



FP6-016039

CILIA

Customized Intelligent Life-Inspired Arrays

Integrated Project

Information Society Technologies
Future & Emerging Technologies
Proactive Initiative BIO-I3

DELIVERABLE: D1.3.1 – Executive Summary

FUNCTIONAL PROPERTIES OF BAT PINNAE AND
QUANTIFICATION OF SHAPE AND FUNCTIONAL
VARIABILITY IN BAT PINNAE

Actual submission date:	September 8, 2006	
Start day of project:	September 1st, 2005	Duration: 48 months
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EXECUTIVE SUMMARY

The success measure for the number of pinna and noseleaf shapes to be analyzed by month 12 of the project (10 analyzed shapes) has been met. Besides the bat pinna, primate pinna shapes have been analyzed to provide an outgroup reference for the interpretation of the bat results. The results obtained so far support the notion that the beam pattern of bat pinnae and noseleaves contain a sufficient amount of interspecific variability and novel features to warrant the further work planned for the CILIA project. A method for automatically investigating the dependencies between structural and acoustic features has been developed and applied successfully to a pinna and a noseleaf.