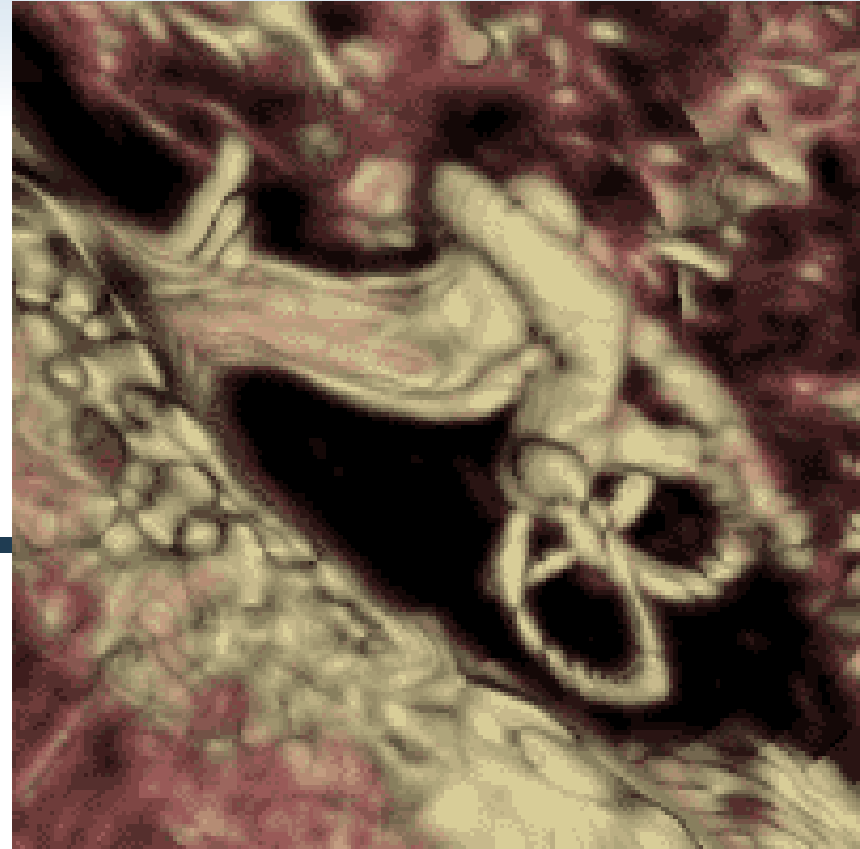


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Analyze Webinar – January 19, 2012

Cochlea Segmentation and Visualization

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Application Specialist
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Webinar Agenda

- ◆ Estimated Duration: 30 minutes
- ◆ Webinar Agenda:
 - Inner Ear and Cochlea Segmentation and Visualization
 - Inner Ear and Cochlea Surface Generation
 - Questions & Answers
- ◆ Webinar Objectives:
 - Review Threshold and Connection Based Segmentation
 - Introduce Tissue Map and Perspective Rendering Techniques
 - Review Surface Generation and Export

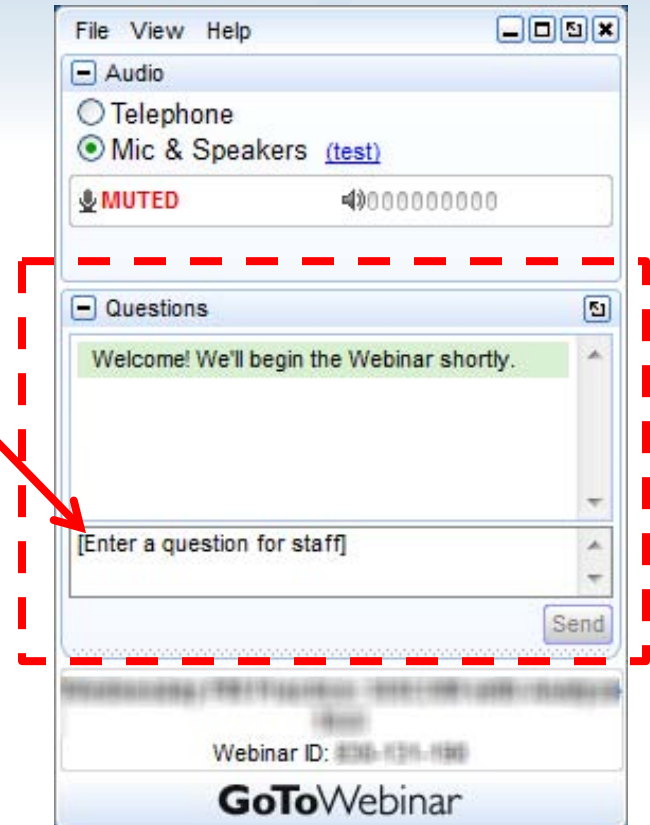
Webinar Notes

- ◆ Questions during the Webinar

- Use “Questions” pane of your GoToWebinar control panel

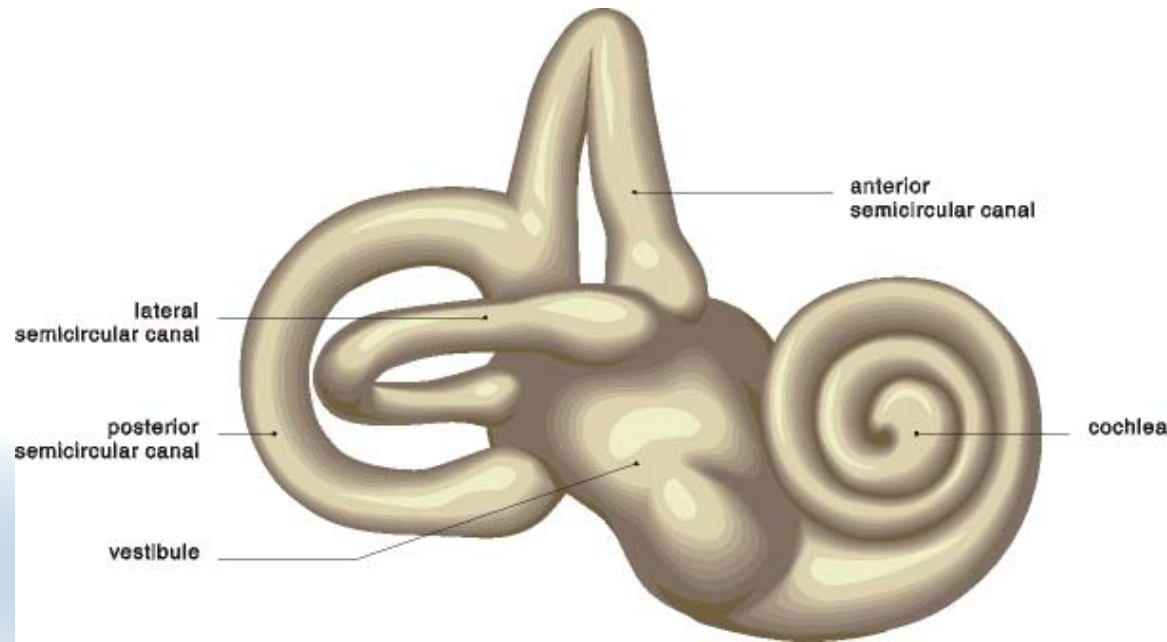
- ◆ After the Webinar

- Webinar registrants will receive an email from Analyze Webinars that contains a link to the recording tomorrow



Inner Ear Anatomy and Function

- ◆ The Inner Ear:
 - The innermost part of the vertebrate ear.
 - Two main functional parts:
 - The cochlea, dedicating to hearing
 - The vestibular system, dedicated to balance.



Inner Ear Segmentation Applications

- ◆ Cochlea Measurement
 - Diagnosis/Teaching
- ◆ 3D modeling
 - Stereotactic guidance for cochlea implant (CI) placement
- ◆ Retrospective assessment of CI placement
 - CI placement and insertion depth effect on hearing and speech.

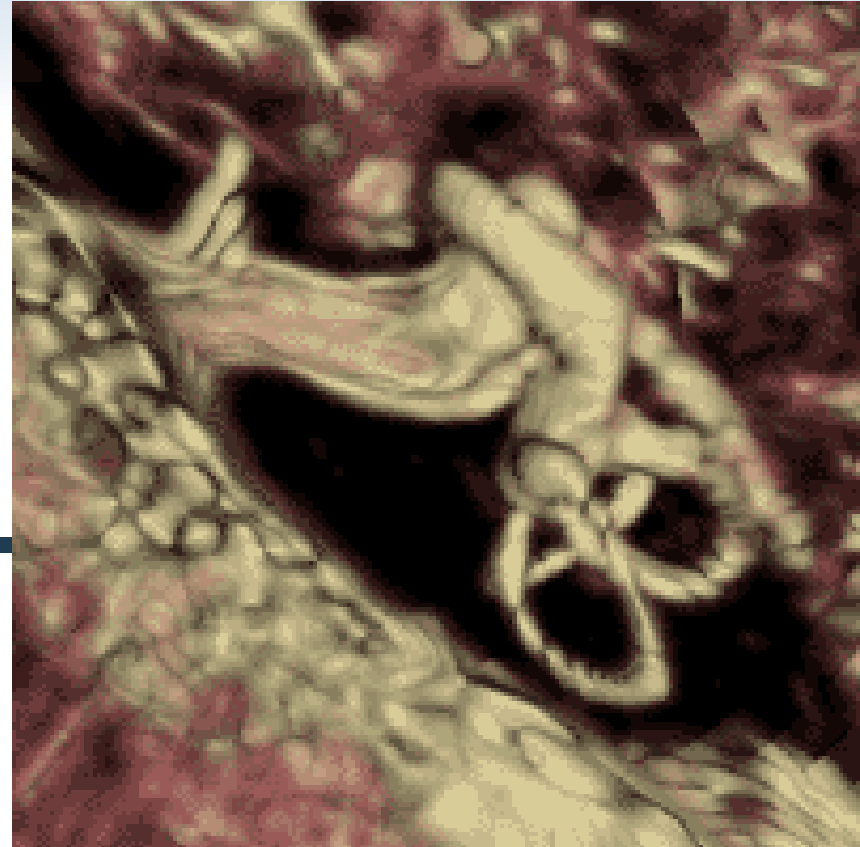
Demonstration Overview

- ◆ Segmentation of the Inner Ear and Cochlea
 - Volume Render
 - Threshold based segmentation
 - Connection based segmentation
- ◆ Visualization of the Inner Ear and Cochlea
 - Volume Render
 - Volume Compositing and Tissue Mapping
 - Perspective Rendering 'HDVR'
- ◆ Surface Generation
 - Surface Extractor

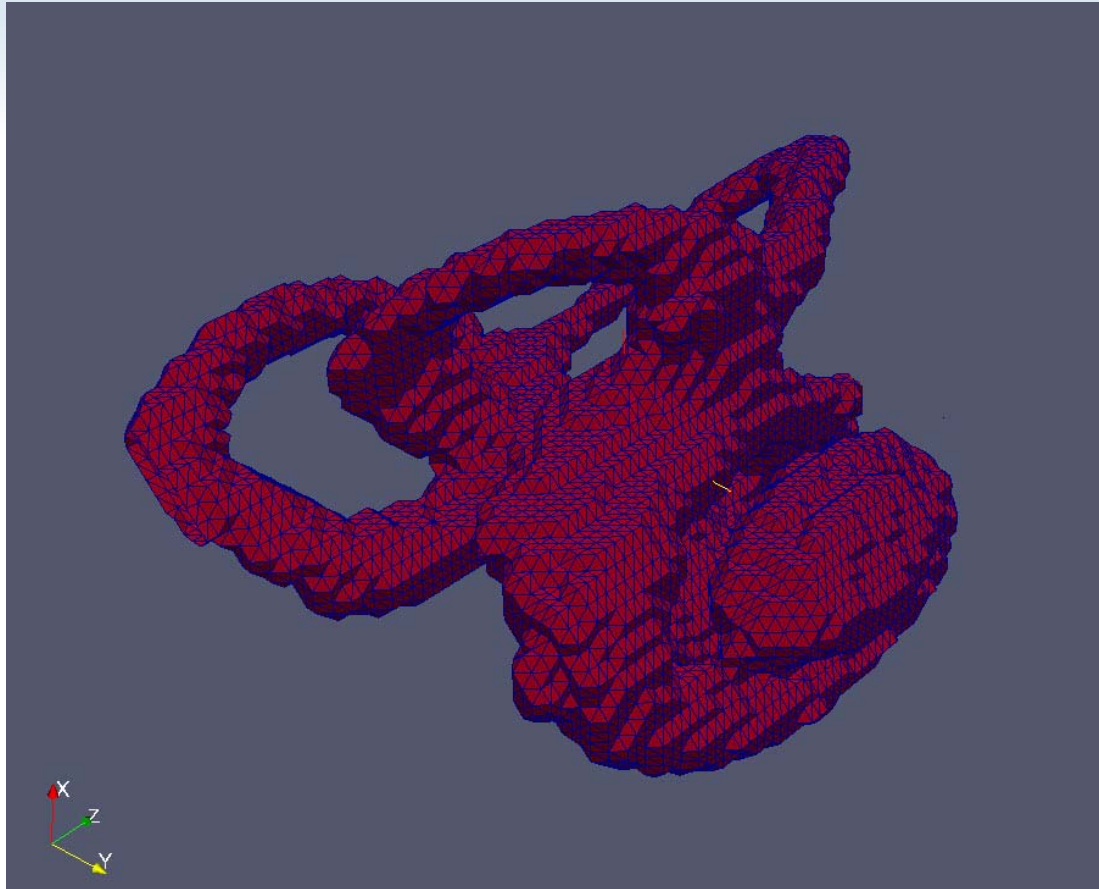
Analyze Webinar – January 19, 2012

Cochlea Segmentation and Visualization

Demonstration



Inner Ear and Cochlea Surface



Inner Ear and Cochlea Surface Generated via March Cubes Algorithm

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Questions?

Supported Surfaces

- ◆ Supported file formats for **polygonal** surfaces

File Format	File Extension
Alias Wavefront	.obj
Autocad	.dxf
IGES	.iges
Compressed IGES	.iges
SGI Open Inventor*	.iv
Patran	.out
PLY	.ply
SGI Poly	.poly
3D Systems Stereolithography	.stl
Binary 3D Systems Stereolithography	.stl
VRML*	.wrl

Supported Surfaces

- ◆ Supported file formats for **contour** surfaces

File Format	File Extension
ASCII Columns	.txt
IGES	.iges
Compressed IGES	.iges
HP 3D	.hppl
3D Systems	.pogo
3D Systems	.slc

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Questions?

Summary

- ◆ Watch for an email from Analyze Webinars tomorrow
- ◆ Find out about upgrade pricing - sales@analyzedirect.com
- ◆ Evaluate Analyze 10.0 free for 30 days- www.analyzedirect.com/evaluate
- ◆ Suggest a topic for a future Webinar - webinars@analyzedirect.com
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