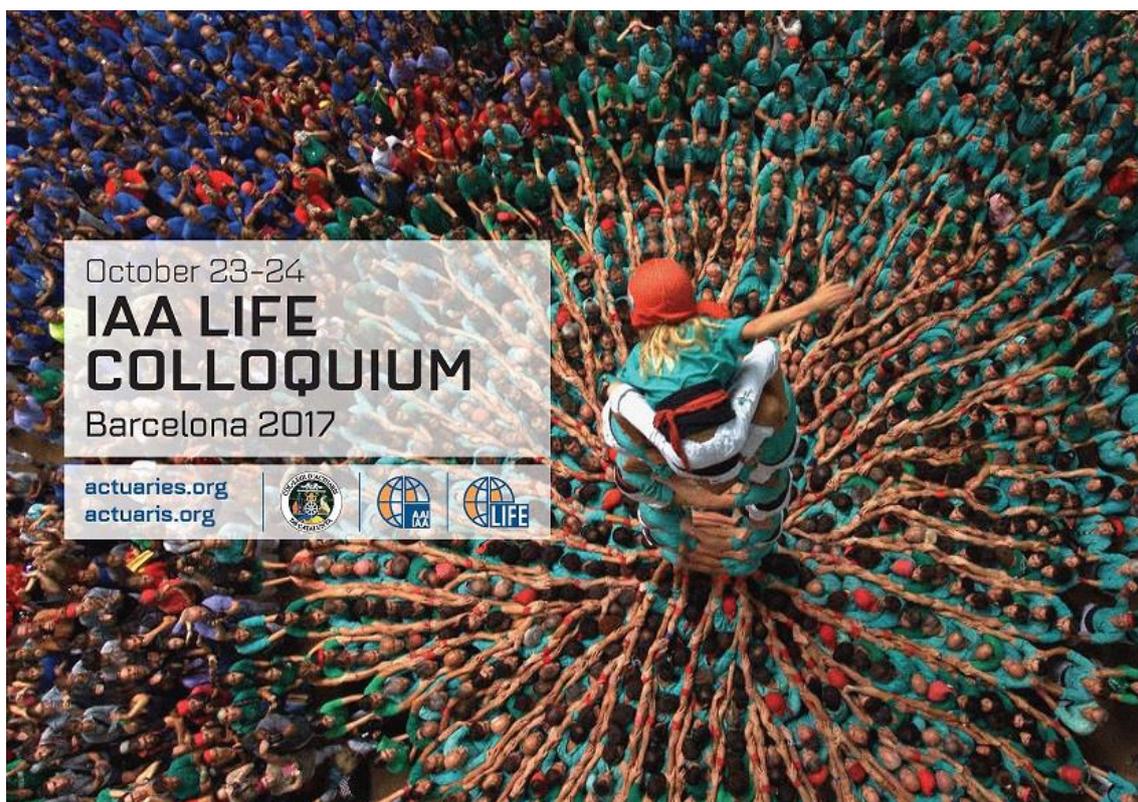


IAALS COLLOQUIUM IN BARCELONA,  
SPAIN  
23 – 24 OCTOBER 2017



COL·LEGI D'ACTUARIS DE CATALUNYA



## INTRODUCTION



Dear Colleagues,

I wish to welcome you to the Colloquium “**Long-Term Saving in an Ageing World**”, run under the auspices of the International Actuarial Association — Life Section (IAALS). This event is to be held in Barcelona, (Spain), 23 and 24 October 2017 and organized by the Col·legi d'Actuaris de Catalunya, (Catalan Actuaries Association).

The seemingly unstoppable growth in human life expectancy, which coupled with the current state of health and social services, has led to a remarkable rise in longevity right across the face of the Earth.

While this may be heralded as great news for mankind, it nevertheless lays down a major challenge to both private and public pension schemes, the life insurance industry as a whole and therefore the actuarial profession itself.

In this event, entitled; “**Long-Term Saving in an Ageing World**” we aim to take a closer look at the matter mentioned above and the repercussions implied by it.

For this purpose, we are privileged to count upon the participation of the following specialists on the subject, who will share their wisdom and insight on the theme: Dr Nicholas Barr, Professor at the London School of Economics, Dr Stéphane Loisel, Professor at the University of Lyon and Dr. Jens Perch Nielsen, Professor of Actuarial Science at City University London.

We are confident that the Colloquium will also provide participants unfamiliar with the city with an ideal opportunity to get to know Barcelona, now one of the world's most visited metropolis, with its outstanding, cultural, leisure and gastronomic delights.

Looking forward to seeing you in Barcelona in October 2017.

Miquel Viñals

Chairman of the Col·legi d'Actuaris de Catalunya.

## PROGRAM

## VENUE

### **COSMOCAIXA.**

Adress: Isaac Newton, 26 - 08022 Barcelona, España [Google maps](#)



The building's history started more than a century ago, in 1904, when the architect Josep Domènech i Estapà used the Modernista style of the time to construct the Amparo de Santa Lucía institution, in operation for 75 years.

In 1979 the "la Caixa" Foundation commissioned the architects Jordi Garcés and Enric Sòria to remodel and enlarge the building to house the Science Museum,

becoming Spain's first interactive museum dealing with scientific themes. The subsequent refurbishment to transform the museum into CosmoCaixa was designed by the architects Robert and Esteve Terradas and the new centre opened its doors on the 25th of September 2004. The complex has become the reference museum of sciences in Catalonia.

## PROGRAM

### **SUNDAY OCTOBER 22**

**18:00 – 21:00**

**WELCOME RECEPTION**



On Sunday, October 22, the Reception and Welcome Dinner will be held at the Aquarium in Barcelona. This is a unique and outstanding attraction within the city, located on the shores of the Mediterranean Sea. Here it is possible to marvel at over 11,000 aquatic animals that are kept here. This event is designed as the perfect starting point for the coming days in which we hope, you will be able to enjoy the city.

## MONDAY OCTOBER 23

### 8:00 – 17:30 COLLOQUIUM SESSIONS

8:00 – 9:00	REGISTRATION
9:00 – 9:15	WELCOME
9:15 – 10:30	PLENARY 1
10:30 – 11:00	COFFEE BREAK
11:00 – 13:30	PARALLEL SESSIONS
13:30 – 14:00	LUNCH
14:00 – 16:15	PARALLEL SESSIONS
16:15 – 17:30	PLENARY 2

### 21:00 – 23:30 GALA DINNER

On Monday, October 23, the gala dinner will be held at the Auditorium of the University of Barcelona, a neo-Romanesque monument built in the 18th century, which breathes a blend of history, tranquility and knowledge.



During the gala dinner, awards will be given to the best works, according to the criteria of the scientific committee.

## TUESDAY OCTOBER 24

### 8:00 – 17:30 COLLOQUIUM SESSIONS

9:00 – 10:30	PARALLEL SESSIONS
10:30 – 11:00	COFFEE BREAK
11:00 – 14:00	PARALLEL SESSIONS
14:00 – 14:30	LUNCH
14:30 – 15:15	PLENARY 3
15:15 – 17:30	CLOSING ADDRESSES

## ABOUT THE COLLOQUIUM

In the Life Insurance Colloquium of the International Actuarial Association (IAALS) "Long-Term Saving in an Ageing World" a number of the following topics will be addressed:

- Longevity and ageing
- Limits to human life
- Mortality at older ages and related trends
- Stochastic Modelling of Longevity
- Longevity risk
- Longevity bonds
- Protection against longevity
- Financial and real assets to cover long term liabilities
- Annuities, programmed withdrawals, other withdrawals
- Long term care saving products.
- Behavioral patterns of long term saving
- Barriers to saving
- Interest rates: how to survive in a low interest rate environment
- Public pensions and the need to top them up

This topics and others will be discussed during the Parallel Sessions, where some 40 papers previously related by the Scientific Committee will be presented, as prepared by actuaries from the United Kingdom, Norway, Australia, the United States, Hungary, Denmark, and Germany, among other countries.

The Scientific Committee is made up of 10 leading figures from the academic and professional spheres, both national and overseas, chaired by Diego Valero, one of the most pre-eminent specialists in pensions in Spain, and member of the advisory group of the Pacto de Toledo.

The Scientific Committee will award the best work in the following categories:

- Theoretical contributions: For the best academic research.
- Practical contributions: For the best essay or presentation of the applied work.

The prizes (\$ 1,000 each prize) will be presented during the gala dinner on Monday, October 23, which will take place in the auditorium of the historic building of the University of Barcelona.

## SPEAKERS



**Dr. Nicholas Barr.** With a MSc in Economics from the London School of Economics and a PhD from the Berkeley University in California. He's a Professor of Public Economics at the London School of Economics(LSE). He is author of numerous articles, and author or editor of more than twenty books. At the heart of his work is an exploration of how market failures can both explain and justify the existence of welfare states. He's one of the world's greatest specialist in pensions.



**Dr. Stéphane Loisel.** With a PhD in Applied Mathematics from the University of Lyon, a MSc in Actuarial and Finance Science. He is a fellow of the Institute de Actuaries. Professor at ISFA, Université Lyon 1, and associate researcher at CMAP, Ecole Polytechnique. Associate Editor in various journals, and he is a specialist in longevity risk, among other things.



**Dr. Jens Perch Nielsen.** is Professor of Actuarial Science at City University London. Actuary from Copenhagen and statistician from UC-Berkeley. He became research director of RSA with responsibilities in life as well as non-life in 1999. From 2006 until 2012 he worked as an entrepreneur. He is the co-author of more than 100 scientific papers reviewed journals of actuarial science, economics, econometrics and statistics and also one book on quantitative operational risk modelling and associate editor of Digital Finance.

## COMMITTEES

### ORGANIZING COMMITTEE

Board of Directors, Col·legi d'Actuaris de Catalunya, (Catalan Actuaries Association).

**Miquel Viñals**, (Chairman) Chairman of the Col·legi d'Actuaris de Catalunya

**Julia Soler**, Vice-president of the Col·legi d'Actuaris de Catalunya

**Emilio Vicente**, Secretary

**Francisco Durán**, Treasurer

**Marc Arias**, Board member and Head of Institutional Relations

**Lluís Bermúdez**, Board member and in charge of Training and Research

**Xavier Plana**, Board member and Head of the Professional Section.

### SCIENTIFIC COMMITTEE

**Diego Valero** (Chairman), University of Barcelona

**Carme Ribas**, University of Barcelona

**Jan Dhaene**, University of Leuven

**Abraham Hernández**, Vitalis Mexico

**José Antonio Iglesias**, Vidacaixa

**Ermanno Pitacco**, University of Trieste

**María Jesús Romero**, Zurich

**Antonio Rubio**, Catalana Occidente

**Miguel Santolino**, University of Barcelona

**Mogens Steffensen**, University of Copenhagen

## REGISTRATION

### REGISTRATION FEES

	Until July 31	After July 31
IAA Section Members	550	600
Non IAA Section Members	650	700
Academics & Students	450	500
Corporate (3-5 participants)	15% discount	
Corporate (+ 5 participants)	25% discount	

Gala Dinner (accompanying person)	100
-----------------------------------	-----

#### **All rates include:**

2-day Colloquium

Sunday Evening Welcome Reception

Monday Evening Gala Dinner

All amounts expressed in Euro. VAT incl.

## INFORMATION

Web: <http://www.actuaries.org/barcelona2017/index.cfm>

In this web you will find all the updated and necessary information as well as the steps to follow to be able to register and participate in the IAALS Colloquium the coming 23 and 24 October.

### Organizing Committee

---

Please contact the Organizing Committee for any questions.

**Mr. Joaquim Celma**

[info.iaals.barcelona2017@actuaries.org](mailto:info.iaals.barcelona2017@actuaries.org)

[actuaries@actuaries.org](mailto:actuaries@actuaries.org)

**Looking forward to seeing you in Barcelona this 23-24 October**

## SPONSORS

Allianz 

 BBVA Seguros

 BDO

 Catalana  
Occidente  
Grupo asegurador

 FIATC  
S E G U R O S

 GUY CARPENTER

 M A Z A R S

 Nacional de Reaseguros, S.A.

 VidaCaixa

Willis Towers Watson 

 ZURICH<sup>®</sup>