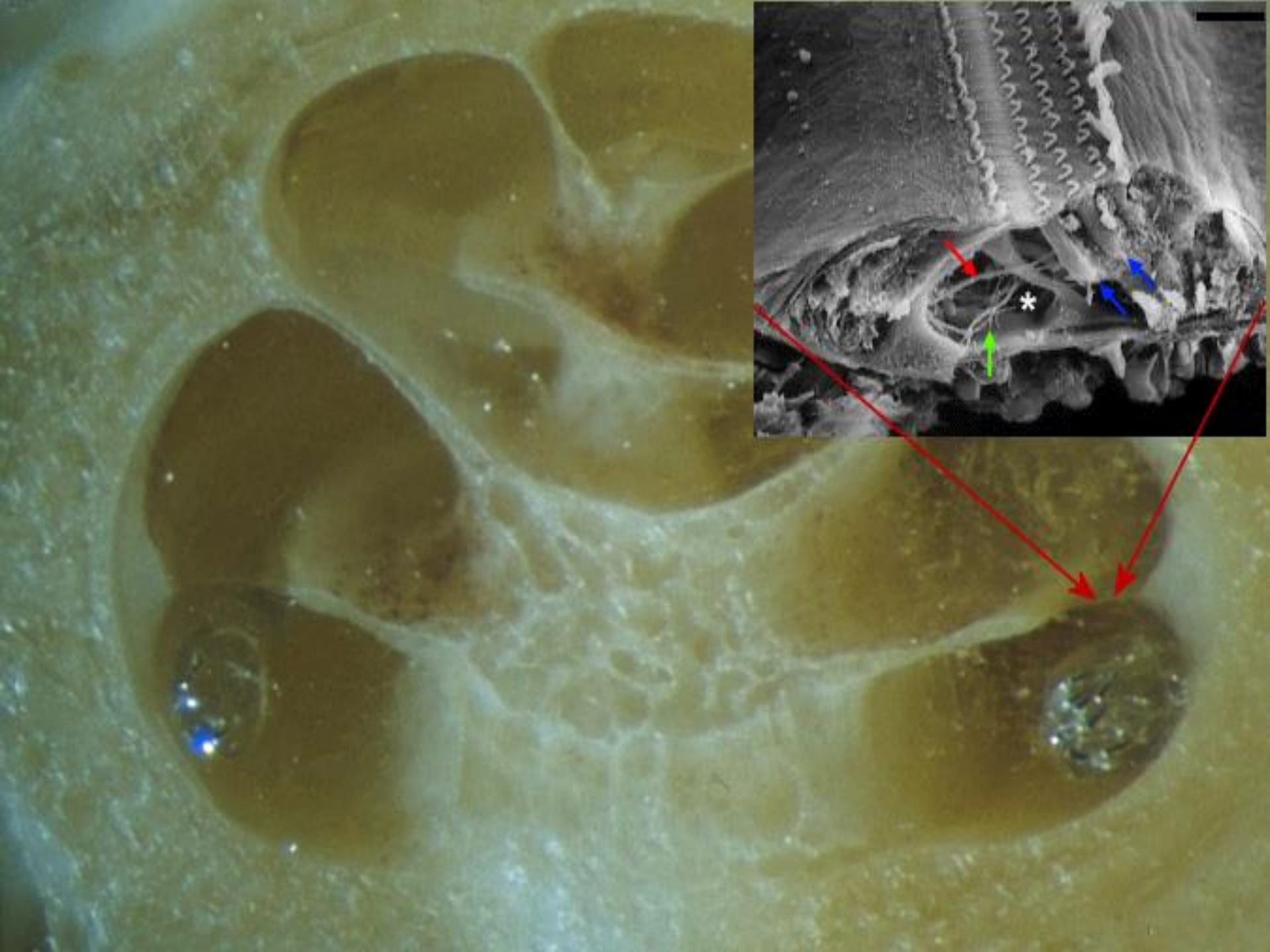
J. E. Rose

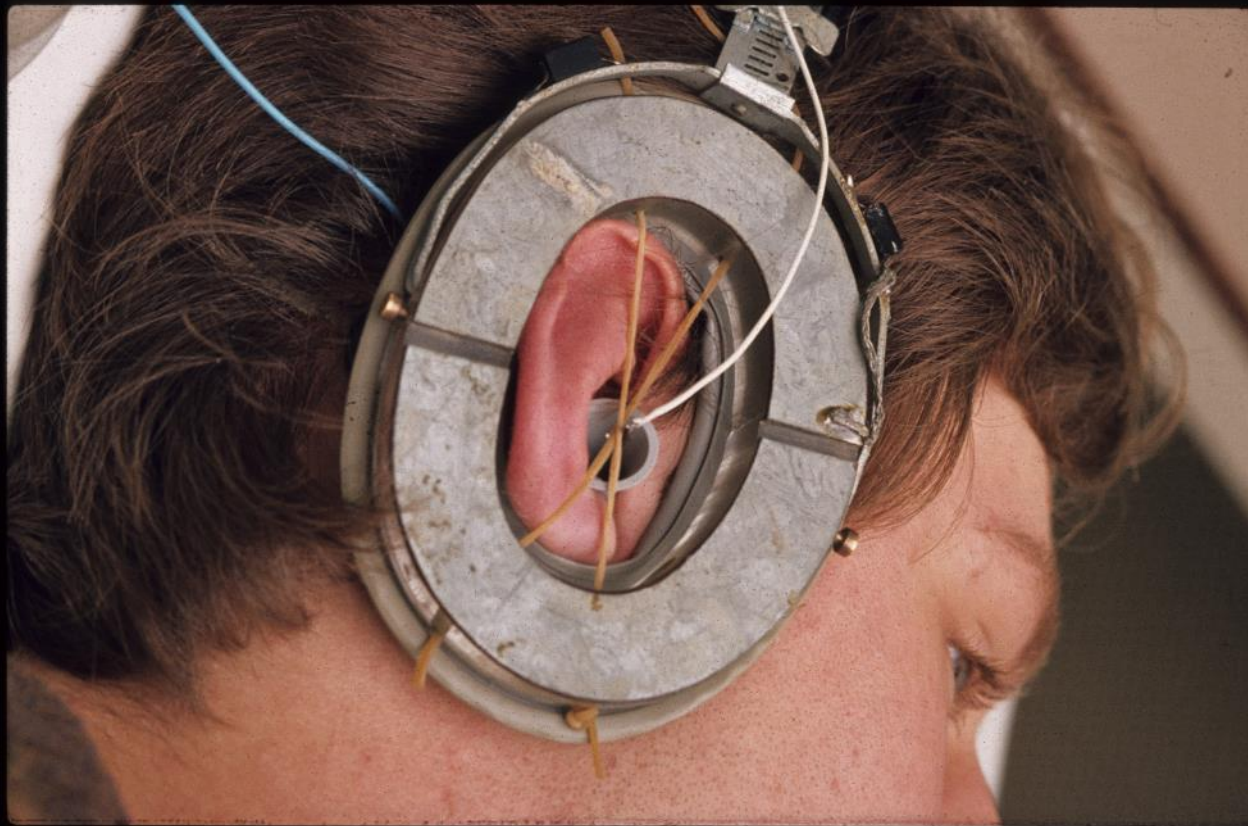


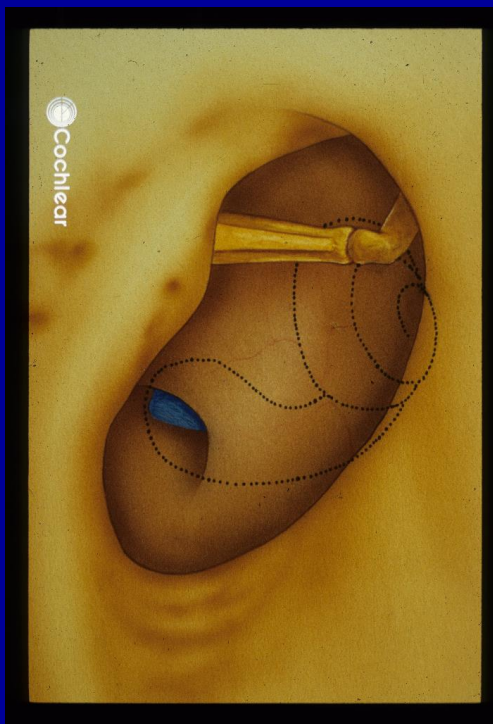
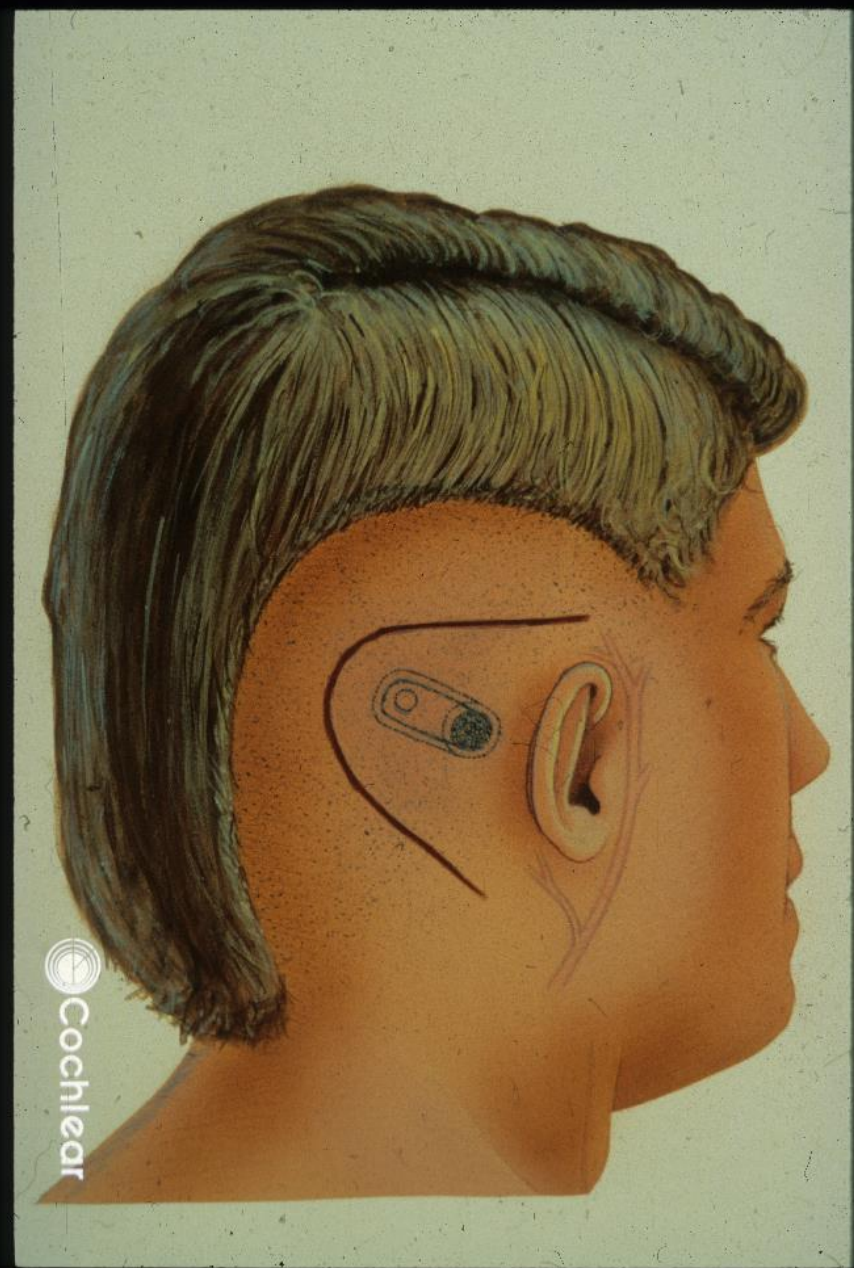


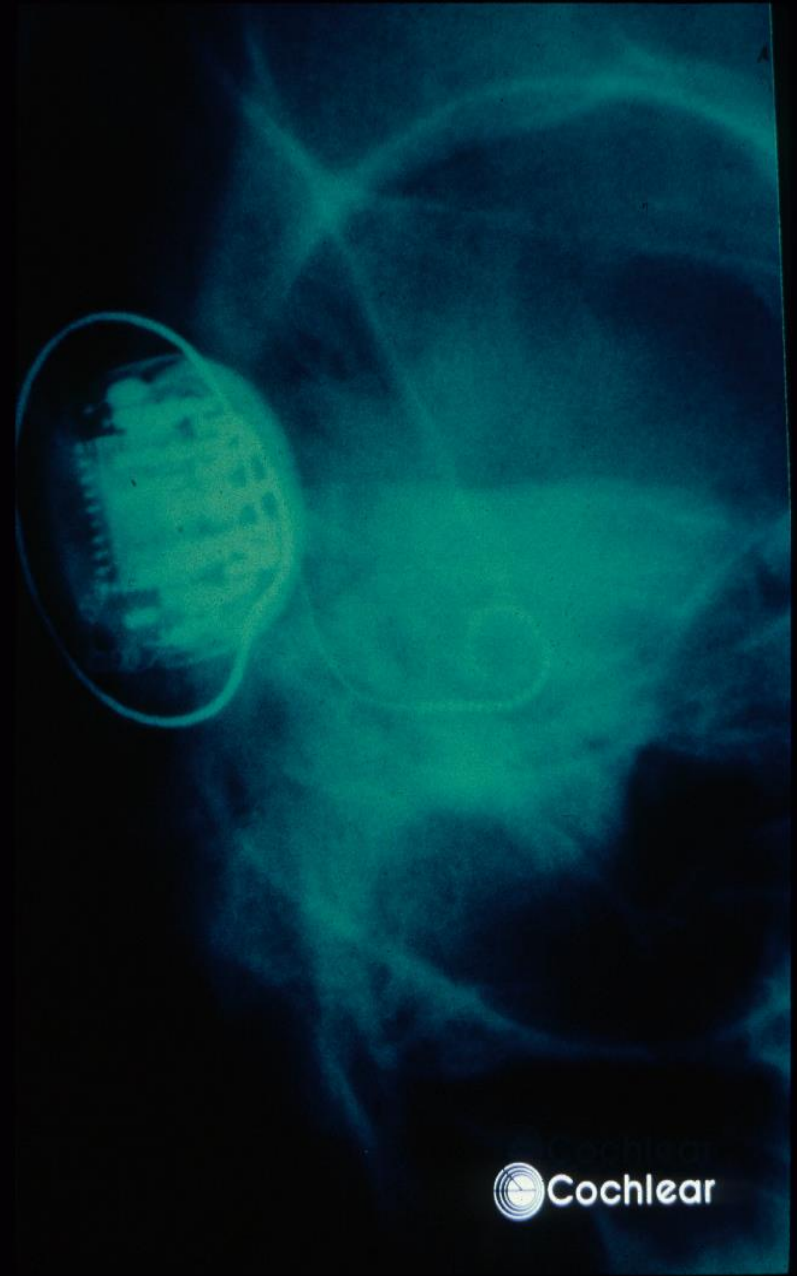
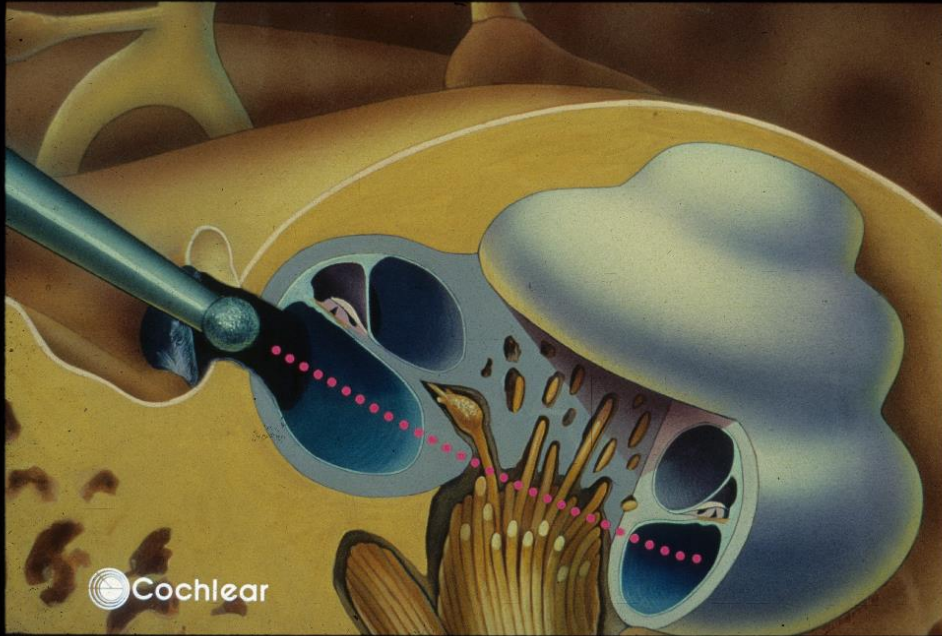


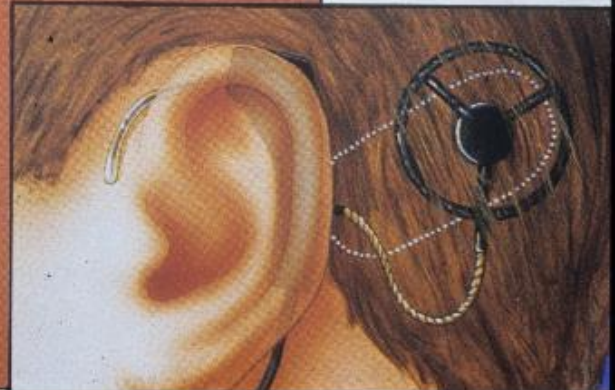
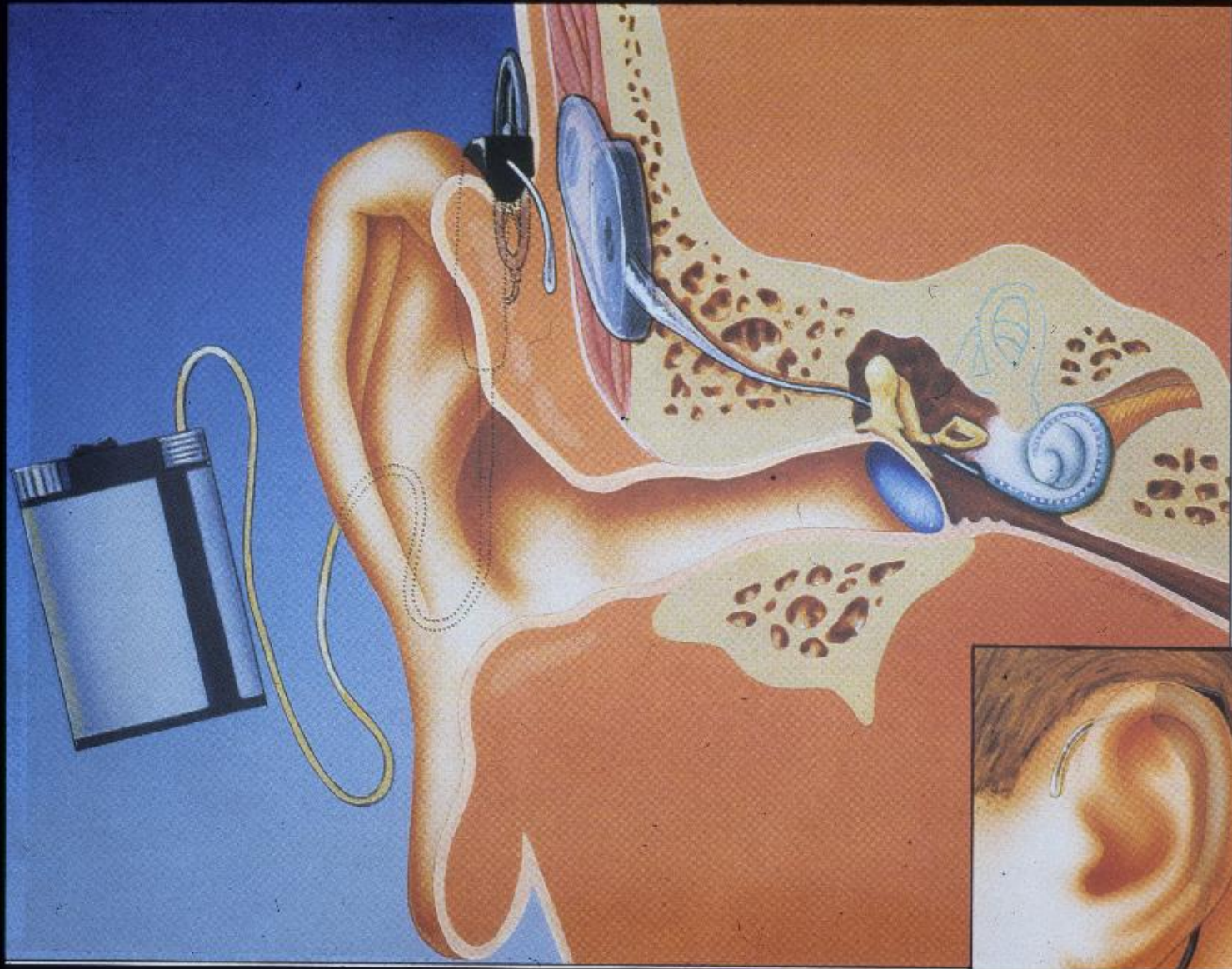






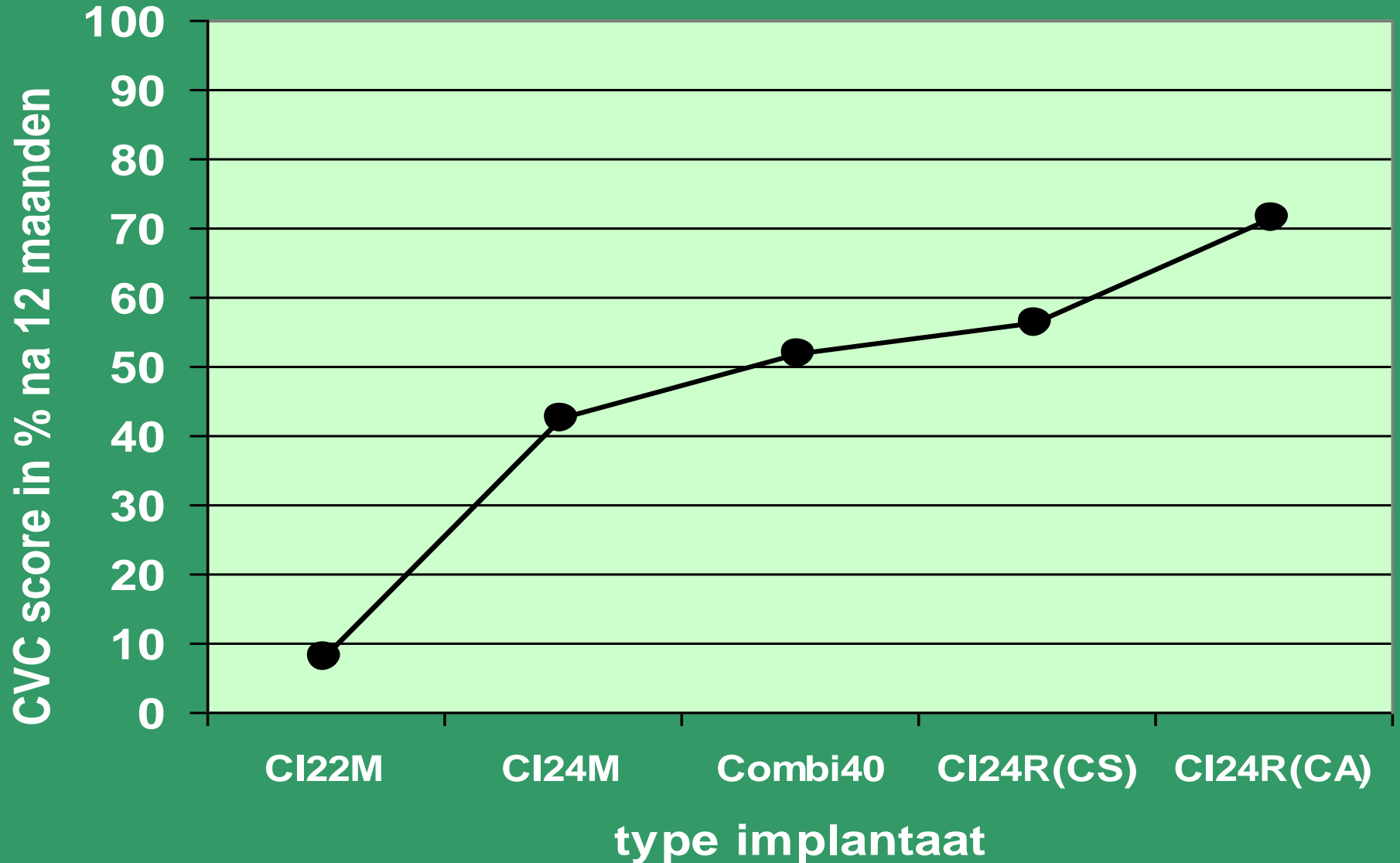








Beter spraakverstaan door technische verbeteringen

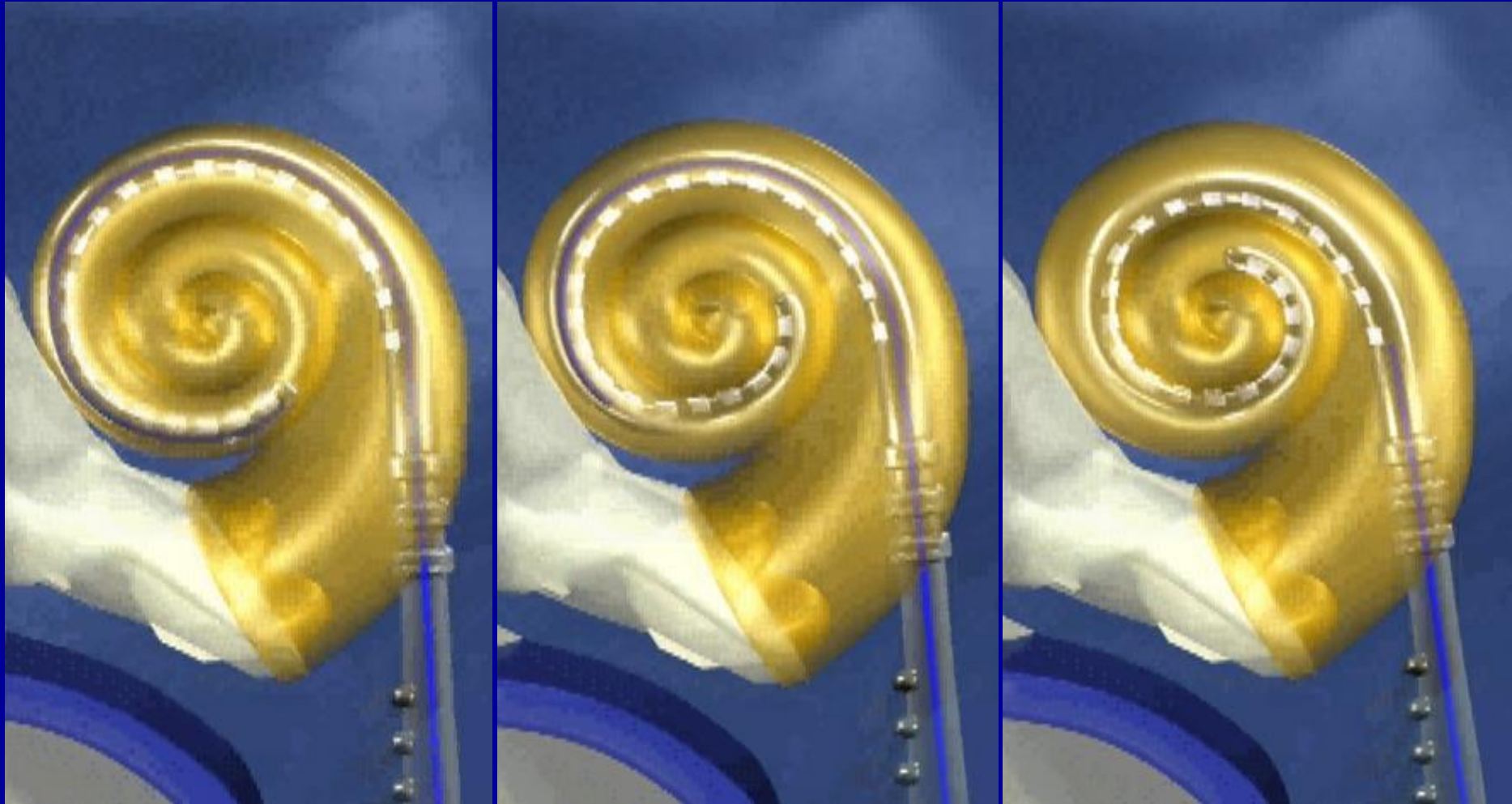






Voorgebogen elektroden

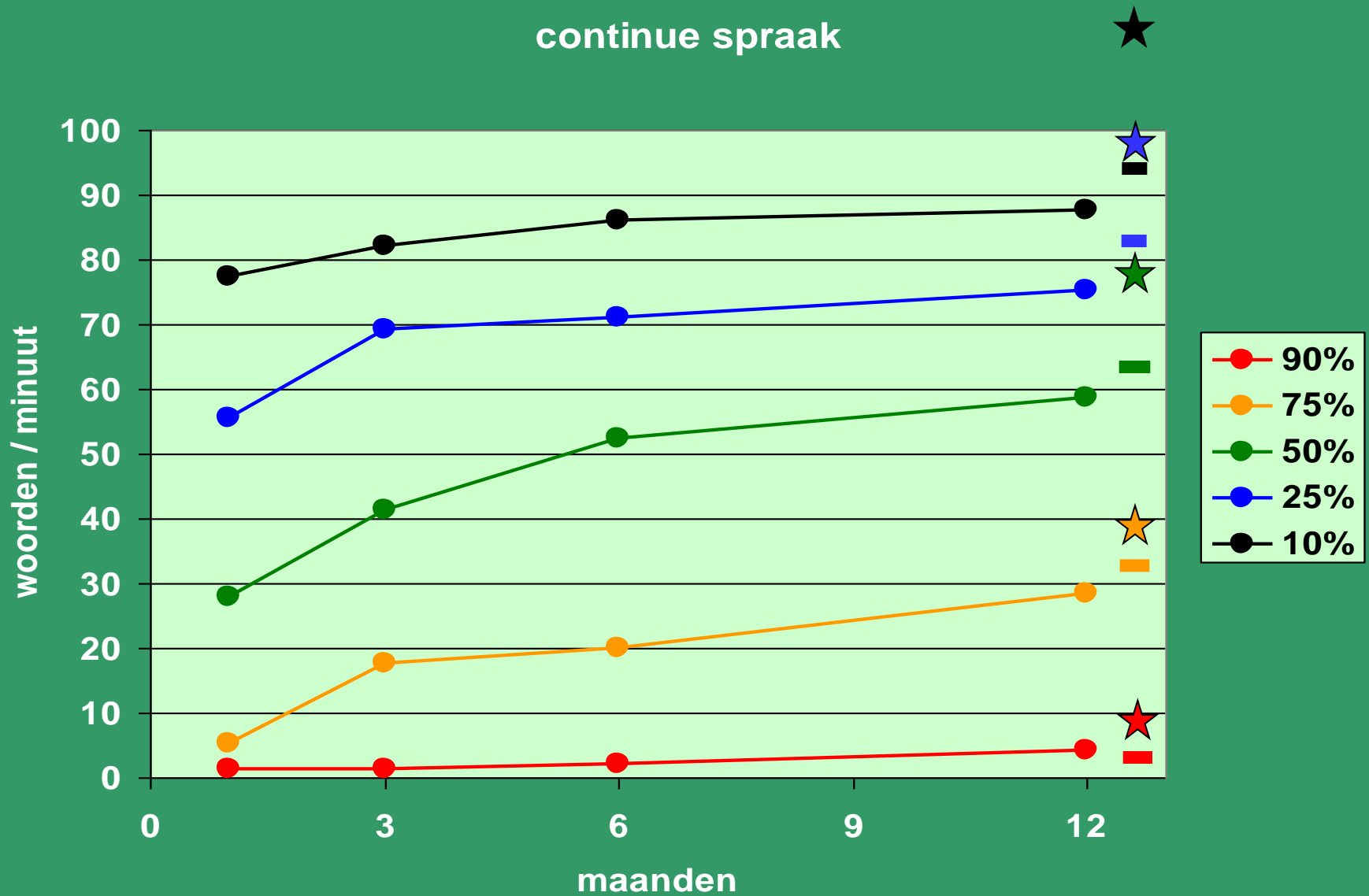
Inbrengen van een voorgebogen elektrode





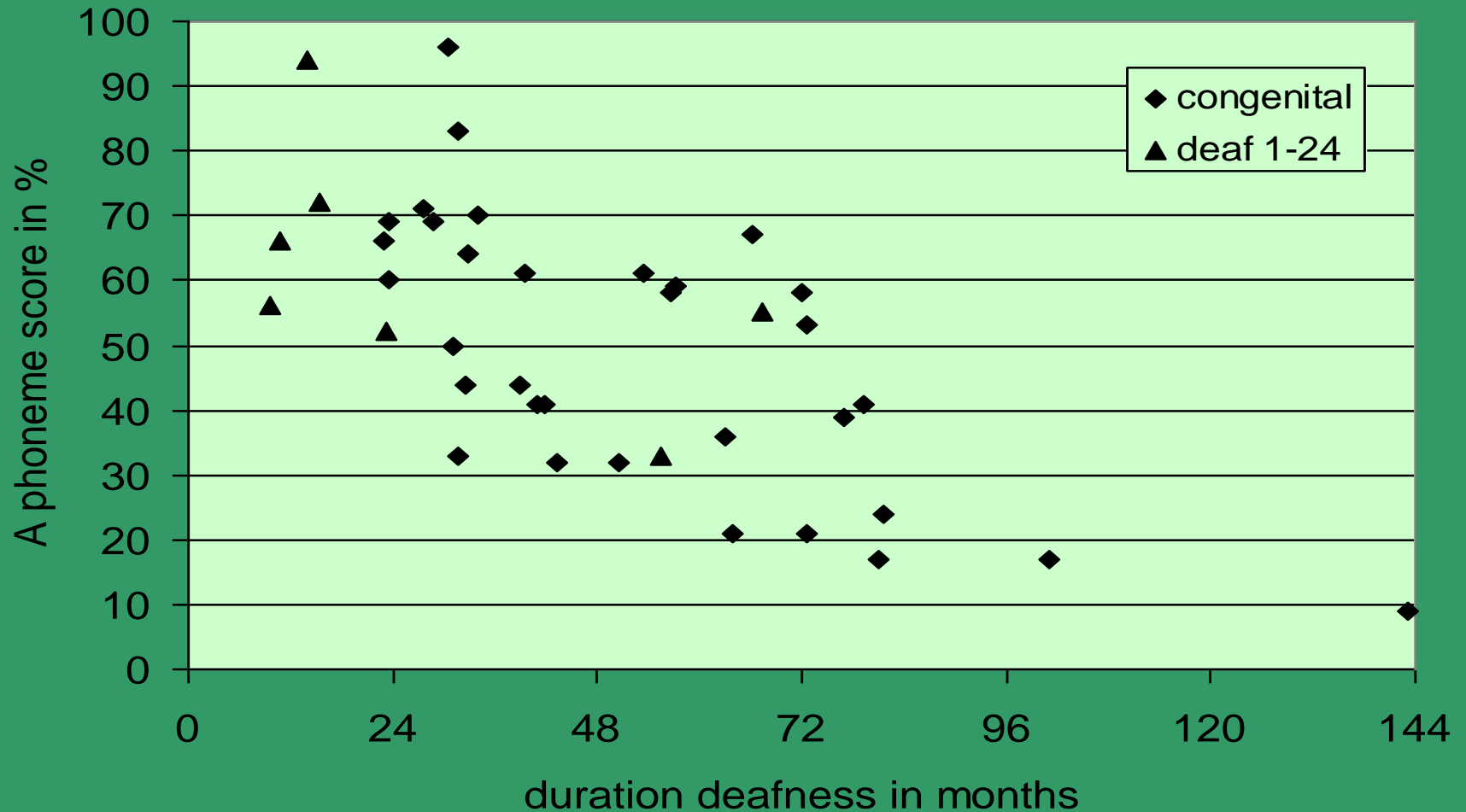
Stimulatie uitgroei zenuwen

Grote verschillen in resultaat

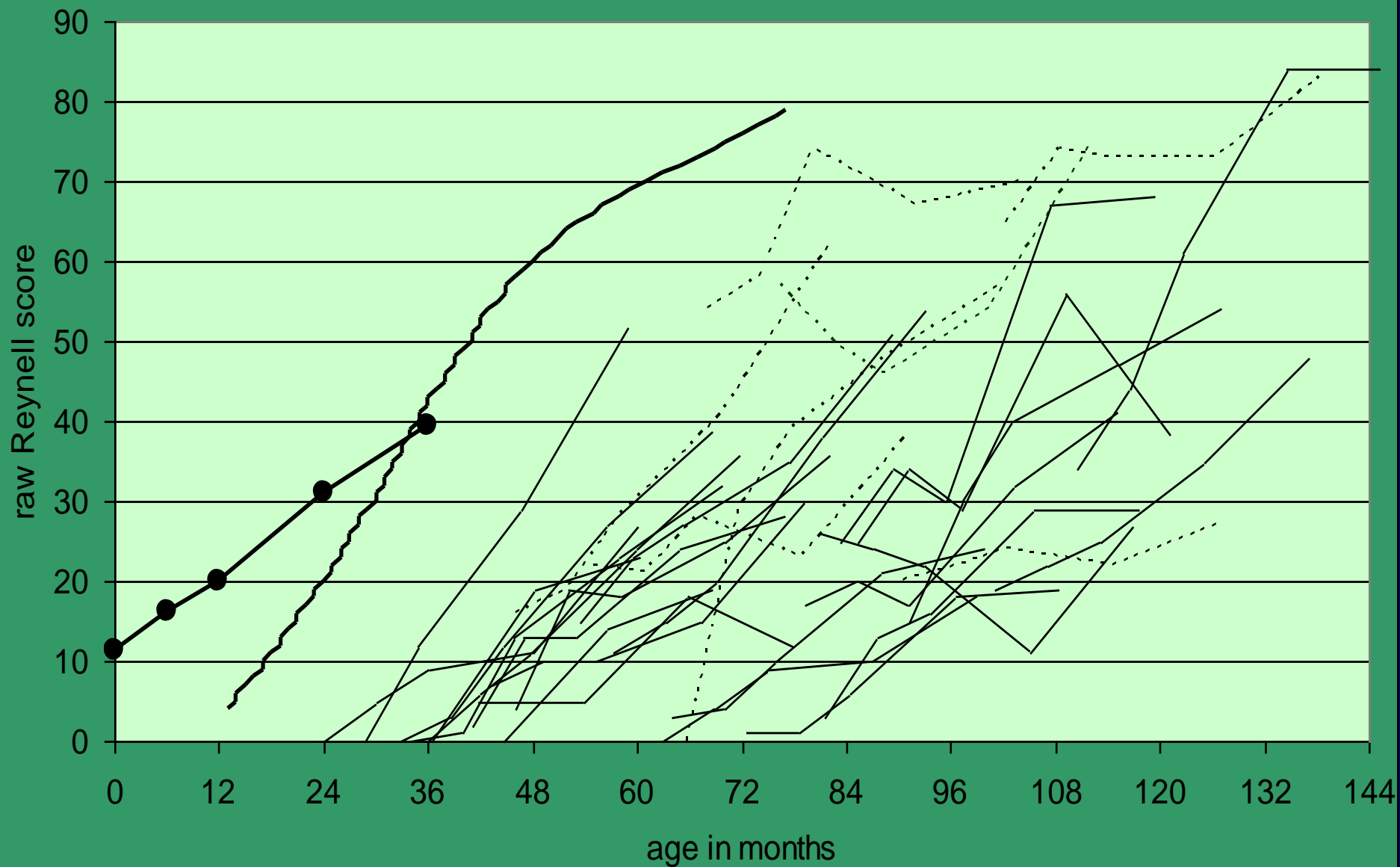


Hoe langer doof, des te minder het resultaat

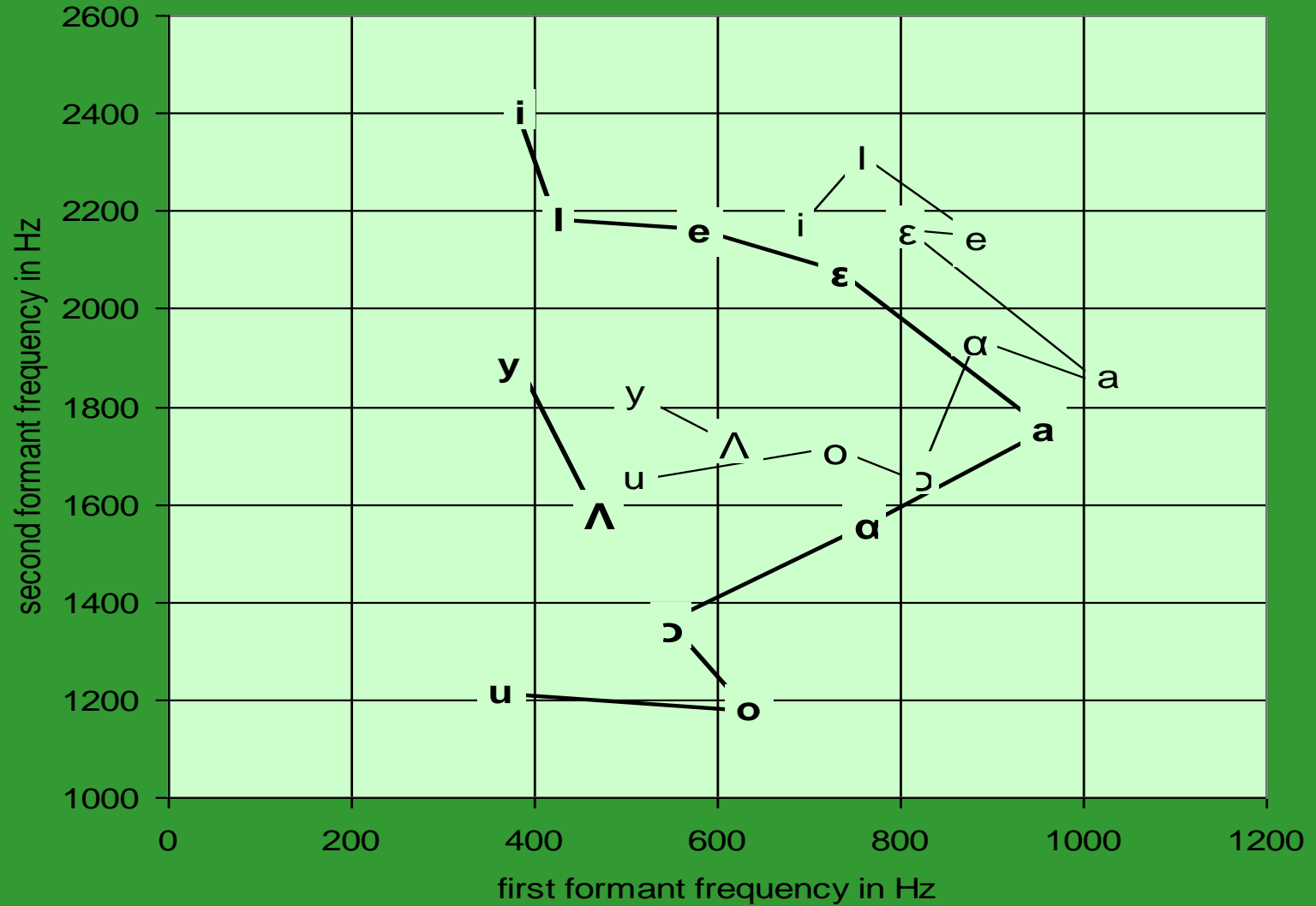
$R = -0.68$



Taalontwikkeling



Uitspraak klinkers



Akoestisch + elektrisch horen

