2011/3/SSGSUE01 The "5th **International Otolith Symposium 2014 (IOS2014)**" will be held during October 2014 at Palma, Mallorca Island, Spain, with Beatriz Morales-Nin (Spain) and Audrey Geffen (Norway) as Conveners.

A Scientific Steering Group will be established with members nominated by relevant Working Groups or other relevant ICES bodies from among the ICES network of research institutes in order to assist the Conveners in planning the Symposium. Additionally the Scientific Steering Group will be completed with members of the organizing Committees of previous IOS Symposia to gain from their experience and a local Committee to support the organization.

In consultation with the Conveners, the ICES Secretariat will solicit appropriate cosponsorship from other international organizations like NAFO, CIESM and FAO-GCPM.

Supporting Information

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Priority:	Otolith analyses underpin a majority of the work in ICES, from stock assessment for Advice, to multiple applications in Science. For example, historical data on individual age and growth are used to chart changes in productivity or fishery induced evolution, and otoliths recovered from stomach contents or feces are important in evaluating trophic interactions as part of ecosystem-based management.
Scientific justification:	The aim of the International Otolith Symposium is to explore the use of calcified tissues as tools to support management and define indicators at environmental, community, population and individual levels. This will be the 5th in a series of independent symposia which have been convened, beginning in 1993, to encourage the exchange of information and expertise and promote the development of new techniques and applications for otolith-based analysis in ecology, management, and conservation. This international forum is the centre for the exchange of information on developments in the field. New techniques of analysis, statistical treatment, and indeed new areas of application are all presented in this forum. Regular attendees are often the prominent users of otolith analyses in their home institution, and many are active in ICES work. This is also the premier venue for interaction between ICES scientists and those working in other parts of the world. North America, Japan, Taiwan, and Australia are particularly active in advancing otolith techniques, and exchange of ideas and information is crucial to improving the science in the ICES community. The Symposium will consist of a 5-day venue with one day dedicated to two paralel workshops: a) ICES workshop on age determination issues for relevant species and b) Image analysis developments and models for otolith shape analysis.

Resource requirements:	Albeit it is difficult to make precise estimates three years in advance of the event, conveners drafted a preliminary budget that comprises the following items (in Euros):		
	Renting venue facilities	20.000	
	Catering health brakes	15.000	
	Conference dinner	18.000	
	Printed material, extra pages plus S&H JMS etc.	5.750	
	T&S Invited speakers	15.625	
	Student grants, awards, conference bags	57.375	
	TOTAL	131.750	
	We envisage the following registration fees: $400 \in \text{for ea}$ $500 \in \text{for late registration and } 200 \in \text{for students.}$	<u>_</u>	
	In a conservative estimate of 250 participants and 25 sturepresent a minimum of 105000 € income.	dents this may	
	Additionally we will seek support from the Spanish reg grant programmes on 2012 for Symposiums by the Scien from the Balearic Islands Governement. We will explore South American Spanish speaking countries scientists to Ministry of External Affairs programmes. Support in kind provided by IMEDEA and the University of the Balearic We will seek support for the Shape Analysis Workshop enterprises producing Image Analysis Systems.	nce Ministry and the support for rough the and will be a Islands.	
Participants:	The IOS series started in Hilton Head (USA) in 1993, followed by IOS1998 in Bergen (Norway), IOS2004 Townsville (Australia) and IOS2009 Symposium held in Monterrey (USA). In general attendance ranged between 250-350 participants. IOS2009 counted with 268 registrars from 36 countries showing the interest on the Symposium in a time of economic crisis. We hope that by 2014 an economic recovery will help to increase the participation. Besides, Mallorca being a main touristic destination with low budget air connections, it would facilitate participation of European ICES countries. Many ICES expert groups can be expected to be represented amoung the presenters. Two of the workshops are specifically organised in recognition of topics important in ICES work (ICES Age workshop, and otolith shape analysis). Eight members of the preliminary international steering committee are scientists closely involved in ICES activities, and i is likely that more than 50% of the participants will report on research directly relevant to ICES members. This will also be an important opportunity to showcase the research of the ICES community to a global audience.		
Secretariat facilities:	Conveners ask for support for development and mainter conference webpage to allow for registration, abstract a submission, payment of registration and general manage Symposium. During the conference professional English assistance will be required for the registration and venu Assistance is requested to advertize the Symposium usic communication and dissemination channels, and to confinternational organizations to gather support for IOS202 The ICES Ageing Workshop would require assistance to and developed.	nd paper gement of the h-speaking te management. ng the ICES ttact other	
Financial:	In addition, financial support of 10K Euro is requested invited speakers preferably from ICES member countrie abstracts and other printed material, and for travel support career scientists, preferably form ICES Member countries	es, for the book of port for early	
Linkages to advisory committees:	There is direct linkage to the ICES Advisory committee "scientific justification" section.		

Linkages to other committees or groups:	This symposium topic is directly related to the remit of several ICES Expert Groups which may support the symposium.
Linkages to other organizations:	Other organizations which hold an interest in the Otolith Symposium include PICES, CIESM, FAO-CGPM
Publication of proceedings	The convener request to use the ICES Journal of Marine Science for the proceedings. The volume is expected to exceed 250 pages adding a probable extra cost of 2020 €. The symposium budget includes funding for the extra pages, to be covered by the registration fee income. The conveners Beatriz Morales-Nin and Audrey Geffen will be the guest editors, and it is accepted that the publication schedule will conform to the 15-month turnaround schedule for publication. Each previous IOS had a special issue published according to the organizing committee origin; for instance there were special issues in Journal of Fisheries Research on 2000, Marine and Freshwater Research in 2005 and Environmental Biology of Fishes in 2010.