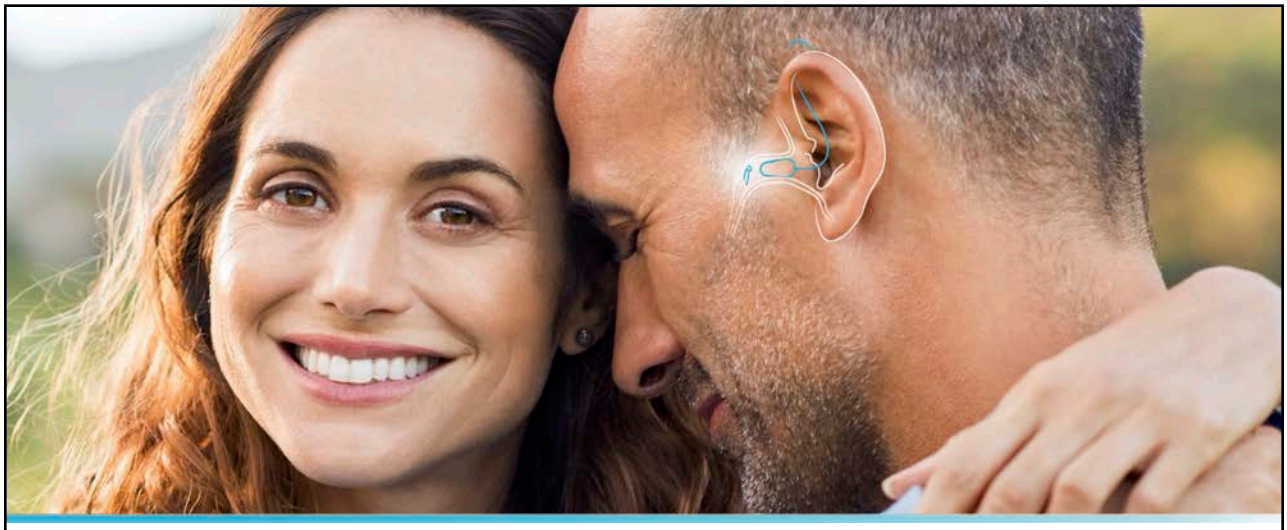

The Earlens Difference:
Why Contact Drive Succeeds When Acoustic Devices Fail

Drew Dundas, Ph.D., FAAA

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ML00417vA

If you could give your patients everything they wanted in their listening experience,

wouldn't you?

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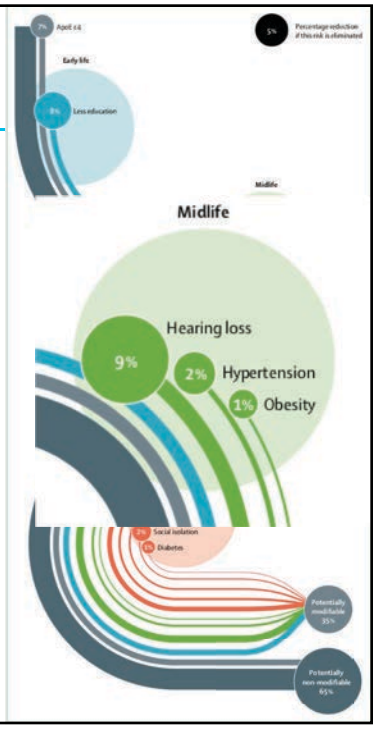
Hearing Impairment Should Be Treated

- Hearing impairment is a global health concern, impacting more than 1/10th of the world's population
  - >65% of US adults over 70 are candidates for hearing aid-based treatment
- Awareness of the impact of untreated hearing impairment is growing[1]
  - Cognition, dementia, depression, falls, healthcare costs
  - Early and appropriate treatment is recommended
- The good news - well-fit hearing aids counteract neuroplasticity changes[3]
- The current standard of care is treatment with a conventional, acoustic hearing aids
  - Many brilliant solutions from brilliant engineers



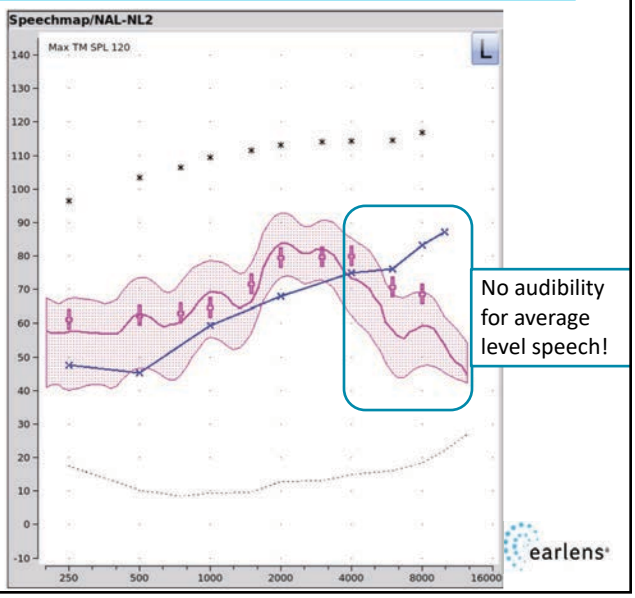
1. Livingston et. al, Lancet, 2020
2. Hearing Industries Association data, 2019
3. Glick & Sharma 2020

Why are some still patients still hard to fit?

- With all the modern advances in technology, why are some patients still having the same complaints they had 10 years ago?

How often are we still struggling with these patient concerns with acoustic hearing aids:

- Why are some people with steeply sloping loss hard to fit?
- Why do some people with good WRS still struggle with speech understanding?
- Why do your musician/engineer patients complain about the sound quality – when their nice headphones "sound great!"
- Why with claimed bandwidth to 10 kHz do you all-too-often see the high frequencies roll off below audibility when verifying a fitting?



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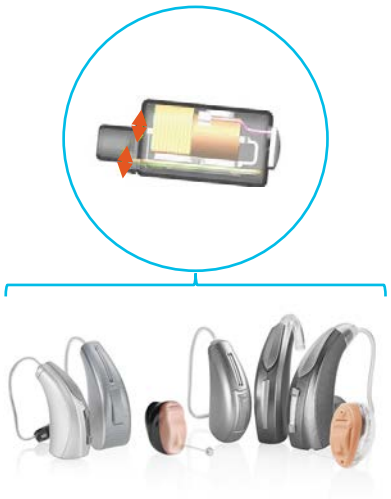
The Answer Lies in the Physics of Sound Amplification



The physics of speaker performance make compromise a necessary evil in acoustic hearing aid design and fitting

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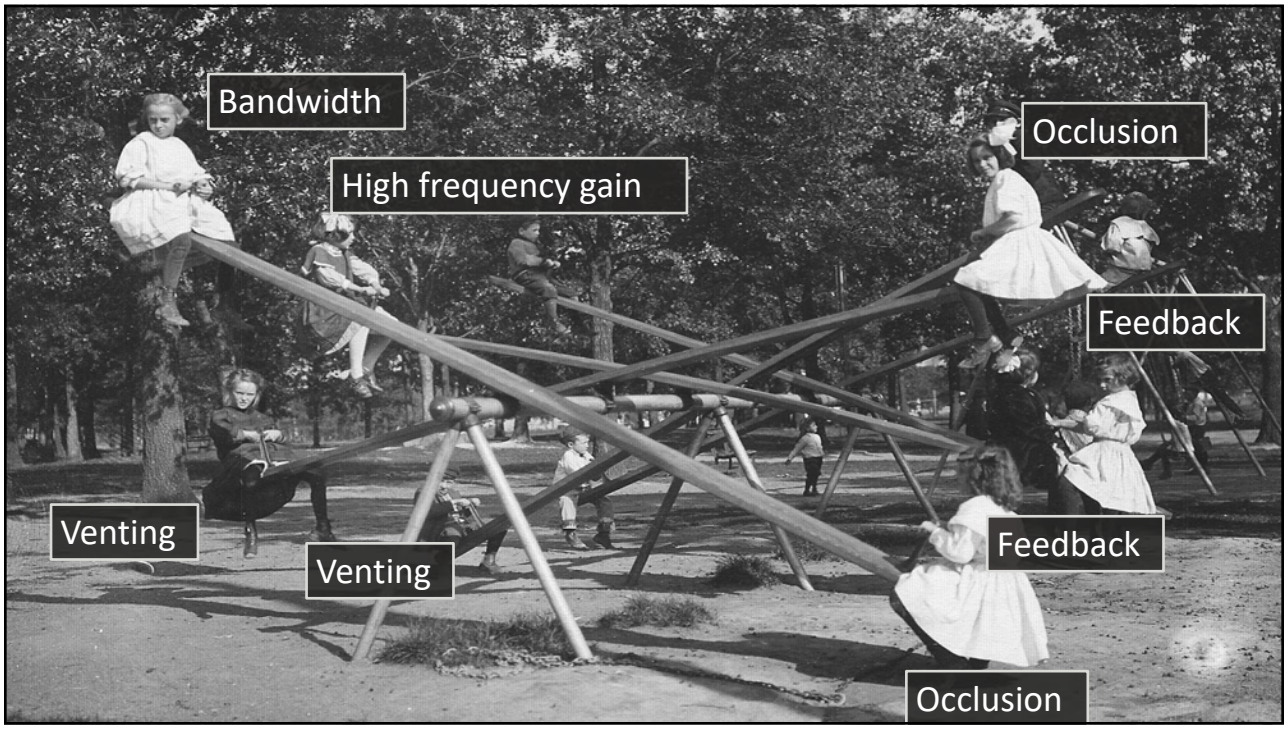

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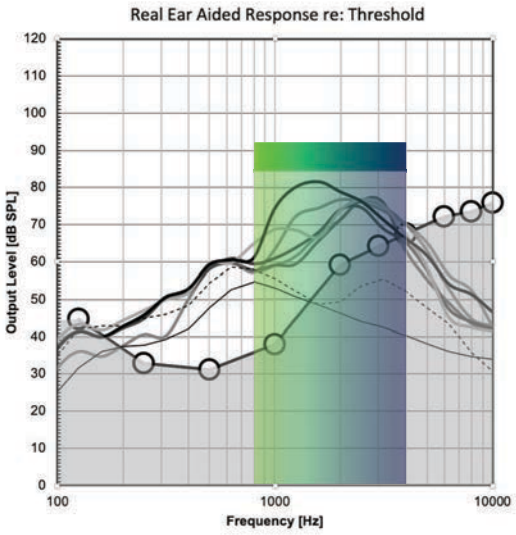
The Result of all the Trade-offs:



- Under clinically realistic conditions acoustic hearing aids provide limited audible bandwidth improvements, even in less severe hearing impairments
- This is why some of those patients can't be adequately amplified, and why many complain of limited benefit
- Audibility is restricted due to need to vent for occlusion, while preference and feedback limit gain in high frequencies when balanced against inadequate low frequency response

Struck & Prusick, (2017)

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What if…

You had a different option at your fingertips for those patients…

- Where you didn't have to trade off audibility to address occlusion?
- Where you could reach audibility targets to 10 kHz with no feedback and while widely vented?
- Where you could treat hearing impairment with a solution that doesn't produce sound, but simultaneously "Sounds Great?"

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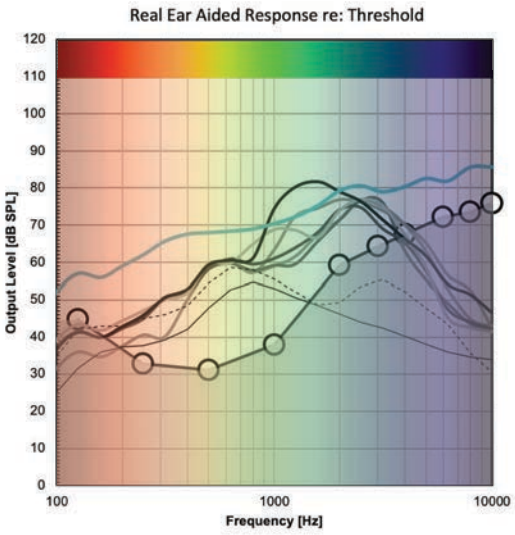
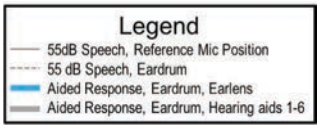
Contact Direct Drive versus Speaker-Based Hearing Aids



- Earlens is a hearing solution that amplifies without producing sound…
- By directly vibrating the eardrum instead of using sound, you get:
  - Low frequency output with wide venting
  - The ability to meet prescriptive targets from 125 to 10 kHz without feedback
  - Balanced frequency response that prevents tinniness, sharpness and harshness



Struck & Prusick, (2017)

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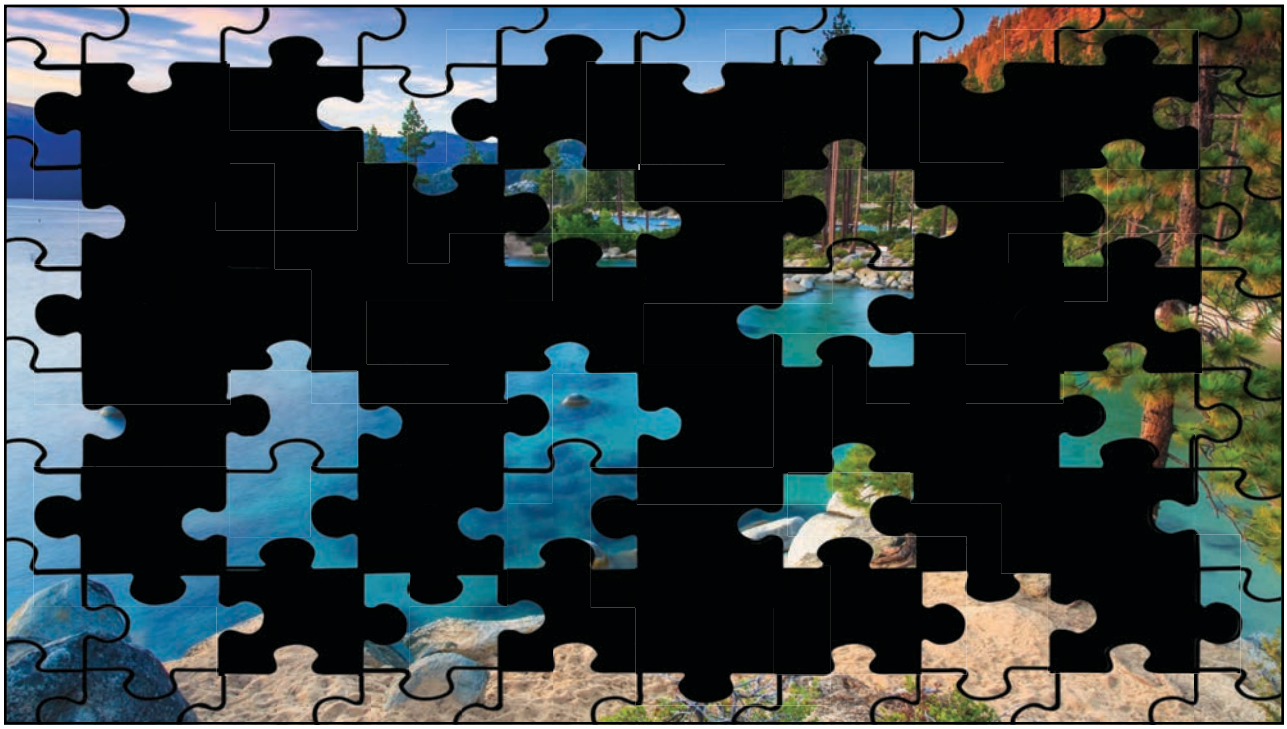

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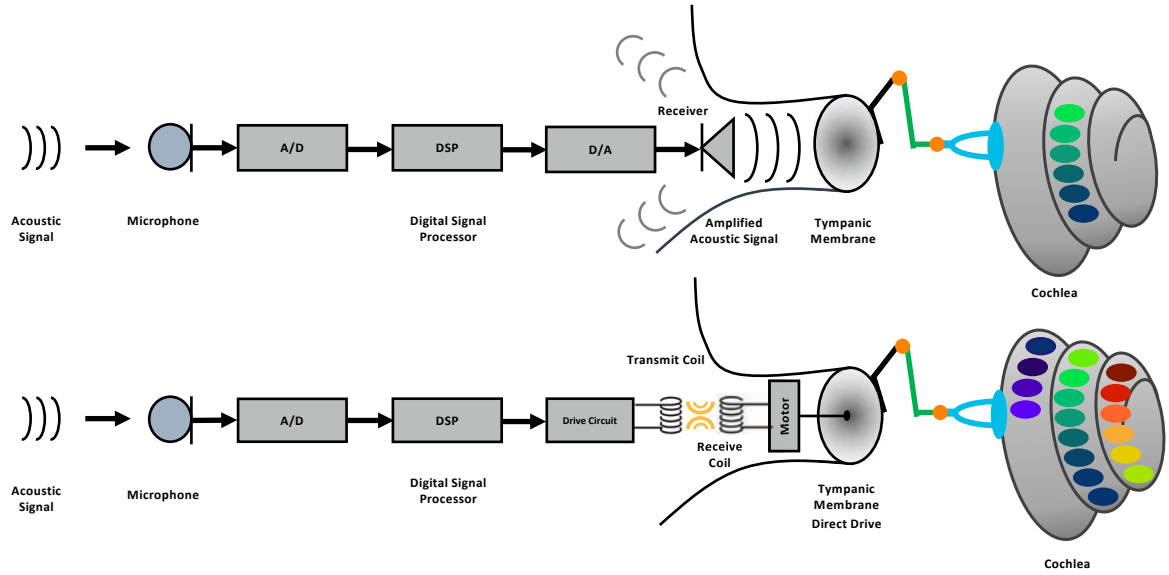
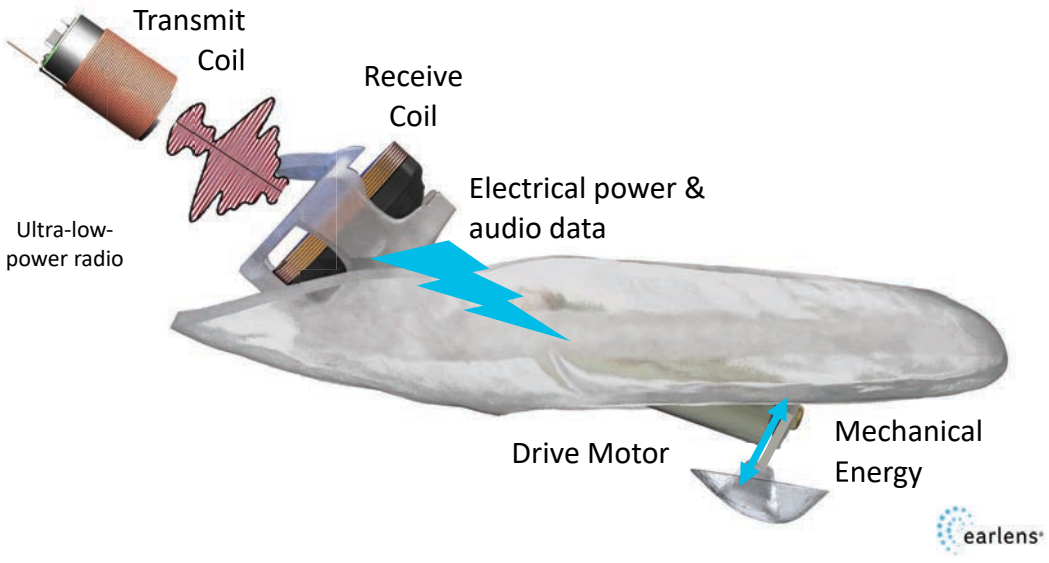
Earlens is Different – Directly Driving the Eardrum



Earlens Contact Hearing Solution



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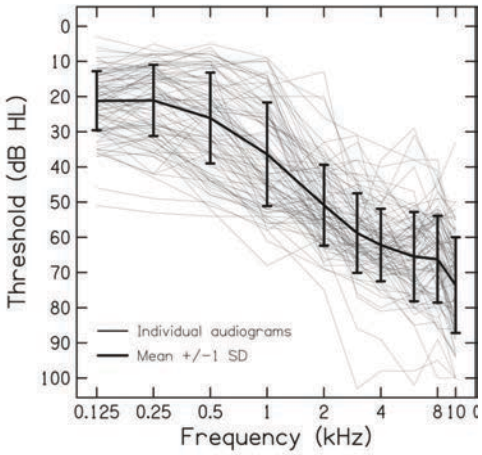
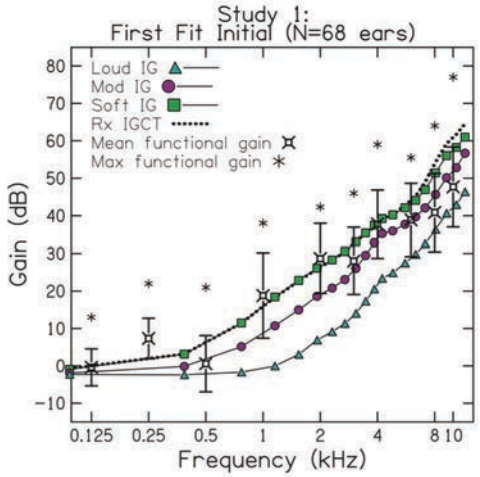
Unmatched Real Ear Aided Gain…



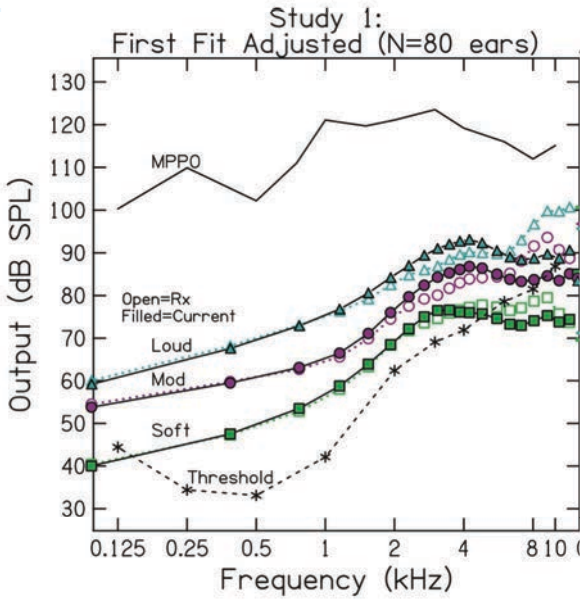


- Direct drive of the eardrum allows for broadband aided benefit via high efficiency energy transfer
- >60dB gain is achievable even with a widely vented fit[1]

1. Arbogast et al, Ear and Hearing: May/June 2019 - Volume 40 - Issue 3 - p 741-756

…Realized as Broadband Audibility

- Peer reviewed evidence demonstrates[1]:
  - Broadband, usable audibility
  - Patient preferred sound quality
  - High patient satisfaction
- But why do these patients accept that much high frequency gain with a contact solution and not an acoustic device?
- The magic is in the broadband naturalness of sound…
- People need the pedestal of the lows in order to appreciate and accept the crispness of the highs.[2]



1. Arbogast et al, Ear and Hearing: 40(3), May/June 2019, 741-756
2. Moore & Tan, J. Acoust. Soc. Am. 114 (1), July 2003, 408-419

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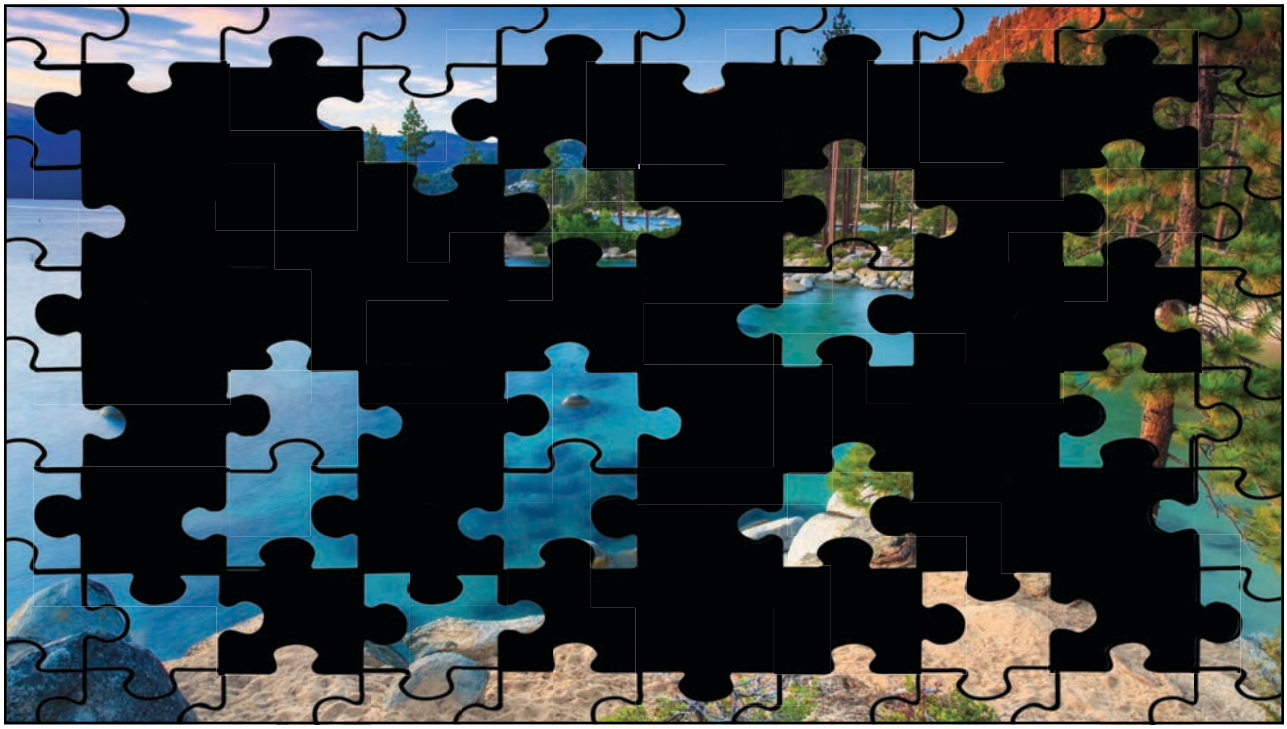
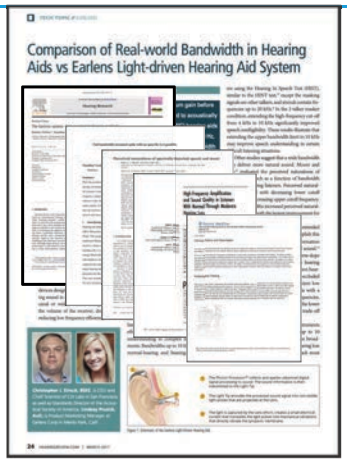
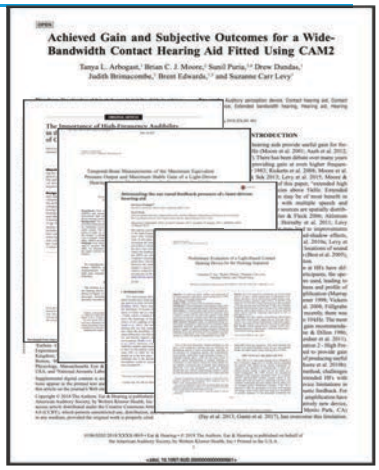


Patients Benefit from More Audible Bandwidth





Multiple peer-reviewed articles have ended the debate

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★ Superior sound quality ★ Clear speech
★ Best in class streaming ★ Reduced effort

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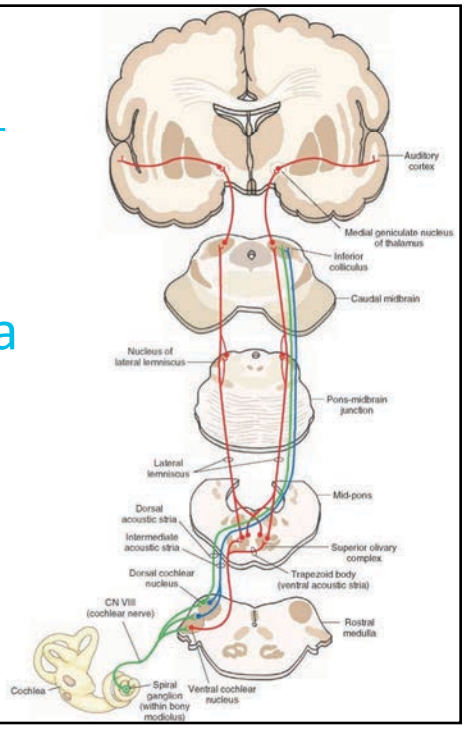
Why Earlens?

- **Key motivation for inventing the Earlens:**

Deliver a broader audible frequency range to the cochlea

- Provide access to more and redundant information for the brain to use
- Useful in higher-level cognitive functions (e.g., speech perception, memory, learning)
- Users report superior sound quality, reduced listening effort and high satisfaction with balanced and comfortable loudness



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A Premium Product with Premium Service

- Earlens is focused on changing the paradigm of treatment

1. Differentiated product and unique method of action with superior performance over speaker-based technology
2. Earlens product is only available via an Audiology and Physician partnership model
3. Medical Model partnership of care at practice reinforces value of service and clinicians are reimbursed for follow-up service appointments
4. Premium care is continued via Earlens Concierge, helping patients get help fast and unburdening clinicians from non-clinical troubleshooting

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The Earlens Difference

World's Only Nonsurgical Direct Drive Technology

Mimics the **natural hearing pathway** by directly driving the middle ear—without the need for surgery

2.5x Bandwidth

Unrivaled Audibility and Sound Quality

Unmatched stable gain and audibility across the broadest frequency range **(125-10,000 Hz)**—with a widely vented fit and reduced risk of feedback

Exceptional Practice Differentiation & Service

Practice development and a unique service delivery model involving the Audiologist and **ENT physician** differentiates your practice and products from competitors

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If I could give my patients everything they wanted in their listening experience,

I would.

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Questions? Want more information?

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CustomerCare@Earlens.com

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