



## **EHRA SPRING SUMMIT MEETING: “POST-GRADUATE EDUCATION IN A CHANGING AND CHALLENGING ENVIRONMENT”**

### **DAY 1**

- 14:00 Welcome
- 14:05 Introduction

### **Session 1. Career in EP and rhythm management. How to start the process?**

- 14:15 Optimizing the career path from cardiology to sub-specialty
- 14:30 EP trainees in Europe: is there a gap to be filled ?
- 14:45 How to encourage more women to become an EP

How national societies/working groups might influence the process of engagement in EP ?

- 15:00 The case in Spain
- 15:15 The case in UK
- 15:30 The case Central and East Europe
- 15:45 Discussion

How national societies/working groups might influence the process of engagement in EP ?

## The case in Spain

Angel Moya  
President of WG of EP and Arrhythmia (SEA)  
of Spanish Society of Cardiology  
Hospital Vall d'Hebron. Barcelona. Spain

# Spanish Society of Cardiology (SSC)

---



## Scientific Associations

## Scientific Associations

- Promote, coordinate and supervise studies and research in their specific field
- Spread and disseminate knowledge in specific field
- Collaborate with National and International Associations
- To advise SSC in the organization of congresses and meetings, selecting topics and faculty
- To advise SSC in selecting experts for specific committees

# ESC Associations



# SSC Associations



EP and Arrhythmia



Cardiac pacing



Imaging



Clinical Cardiology



Ischemic Heart disease  
and CCU



Paediatric Cardiology and  
Congenital Heart Disease



Cardiac Catheterization



Geriatric Cardiology



Cardiovascular Risk  
And Rehabilitation



Heart Failure and Cardiac  
Transplantation

# SSC Associations



EP and Arrhythmia



Cardiac pacing



- Registries
- Accreditation process
- Annual scientific meeting





- Registries
- Accreditation process
- Annual scientific meeting



Rev Esp Cardiol. 2012;65(10):928-936

Artículo especial

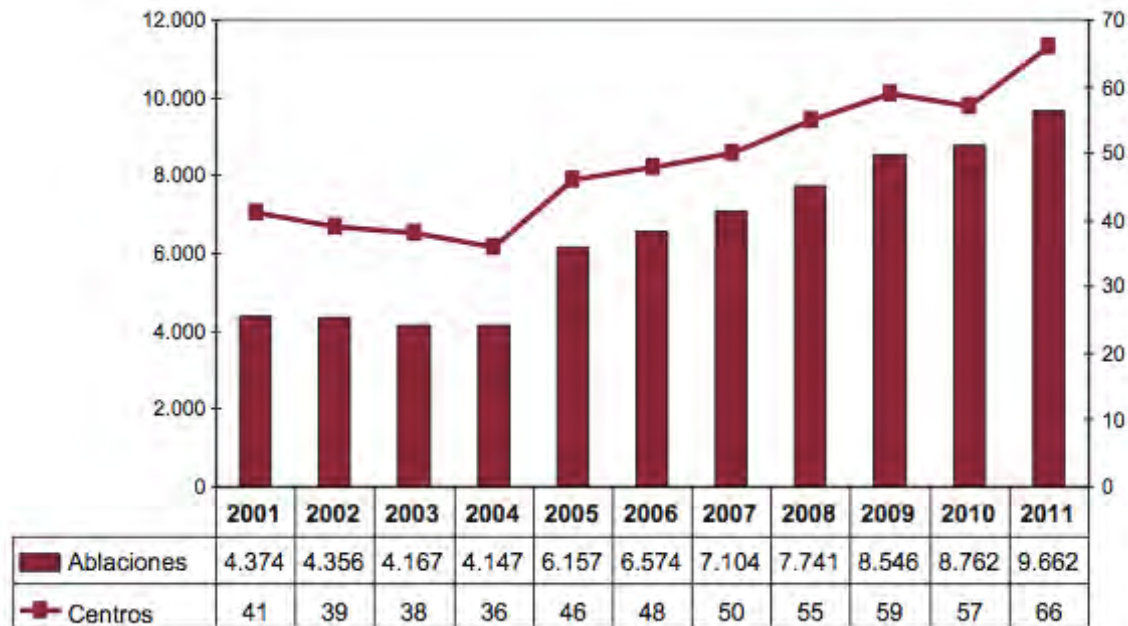
## Registro Español de Ablación con Catéter. XI Informe Oficial de la Sección de Electrofisiología y Arritmias de la Sociedad Española de Cardiología (2011)

Ernesto Díaz-Infante\*, Alfonso Macías Gallego y Ángel Ferrero de Loma-Osorio

*Sección de Electrofisiología y Arritmias, Sociedad Española de Cardiología, Madrid, España*

**Spanish Catheter Ablation Registry. 11th Official Report of the Spanish Society of Cardiology Working Group on Electrophysiology and Arrhythmias (2011)**

# Ablation registry



# Ablation registry



**Tabla 1**  
Características e infraestructura de los 66 laboratorios de electrofisiología participantes en el registro de 2011

	n (%)
Centro universitario	46 (70)
<i>Nivel</i>	
Terciario	58 (88)
Secundario-comarcal	8 (12)
<i>Sistema sanitario</i>	
Público	54 (82)
Exclusivamente privado	12 (18)
<i>Servicio responsable</i>	
Cardiología	66 (100)
Cirugía cardíaca	47 (71)
<i>Disponibilidad de la sala</i>	
Dedicación exclusiva	47 (71)
Días de electrofisiología (mediana)	4
<i>Poligrafo digital</i>	66 (100)
<i>Radiología digital</i>	50 (76)
<i>SNNF</i> <sup>a</sup>	56 (84)
Navegación magnética	3 (4,5)
Navegación robotizada	1 (1,5)
Crioablación	26 (39,5)
Ecocardiografía intracardiaca	20 (30)
<i>Implante de dispositivos</i>	
No	17 (26)
DAI	4 (6)
DAI y marcapasos	43 (65)
<i>CVE programada</i>	
No	20 (30,3)
CVE	33 (50)
CVI	1 (1,5)
CVE y CVI	12 (18,2)

# Ablation registry



**Tabla 2**  
Evolución de los recursos humanos de los laboratorios de centros hospitalarios públicos participantes desde 2003

	2003	2004	2005	2006	2007	2008	2009	2010	2011
Médicos de plantilla (n)	2,2	2,2	2,2	2,3	2,4	2,5	2,6	2,8	2,6
Médicos de tiempo completo (n)	1,4	1,6	1,7	1,8	2,1	2,1	2,1	2,3	2,2
Becarios/año (n)	0,6	0,7	0,6	1,3	0,6	0,6	0,8	0,75	0,7
DUE (n)	1,6	1,6	1,7	1,7	2	2,2	2,2	2,4	2,3
ATR (n)	0,2	0,2	0,2	0,3	0,4	0,3	0,3	0,3	0,3

- Treated arrhythmias
- Acute succes rate
- Complications
- Type of catheters



Rev Esp Cardiol. 2012;65(11):1019-1029

Artículo especial

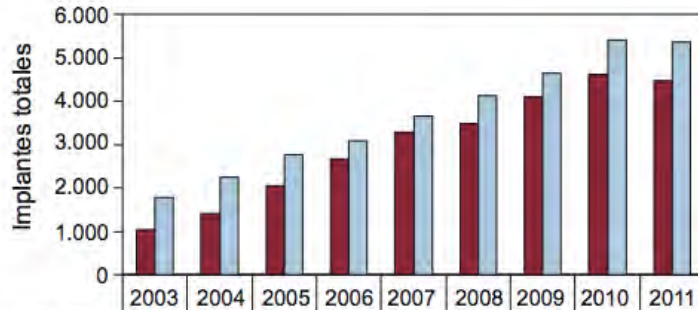
## Registro Español de Desfibrilador Automático Implantable. VIII Informe Oficial del Grupo de Trabajo de Desfibrilador Automático Implantable de la Sociedad Española de Cardiología (2011)

Javier Alzueta<sup>a,\*</sup> y José María Fernández<sup>b</sup>

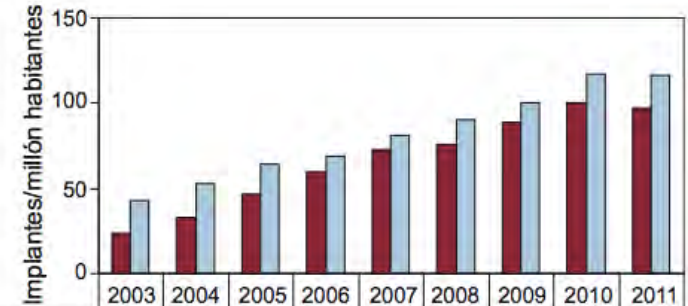
**Spanish Implantable Cardioverter-Defibrillator Registry. Eighth Official Report of the Spanish Society of Cardiology Working Group on Implantable Cardioverter-Defibrillators (2011)**



# ICD registry



	2003	2004	2005	2006	2007	2008	2009	2010	2011
■ Registro Español de Desfibrilador Automático Implantable	1.046	1.414	2.050	2.679	3.291	3.486	4.108	4.627	4.481
■ EUCOMED	1.788	2.244	2.756	3.094	3.652	4.114	4.633	5.405	5.365



	2003	2004	2005	2006	2007	2008	2009	2010	2011
■ Registro Español de Desfibrilador Automático Implantable	24	33	47	60	73	76	89	100	97
■ EUCOMED	43	53	64	69	81	90	100	117	116



Angel Moya.

# ICD registry

---

## General data

- # Centers
- Demographic data
- Index arrhythmia
- Clinical presentation
- Underlying heart disease (EF, baseline rhythm)
- Previous EPS

## Implant data

- Location (EP lab vs. OR)
- Specialist
- PP vs. SP
- Type of device: single, dual, CRT-D
- Initial program
- Complications





Rev Esp Cardiol. 2012;**65**(12):1117–1132

## Artículo especial

### Registro Español de Marcapasos. IX Informe Oficial de la Sección de Estimulación Cardíaca de la Sociedad Española de Cardiología (2011)

Raúl Coma Samartín<sup>a,b,\*</sup>, María José Sancho-Tello de Carranza<sup>a,c</sup>, Francisco Ruiz Mateas<sup>a,d</sup>, Juan Leal del Ojo González<sup>a,e</sup> y María Luisa Fidalgo Andrés<sup>a,f</sup>

### Spanish Pacemaker Registry. Ninth Official Report of the Spanish Society of Cardiology Working Group on Cardiac Pacing (2011)

- # Centers
- # Implants
- Demographic data
- Indication
- Mode of stimulation
- Generator
- Electrode

# Registries



- ↑ Consecutive: → Allows to compare annual evolution
- ↑ Detailed clinical, center, procedure related data
- ± Confidential (Ablation & PMK)
- ↓ Voluntary
- ↓ Not audited

# Registries



↑ Consecutive: → Allows to compare annual evolution

↑ Detailed clinical, center, procedure related data

± Confidential (Ablation & PMK)

↓ Voluntary

↓ Not audited

→ Useful tool for physicians, fellows, authorities, EHRA white book



- Registries
- Accreditation process
- Annual scientific meeting

# La arritmología como una especialidad dentro de la cardiología: sistema de acreditación en electrofisiología cardiaca intervencionista de la Sección de Electrofisiología y Arritmias de la Sociedad Española de Cardiología

José Luis Merino, Fernando Arribas, María López Gil y Xavier Viñolas

Sección de Electrofisiología y Arritmias de la Sociedad Española de Cardiología. Madrid. España.

Rev Esp Cardiol Supl. 2010;10:5B-19B

**Arrhythmology as a Specialty Within Cardiology: The Accreditation System for Interventional Cardiac Electrophysiology Developed by the Spanish Society of Cardiology's Electrophysiology and Arrhythmias Section**



Europace (2009) 11, iii1–26  
doi:10.1093/europace/eup215

## CORE CURRICULUM

### Core curriculum for the heart rhythm specialist<sup>†</sup>

**Jose L. Merino\* (Spain), Fernando Arribas (Spain), Giovanni Luca Botto (Italy), Heikki Huikuri (Finland), Lars I. Kraemer (Germany), Cecilia Linde (Sweden), John M. Morgan (UK), Martin Schlij (The Netherlands), Emmanuel Simantirakis (Greece), Christian Wolpert (Germany), Marie-Christine Villard<sup>‡</sup> (France), Julie Poirey<sup>‡</sup> (France), Svyta Karaim-Fanchon<sup>‡</sup> (France), and Keren Deront<sup>‡</sup> (France) on behalf of the 2005–2007 Accreditation Committee of the European Heart Rhythm Association**

# EP Accreditation of SEA (SSC)



- **History**

- Barcelona 2001: discussion 1<sup>st</sup> draft
- Bilbao 2002: document approval
- Barcelona 2004: 2<sup>nd</sup> version

# EP Accreditation of SEA (SSC)



- **Scope:**
  - Professional Accreditation for ablation
  - Center Accreditation for training in ablation
  - Recognition of excellence
  - Not a legal requirement for clinical practice



# EP Accreditation of SEA (SSC)



- **Center accreditation**

- To be integrated in a Cardiac Department with training program for Cardiology
- 2 members accredited by SEA (1 the director of the lab)
- $\geq$  150 ablations/year during 3 consecutive years, including all arrhythmias reported in registry
- Participation in National Ablation Registry
- Auditable data base
- Regular (weekly) registered academic sessions in EP
- Minimum publications in indexed peer review journals and abstracts in National and/or International congresses



# EP Accreditation of SEA (SSC)



- **Professional Accreditation**
  - $\geq 1$  year period training in an Accredited Center by SEA
  - Participation in at least 50 ablation procedures
  - Pass an exam

# EP Accreditation of SEA (SSC)



- **Specific aspects**
  - Self financed, paid by applicants
  - Centers are periodically accredited (3 y)
  - Centers are audited for:
    - Procedures
    - Clinical meetings
  - Professionals are audited for procedures

# EP Accreditation of SEA (SSC)



Year	Applicants	Pass exam	Accredited	Age
2003	44	36	36	52.2 (42-62)
2004	16	12	11	49.2 (33-69)
2006	22	18	11	44.5 (34-54)
2008	23	22	17	40.2 (35 – 52)
2009	18	16	9	39.2 (35 – 42)
2010	?	?	15	38.8 (35 – 48)
2012	?	?	21	37 (33 – 50)
2013	12	NY	NY	33 (31 – 36)

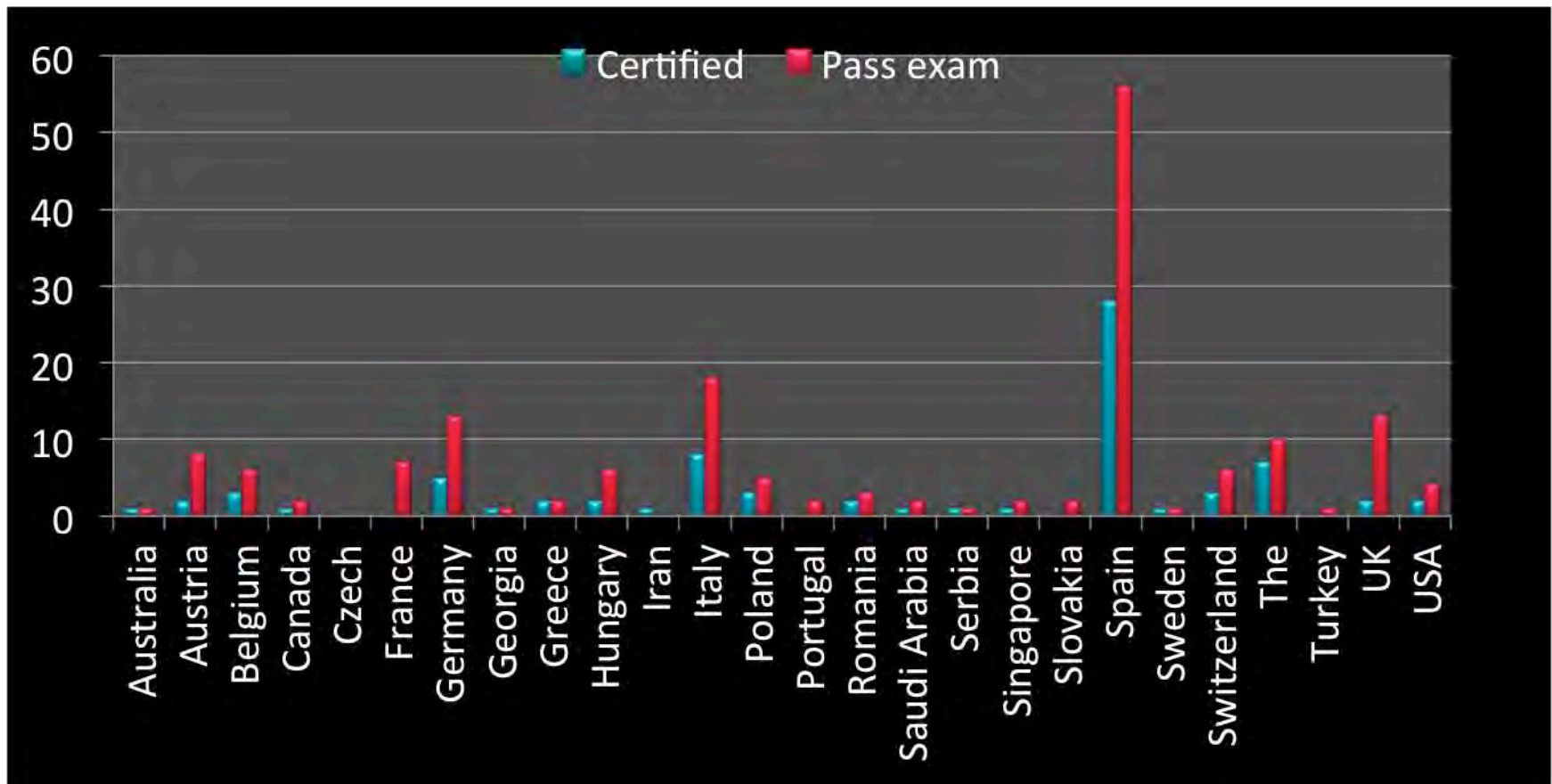
Source: Merino et al. Rev Esp Cardiol 2010, and SSC Secretary

# National vs European Accreditation



- Homogenization
- Language (local vs. English)
- National specific characteristics
- Center Accreditation
- Audit
- Link between EHRA and to Latin America

# EHRA European Certification



Source: EHRA White book 2012

# EP and Arrhythmia Association (SEA)



- Registries
- Accreditation process
- **Annual scientific meeting**

# Arritmias 2013

## XII Reunión Anual de la Sección de Electrofisiología y Arritmias de la SEC



SOCIEDAD  
ESPAÑOLA DE  
CARDIOLOGÍA



Sección de  
Electrofisiología  
y Arritmias



# Santander

17 al 19 de abril



Con la colaboración de:

El grupo de trabajo de Resucitación  
Cardíaca de la SEC

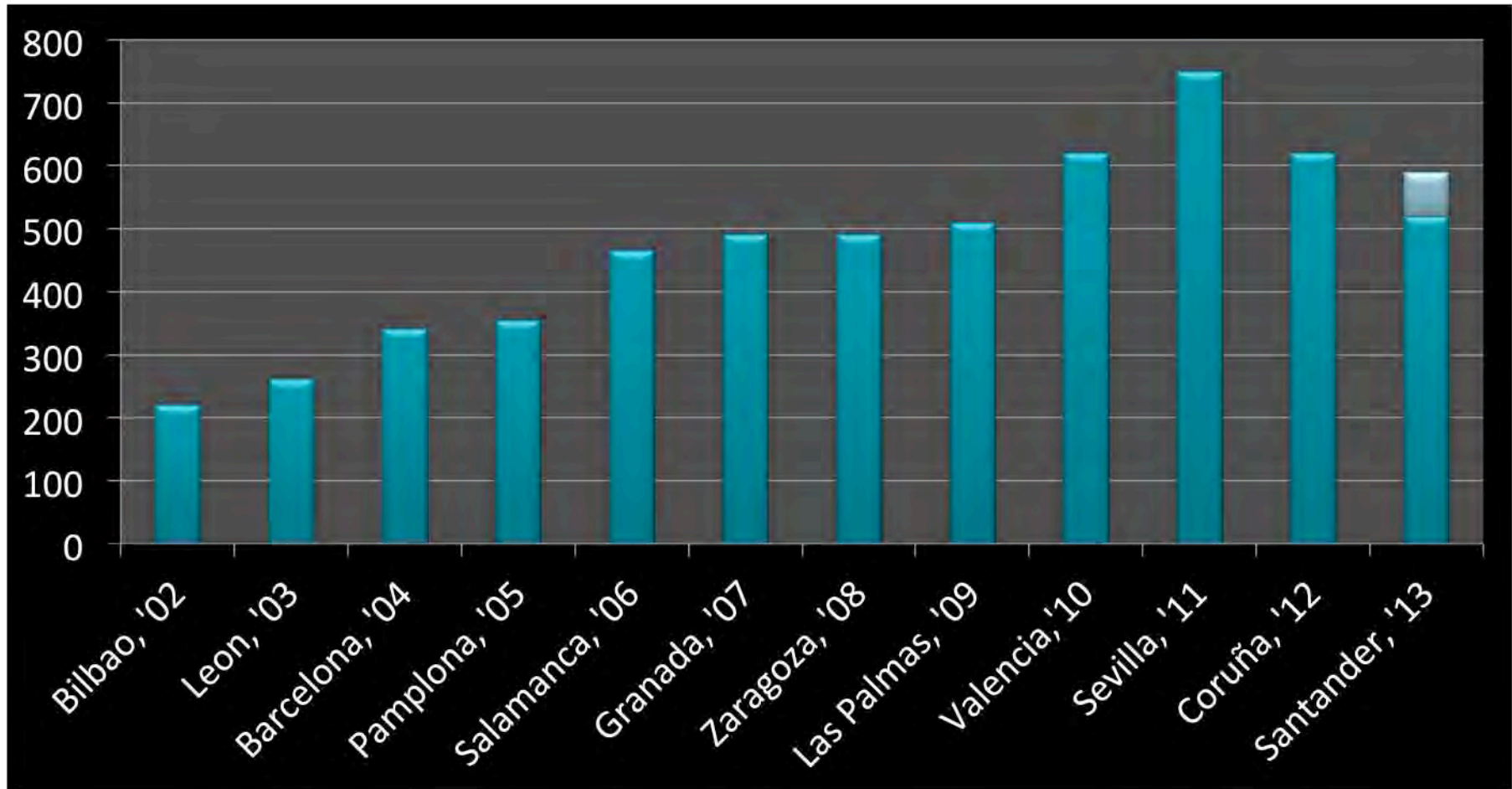
El grupo de Arritmias Cardíacas  
de la SEMES

[www.escardio.org](http://www.escardio.org)



EUROPEAN  
SOCIETY OF  
CARDIOLOGY®

# SEA Annual Scientific meeting





# Annual Scientific meeting. Santander '13

- **New aspects**
  - Health economy
  - Basic anatomy for EP
  - Critical review guidelines
  - Training program in basic emergency situations
  - Patient's corner

# Faculty in SEA scientific meeting, Santander 2013

Faculty (SEA members)	2012	2013
≤ 40 y	13 (20%)	22 (25%)
≤ 45 y	24 (37%)	36 (41%)
≤ 50 y	36 (55%)	52 (59%)
Total	65	88

# Conclusions

- **Spanish EP and Arrhythmia Association (SEA), through Registries, Accreditation Process and Scientific Annual Meeting, contributes in improving the quality of clinical practice and scientific activity, engages young EP and maintain fruitful collaboration with EHRA**