

Enclosure 3

Norwegian e-Health week 2nd June 2014

Programme & presentations from Abertay





eHelseUKA2014

The Norwegian eHealth Week 2014
02.-04. Juni 2014, Campus Grimstad

- Hjem / Home
- Program 2014
 - Mandag / 2 June Monday
 - Tirsdag / 3 June Tuesday
 - Onsdag / 4 June Wednesday
 - Foredragsholdere / Speakers
 - Påmelding / Registration

09.30 - 13.00	International day with examples from local and international projects	Session chairs: Rune Fensli, Santiago Martinez
09.30 – 09.35	Opening of the eHealth WEEK2014	Jan Inge Tungesvik, KS Agder
09.35 – 09.40	Video Greetings to the eHealthWeek in Grimstad from the Norwegian Ministry of Health and Care Services	State Secretary Anne Grethe Erlandsen and State Secretary Cecilie Brein-Karlsen
09.40 – 09.55	COPD patient online connections at home with Telemedical Central at Valhalla, Kristiansand	Berglind Smaradottir and Martin Gerdes, University of Agder
09.55 – 10.25	Power to patients: How telehealth promote equal partnership in health services	Bjørn Engum, Nasjonalt senter for samhandling og telemedisin
10.25 – 11.20	The Andalusian eHealth Strategy	José Daniel Soto Alba Head of the Information and Communication Technologies Service in the Regional Ministry of Equality, Health and Social Politics in Andalusia, Spain
11.20 – 11.30	Kaffe / Te / frukt Coffee, Tea and Fruit	
11.30 – 12.15	An integrated mental health and addiction care in integrated social and health care - an eksote experience in Finland	Juha Kemppinen, Finland
12.15 – 12.30	Visions and possibilities of a regional integrated Health network in the Agder Region	Frode Gallefoss Sørlandet Hospital HF
12.30 – 12.45	Norwegian National Health portal: Helsenorge.no - perspectives for the future involvement of patients and close relatives	Helge Blindheim Helsedirektoratet
12.45 – 13.00	United for Health Project (U4H) / organiser og løsninger	Roger Nodeland Kristiansand kommune
13.10 - 14:00	Lunsj Lunch	
14.00 – 17.00	Interreg IVB NorthSea Region Programme Project: e-inclusion for an aging Europe (iAge)	Session chair: Santiago Martinez
	iAge: e-inclusion in ageing Europe: it's aim, objectives and results.	Roos Galjaard, Bureau Pau, iAge project manager
	Grandma on web, Vennesla Municipality project	Elin Thygesen, University of Agder
	Accessible Usability	Mr Allan Milne, University of Abertay Dundee, UK
	Instant Aging, interactive workshop / Guided tour: Smarthouse	Dr Scott-Brown, University of Abertay Dundee, UK

International Day programme 2nd June 2014

Accessible?

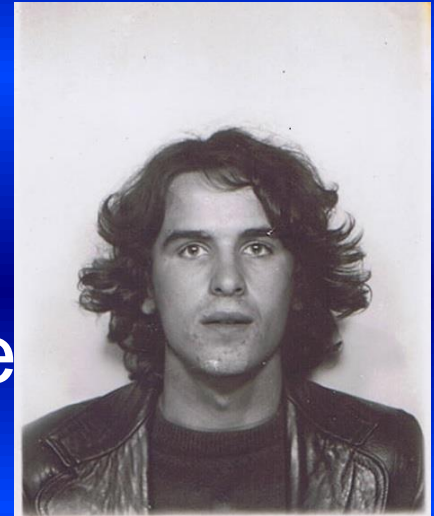
Usable?

Who should care?

(c) Allan C. Milne.
Abertay University,
dundee, Scotland.

Allan Milne.

- Software architect & developer
 - University lecturer ...
- Blind; use a guide dog .
 - Grumpy old man ...



E-Health must be ...

... a universal and inclusive provision;

... usable without barriers;

... accessible to all users.

Usability is about being ...

- effective (easy to learn & remember);
- efficient (quick to navigate & do the job);
and
- satisfying (no frustrations or misunderstandings).

Demographic context.

- Usability must be assessed in the context of the age demographic.
 - IT/gadget/internet literacy.
 - language and culture.
 - incidence of disability.

- Any idea what this is all about?

Accessible content must be

...

- perceivable;
 - operable;
- understandable and
 - robust.

Accessibility can be ...

- built in to the product or service (inclusive design);
 - available “out of the box”.
- provided through compatibility with a consumer’s own assistive practices and technologies.

Accessibility applies to ...

- blindness & low vision;
- deafness & hearing loss;
- learning difficulties;
- cognitive limitations;
- limited movement;
- speech disabilities; and
- photosensitivity.

Usability, accessibility & accessible usability.

- ***Usability*** does not specifically address accessible use.
- ***Accessibility*** only addresses the ability to get into a product or service, does not imply that the consumer can do anything useful.
- ***Accessible usability*** is the ability to do useful work in an efficient, effective and satisfactory manner through the medium of an assistive practice or technology.

... not my problem ...

**“Our E-health application is only for
use by staff, not clients”**

So you don't ...

... have staff with changing sensory and/or mechanical abilities?

... employ, or intend to employ, staff who are colour-blind, arthritic, aging or disabled...

... use volunteers?

... want to be an ethical, equal opportunity, legal, efficient and/or profitable business?

So who is responsible?

- Commisioners/procurers:
 - include accessible usability as a non-negotiable requirement in all contracts.
- Developers:
 - understand and use design/implementation practices that result in accessible and usable product/services.
- Acceptance testing:
 - refuse to accept any product/service that is not usable and accessible.
- Operators/users:
 - monitor the accessible usability and provide feedback / complaints / litigation as required!

Delivery can be via ...

- ❖ hardware remotes and gadgets;
- ❖ web sites;
- ❖ desktop applications;
- ❖ mobile apps; and/or
- ❖ manual/paper processes.

Can the user ...

- ☐ perceive all aspects of the interface?
- ☐ understand the content?
- ☐ move around the application?
- ☐ know what to do next?
- ☐ know where they are?

On desktops and web sites ...

- ❑ Can you work

- ❑ in an effective and efficient manner

- ❑ without using the mouse;

- ❑ i.e. using keyboard keys only?

Web pages.

☐ Web Accessibility Initiative (WAI):

☐ <http://www.w3.org/WAI/>

☐ Web content accessibility guidelines (WCAG) version 2:

☐ <http://www.w3.org/TR/WCAG20/>

☐ Accessible rich internet applications (Aria):

On mobile apps ...

- ☐ Can you

- ☐ swipe through page elements in a logical order?

- ☐ avoid hitting the wrong button when wearing gloves?

- ☐ read the screen without your spectacles?

Mobile apps.

☐ Vendor accessibility guidelines.

☐ **Apple:** <http://developer.apple.com/devcenter/ios/>

☐ **Android:** <http://developer.android.com/>

☐ The BBC content and accessibility guidelines:

☐ http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile_access.shtml

Simple steps to accessible usability

- ✓ Keep interfaces simple.
- ✓ Use standard UI components.
- ✓ Embed content in meaningful UI elements.
- ✓ Label all buttons, edit and check boxes.
- ✓ Have alternate text for all graphics.
- ✓ Have a logical tab order.
- ✓ Keep page navigation simple.
- ✓ Make it easy for users to contact you with accessibility issues.

Instant Aging

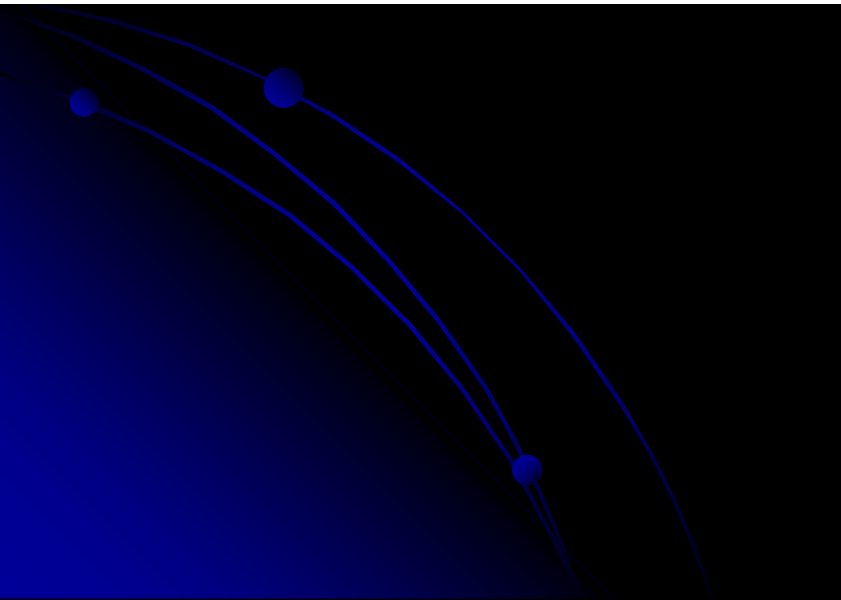
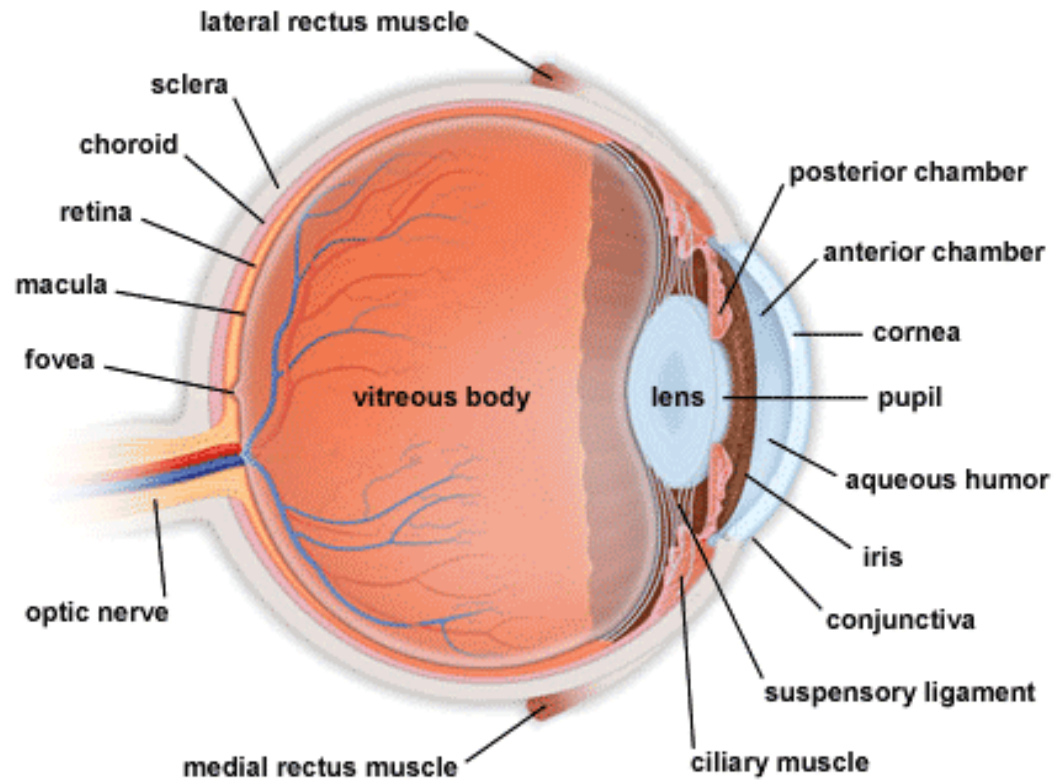
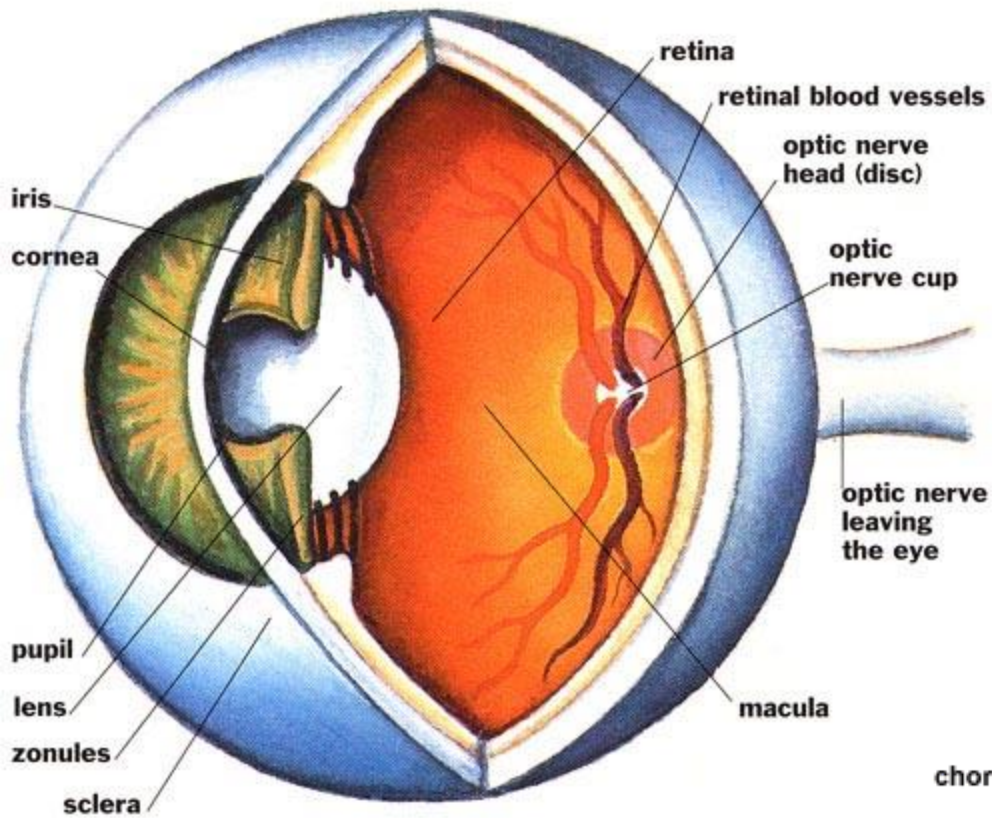


Ken Scott-Brown, Ashleigh McGregor,
Santiago Martinez, John Isaacs,
Siobhan MacAndrew

k.scott-brown@abertay.ac.uk

Workshop Inspired by Kate Anderson, NHS

The eye



Vision

- visual impairment : refers to blindness or partially sightedness not short-sighted (myopia) or long-sighted (hyperopia).

Facts

- Worldwide, about 314 million people are visually impaired. Around 14% (45 million) are blind.
- 87%) who are visually impaired live in developing countries.
- In developing countries, cataracts (a cloudy area that forms in the lens of the eye) are responsible for most cases of blindness (48%).
- With the right treatment, about 85% of visual impairment cases are avoidable, and approximately 75% of all blindness can be treated or prevented.
- Due to improved public health, the number of people who become blind after having an infectious disease has fallen over recent years. However, age-related visual impairment is increasing.
- Visual impairment usually affects older people. Globally, women are more at risk than men.

Macular degeneration

- -Painless
- Occurs when the macula is unable to function as well as it used to.
- The Macula is involved in central vision (what is directly in front of you)
- Macular degeneration is the gradual loss of central vision
- No affect on peripheral vision (outer vision)
- Age related (affects over 50' s most)
- leading cause of visual impairment in the UK,

Glaucoma

- **Glaucoma is a term that describes a group of eye conditions that affect vision. Glaucoma often affects both eyes, usually in varying degrees. One eye may develop glaucoma quicker than the other.**
- **If left untreated, glaucoma can cause blindness. But if it is diagnosed and treated early enough, further damage to vision can be prevented**
- **Glaucoma occurs when the drainage tubes (trabecular meshwork) within the eye become slightly blocked. This prevents eye fluid (aqueous humour) from draining properly.**
- **When the fluid cannot drain properly, pressure builds up. This is called intraocular pressure. This can damage the optic nerve, which connects the eye to the brain, and the nerve fibres from the retina (the light-sensitive nerve tissue that lines the back of the eye).**
- **Among white Europeans, about 1 in 50 people above 40 years old and 1 in 10 people above 75 years old has chronic open-angle glaucoma. It may be more common among people of black-African or black-Caribbean origins**
- **Glaucoma can be treated with eye drops, laser treatment or surgery however, early diagnosis is important because any damage to the eyes cannot be reversed.**

Diabetic Retinopathy

- Diabetic retinopathy is a complication of diabetes in which the retina, a part of the eye, becomes progressively damaged.
- During the initial stages, diabetic retinopathy does not cause any symptoms. However, if it is not treated it can cause partial, followed by total, loss of vision.
- Diabetic retinopathy is a common complication of diabetes. It is the leading cause of blindness in adults under the age of 65.
- It is estimated that 25% of people with type 1 diabetes will have some degree of diabetic retinopathy five years after their symptoms first develop.
- In the case of type 2 diabetes, 25% of people who do not require insulin will have some degree of diabetic retinopathy five years after the onset of symptoms. The figure is higher for people who require insulin (an estimated 40%).
- If diabetic retinopathy is diagnosed and treated at an early stage, the outlook for the condition is good. Research has found that treatment can prevent severe vision loss in 90% of cases of diabetic retinopathy.
- Early stage diabetic retinopathy can usually be treated by bringing your diabetes under better control. More advanced diabetic retinopathy will require laser surgery to prevent further damage to the eyes.

Retinitis Pigmentosa

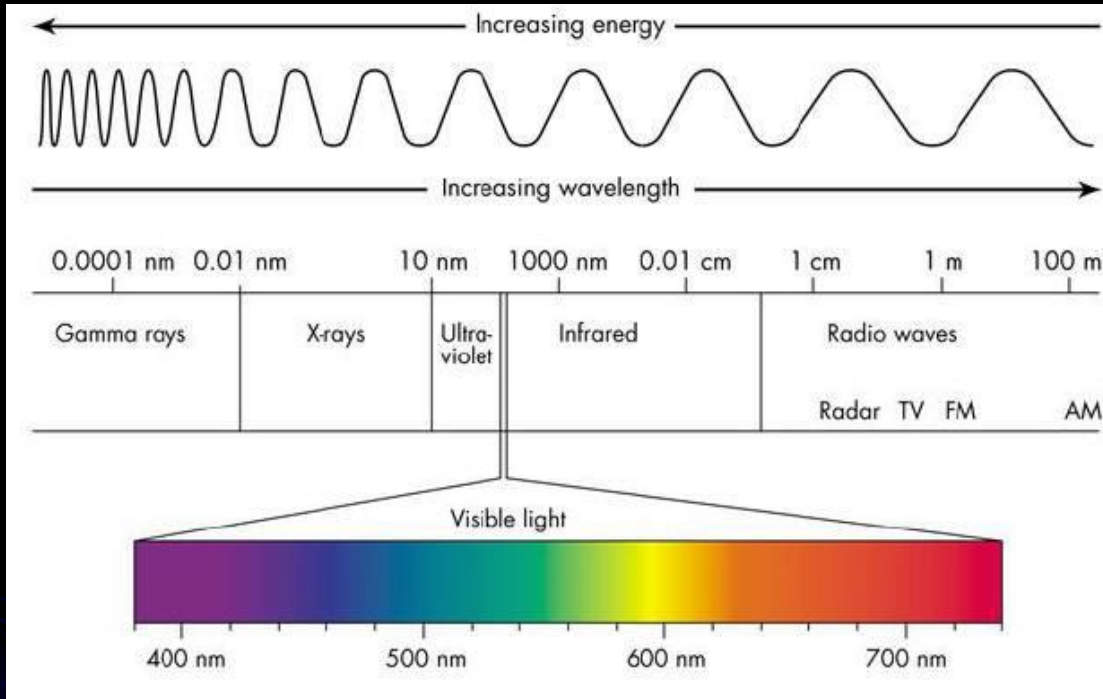
- **Retinitis Pigmentosa (RP)**

- *Clinical features:* Retinitis pigmentosa (RP) is the name given to a group of hereditary retinal diseases characterised by a history of visual problems at dusk or in poor light (night blindness), a gradual reduction in the field of vision and a reduced or absent electroretinogram (ERG).
- Symptoms usually develop between 10 and 30 years of age, although in some, the diagnosis is made much earlier in childhood and in others much later in life.
- Most commonly a person with retinitis pigmentosa has no other problems, the condition is said to be "non-syndromic". However it can occur as part of a large number of syndromes involving other organ systems.
- Individuals may experience associated deafness or renal problems. In the absence of a family history, empiric recurrence risk and offspring risk figures are available.

Cataracts

- **Cataracts are cloudy patches in the lens (the transparent structure at the front of the eye) that can make vision blurred or misty.**
- **Over time, the cloudy patches usually become bigger, and more of them develop. As less light is able to pass through the lens, the person's vision is likely to become blurry or cloudy.**
- **main cause of impaired vision in the world, particularly in developing countries**
- **If cataracts are mild, stronger glasses and brighter reading lights may enable people to live with the condition. However, if left untreated, cataracts can cause blindness.**
- **Once cataracts start interfering with daily activities such as cooking or getting dressed, surgery is usually recommended**

Human Limitations





supporting blind and
partially sighted people

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Scotland

RNIB Scotland is the leading charity working with blind and partially sighted people in Scotland.

As a membership organisation we are dedicated to delivering services our members need and campaigning for their civil and welfare rights. We support children and adults with sight loss to live full and independent lives.

Head office

RNIB Scotland's head office address is:

12-14 Hillside Crescent
Edinburgh
EH7 5EA
[Map](#)

The main telephone number is **0131 652 3140**.

For general email enquiries contact rnibscotland@rnib.org.uk

Further information



supporting blind and
partially sighted people

Popular pages

[Access consultancy services](#)

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Guide Dogs



SPONSOR A PUPPY

Sponsor guide dog puppy Saffie and help change a life



<http://www.guidedogs.org.uk/>

Wanda and Mhairi

- Guide Dogs



SENSES -HEARING

<http://www.phon.ucl.ac.uk/resource/hearloss/>

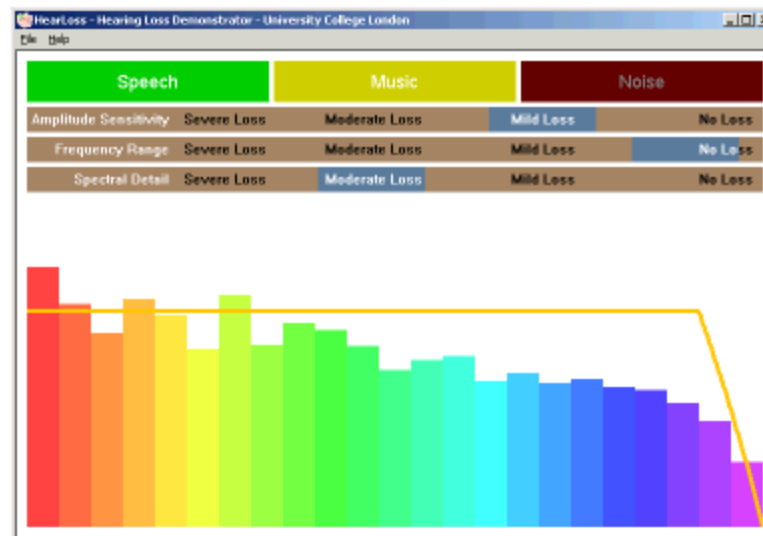


UCL

UCL » Psychology & Language Sciences » Language Sciences » Speech, Hearing & Phonetic Sciences

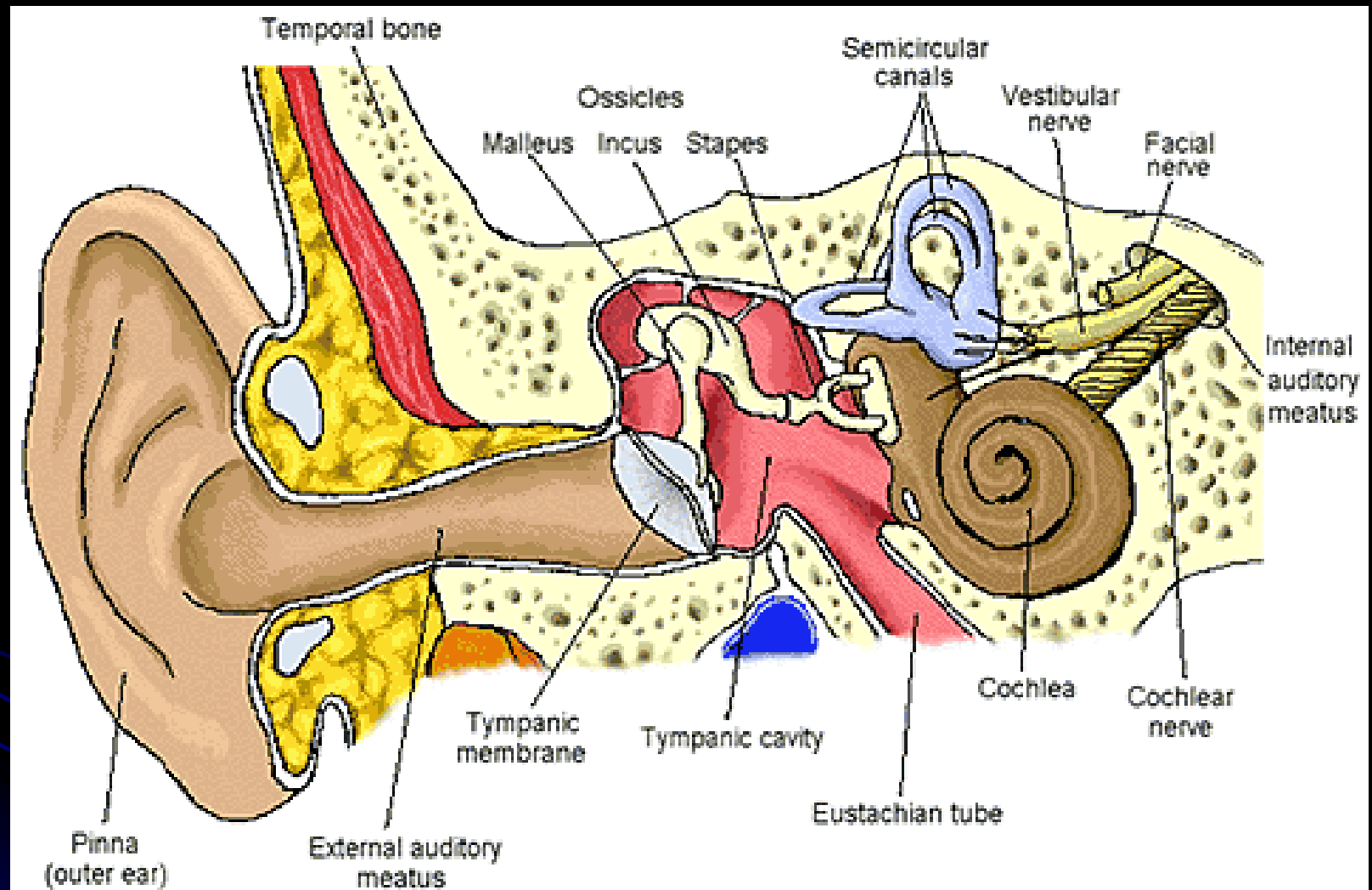
HearLoss - Hearing Loss Demonstrator

HearLoss is an interactive Windows PC program for demonstrating to normally hearing people the effects of hearing loss. With HearLoss you can replay speech, music and noise under a variety of loudness, filtering and masking conditions typical of hearing impairments. Best of all you can interactively change the settings and demonstrate their consequences.



Description

The HearLoss program plays back pre-recorded audio samples of some speech, some music and some typical background noise, either singly or in combination. As it replays, three sliders control a simulation of the effects of three common consequences of hearing loss: loss in *amplitude sensitivity*, reduction in *frequency range*, and loss in *spectral detail*. Changes in the amplitude sensitivity slider changes the loudness of the sound, changes to the frequency range slider changes the upper frequency limit of the sound, while changes to the spectral detail slider changes the amount of fine structure present in the spectrum.



TED TALKS

- Watch this talk from TED.
- Caroline Casey: Looking Past Limits
- http://www.ted.com/talks/caroline_casey_looking_past_limits.html
- The first is about listening, again the emphasis is on thinking about the similarities and differences of Sensation and Perception.
- http://www.ted.com/talks/evelyn_glennie_shows_how_to_listen.html
- In this demonstration, deaf percussionist Evelyn Glennie illustrates how listening to music involves much more than simply letting sound waves hit your eardrums. Its worth noting that Evelyn is hearing impaired. That hasn't stopped her being a world renowned percussionist.
- Then have a look at these:
- http://www.ted.com/talks/aimee_mullins_prosthetic_aesthetics.html
- http://www.ted.com/talks/aimee_mullins_on_running.html

Gordon Legge

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***Vision Research*, 25, 239-252. [\(abstract\)](#); [\(pdf\)](#)**



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Resource Information for Instant Aging Lab.

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Santiago Martinez

- Usability in Design

