

# International Pathology

INTERNATIONAL PATHOLOGY (ISSN 0020-8205)  
published quarterly by the International Academy  
of Pathology.

Circulation 23,000 worldwide.

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<http://www.iaphomepage.org>

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CAPE TOWN  
SOUTH AFRICA

30 Sep. - 5 Oct. 2012

[www.iap2012congress.com](http://www.iap2012congress.com)

## A NEWS BULLETIN

Vol 52 No 4 2011

### Pathology in Spain

The 25th Congress of the Spanish Society of Anatomical Pathology – Spanish Division of the International Academy of Pathology was held in the city of Zaragoza, Spain from May 18 – 21, 2011 in association with the 20th Congress of the Spanish Society of Cytology and the 1st Congress of the Spanish Society of Forensic Pathology.

A strategic goal of the Congress was the strengthening of international bonds amongst histopathologists, cytopathologists, forensic pathologists, clinicians, biologists, veterinarians, residents, technicians, patients' associations, and the industry. With that purpose in mind, the event had a global flavour. It attracted about 1,000 delegates coming not only from Spain but also from Portugal, virtually all Latin American countries, the United States, Italy, the United Kingdom, Belgium, Canada, Australia, and China.

For the first time in SEAP-IAP history, pathology technicians fully participated in the congress, which included numerous teaching activities specifically addressed to them. Another novelty worth mentioning was the digital display of all posters presented, with complete exclusion of paper support in poster sessions.

There were 93 platform presentations and 490 posters. Drs Enrique de Alava, Javier Saenz de Santamaria, and Paz Suarez-Mier chaired the committee handling platforms and posters.

Plenary slide seminars by Drs John R Goldblum and Saul Suster on Wednesday May 18 and by Drs Jaime Prat and John KC Chan on Saturday May 21 marked the beginning and ending points of scientific activities.

Widely acclaimed plenary lectures were delivered by Drs Sergio Serrano, Christopher D M Fletcher, Juan Rosai, Javier Pardo (Pio del Rio Hortega Award), Francisco Nogales, and Antonio Cardesa (Santiago Ramon y Cajal Award).

The ubiquitous work of Drs Robin A Cooke and Marcial Garcia-Rojo was especially acknowledged and the enforced unfortunate absence of Dr Florabel Mullick was particularly regretted.

Finally, the closing business meeting witnessed my presentation of the new SEAP-IAP bylaws and concluded with the inauguration of Dr Ricardo Gonzalez-Campora as SEAP-IA President for the period 2011-2015. It was decided that Cadiz, a charming Atlantic town at the southern tip of Spain, will harbor the 2013 Congress.

*Aurelio Ariza,*  
*Executive President of the Congress*

### Historical background

The Conference was held in a very modern Convention Centre which is one of the buildings preserved from the 2008 World Expo buildings. The Expo site is on the Northern side of the River Ebro. There are a number of ultra modern hotels within easy walking distance of the Convention Centre.

Zaragoza lies between the cities of Madrid and Barcelona and is connected to them by a high speed rail service that runs hourly. It is the 5th largest city in Spain with a population of about 700,000. It was the site of a World Expo in 2008 which had the theme – Water and Sustainable Development.

It was chosen by the Romans as a site for an

*Continued page 3*

*Executive Committee of the Spanish Society of AP – IAP*

*L to R David Hardison (Secretary), Ricardo Gonzalez-Campora (President elect), Aurelio Ariza (President), Joan Carles Ferreres (Treasurer), Teresa Ribalta (former Treasurer)*

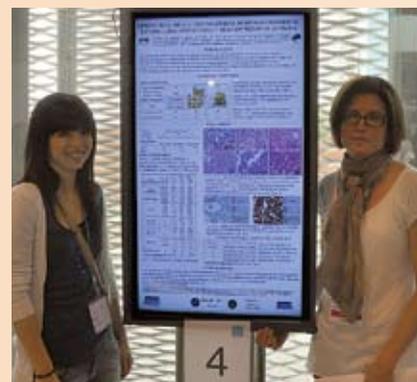




Left: Digital pathology session. Front row; Marcial Garcia Rojo, Antonio Félix Conde Martín, Anna Colomer, Second row: Unknown lady, Carlos Gallego, Marcial Garcia Morillo, Third row; Luis Gonçalves, J. Ernesto Moro Rodríguez, José Santos Salas Valián, Unknown man, unknown man. Last rows: Scientists: Javier Diaz Moya, Martin Gomez Rodriguez, Jonathan Horan, unknown lady, Alberto Gamez Zapata, technician, Francisco Podadera, unknown man.

Right: The two authors of a poster that was submitted online and at the Conference is viewed on a computer screen. Each screen takes 10 posters. The list of those on each screen is on the front screen. Touching the poster you want to see brings it up almost immediately.

Below: John Chan and Jaime Prat preparing for the final Seminar of the Conference that was presented on Saturday morning.



Above: Rio Hortega lecturer: Francisco Javier Pardo Mindán from the Clinical University of Navarra, Pamplona. He spoke on Leonardo da Vinci

Below: Telepathology session. Front row: Josep Antoni Bombí (Barcelona), Javier Pardo Mindán (Navarra), unknown, Jaime Sánchez (Guadalajara). Second row: Isabel Guerra Merino (1st left), (Vitoria), The other names are not known. Last row, standing: J. Ernesto Moro Rodríguez (Madrid), Fidel Fernández (Santander), Felix Pablo Arce Mateos (Santander), unknown, unknown, Máximo Fraga (Santiago de Compostela).



Above: At the poster viewing - Francisco Javier Quelpo who won a poster prize

Right: Young pathologists from Navarro - Maria Zelaya, Adriana Yague, Francisco Quelpo, Sofia Alonso

Left: History of Pathology in Spain speakers: Horacio Oliva Aldamiz (University Autonoma of Madrid), Santiago Ramon y Cajal, (Hospital Vall d'Hebron, Barcelona, Spain), Juan Domingo Toledo y Ugarte (University of the Basque Country), Francisco José Martínez Tello (Universitario 12 de Octubre, Madrid), José Antonio Giménez Mas (Hospital Miguel Servet de Zaragoza).



Below left: Advisory Committee of the Spanish Society of AP - IAP: Standing (L to R) Josep M Corominas, Josep Lloreta, Cristina Terradez, Diego Martinez-Parra, Rosario Granados, Jose Luis Villar, Inmaculada Matanzas, David Hardison, Santiago Nieto, Emilio Mayayo, Socorro Montalbán. Sitting (L to R) Manuel Añenar, Carmen Gonzalez-Vela, Jose Santos Salas, Aurelio Ariza, Amalia Fernandez, Joan Carles Ferreres, Eva Musulen

Below: Attendees and speakers - Infectious Diseases Pathology. Emelio Mayoyo the moderator centre front.

Right: President Aurelio Ariza at work with the new logo of the Society.





*Presidents of the Societies attending the Conference*

*In addition to the presidents of the three organizing societies (Aurelio Ariza for SEAP-IAP, Dr Ernesto Garcia-Ureca for SEC, and Dr Joaquin Lucena for SEPAP), in attendance were Dr Juan Rosai, congress honorary president, Dr Jose Antonio Gimenez-Mas, president of the local advisory committee, Dr Emilio Alba, president of the Spanish Society of Medical Oncology (SEOM), Dr Isabel Oriol, president of the Spanish Association against Cancer (AECC), Dr Claude Cavelier, IAP vice president for Europe, Drs Eduardo Santini-Araujo and Marcelo Franco, IAP vice presidents for Latin America, Dr Michael Wells, president of the European Society of Pathology (ESP), Dr Fatima Carneiro, president-elect of the ESP, Dr Rui Henrique, president of the Portuguese*

*Society of Pathology, Dr Fernando Soares, president of the Latin American Society of Pathology (SLAP), Dr Fernando Miziara, president of the Latin American Society of Cytopathology (SLAC), Dr Maria Merino, president of the Latin American Pathology Foundation (LAPF), Dr Laureado Ortega, president of the Central American Association of Pathology (ACAP), Dr Israel Borrero, president of the IAP Cuban Division, Dr Reynaldo Falcon, president of the Anatomic Pathology Federation of the Mexican Republic, and Dr Fernando Brenes, president of the Costa Rican Pathology Association, among others.*

*Left: Opening slide seminar Saul Suster, Santiago Ramon y Cajal, John Goldblum.*

*Below: Roman amphitheatre uncovered in 1978 to build apartments.*



administrative centre because of its strategic position in the Iberian Peninsula on the River Ebro which provided them with a good water supply. The Romans built a fortified camp and surrounded it with a defensive stone wall. They ruled the area for 400 years after 25 BC. The subsequent invaders, mainly the Goths from central Europe used some of the stones to build structures for themselves. Some of these stones can still be seen in the present buildings, and parts of the original wall still exist. A well preserved Roman amphitheatre was uncovered in the 'old' city in 1978 during the excavations needed to construct an apartment building.

The Moors (Arabs) from North Africa invaded Spain, and from 714 to 1118 Zaragoza was an Islamic Arab Sultanate. After this time the city became the capital of the Christian Kingdom of Aragon, but as was the case with the Romans, their influence remained in some of the buildings that were preserved and used by the subsequent rulers.

At the North Eastern end of the large square in the centre of the old city (the Plaza del Pilar) there is a large mediaeval cathedral (The Basilica of Our Lady of the Pillar). At the South Eastern end there is another cathedral, La Seo, the Cathedral of San Salvador (the Saviour). This has a mixture of various architectural styles, particularly Moorish and Romanesque. The Moorish architecture is preserved in the Northern wall of the Cathedral. The remainder of the building which is mainly of Romanesque architecture was built over an existing mosque during the 12th century.

In front of La Seo there is a monument to Goya, one of the famous artists who lived and worked in Zaragoza. Another building from Moorish times is the Aljaferia Palace (or castle) built in the 11th century. This is where the Parliament of the Province of Aragon has its meetings.

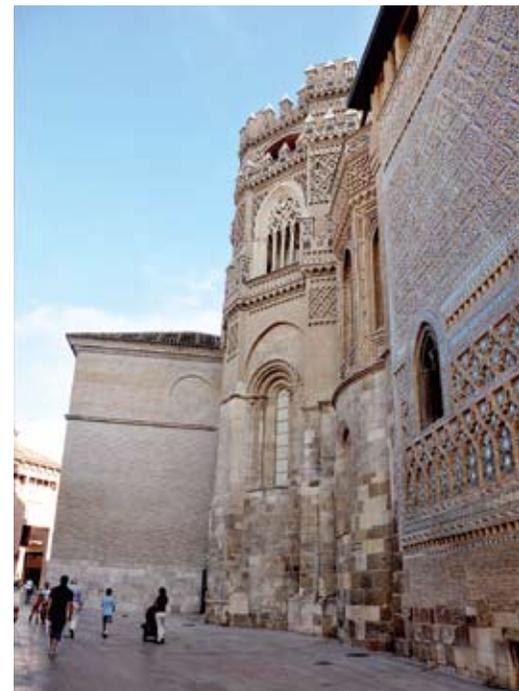
*Below left: Zaragoza: Aljaferia Castle (Palace) built in the 11th century by the Moors. It is now the meeting place for the Parliament of the Province of Aragon.*

*Below: The cathedral of La Seo in the old city has a mixture of architecture that reflects the history of the city. Along the North wall can be seen the Moorish and Romanesque architectures.*



*Above: Zaragoza: Goya monument in front of the Cathedral of San Salvador (La Seo).*

*Zaragoza: Basilica of Our Lady of the Pillar on the South bank of the Ebro River.*



# Santiago Ramón y Cajal (1852 – 1934)



This is the most famous name in medicine in Spain. In fact, accounts of Spanish Medicine are labelled History before Cajal and after Cajal.

The founders of the medical dynasty of Cajal were Justo Ramón, a rural doctor and Professor of Anatomy in the University of Zaragoza and his wife Antonia Cajal. Justo insisted that his two sons, Santiago and Pedro become doctors. Santiago was more interested in painting, and for some years he resisted his father's wish that he study medicine. Ultimately he agreed to this, provided that he was allowed to take lessons in Art as well as in Medicine.

He became interested in the microscopic anatomy of the Nervous System and adopted the silver nitrate staining method introduced by the Italian Anatomist, Camillo Golgi. He then began to draw the nerve cells that he saw in his histological preparations.

the blocks using a 'cut throat' razor. Later on he employed a sliding microtome.

As well as his interest in the microanatomy of the nervous system he also made oil paintings of other anatomical sites. The Museum in the Cajal Institute of Neuroscience Research has some of these paintings including one of the anatomy of the head and neck, and one that shows the exposed abdominal contents.

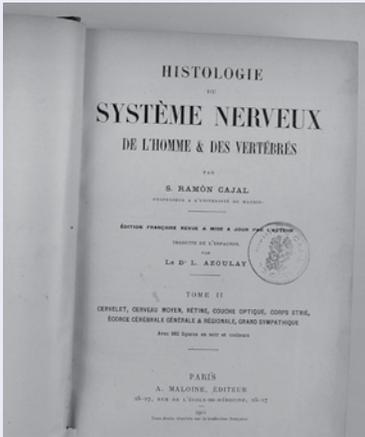
He became interested in photography soon after it

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*Below: Top row from left; Julian Sanz-Ibañez, the 5th Director, Pedro Ramon y Cajal, Francisco Tello, the 2nd Director. (Pedro was the brother of Santiago).*

*Bottom row: Julian Sanz-Ortega, grandson of the 5th Director; Santiago Ramon y Cajal, great grandson of Pedro; Francisco José Martínez Tello, great grandson of the 2nd Director.*

*Photos from the Cajal Institute are reproduced by courtesy of the Cajal Legacy: Instituto Cajal (CSIC) Madrid, Spain.*



*Above: Santiago Ramon y Cajal in 1906, the year in which he won the Nobel Prize.*

*Left: Cajal's textbook on the microscopic anatomy of the nervous system published in 1911.*

*Below: At left is a drawing of the cell in the gut that Cajal recognised as being different from the cells of Meissner and Auerbach. It was thinner than them and he called it the Interstitial cell. At right is a normal stomach stained with CD117 immunostain which stains the Interstitial cells.*

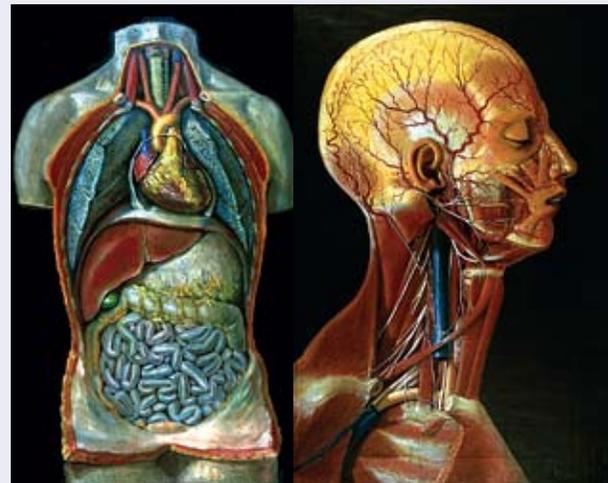
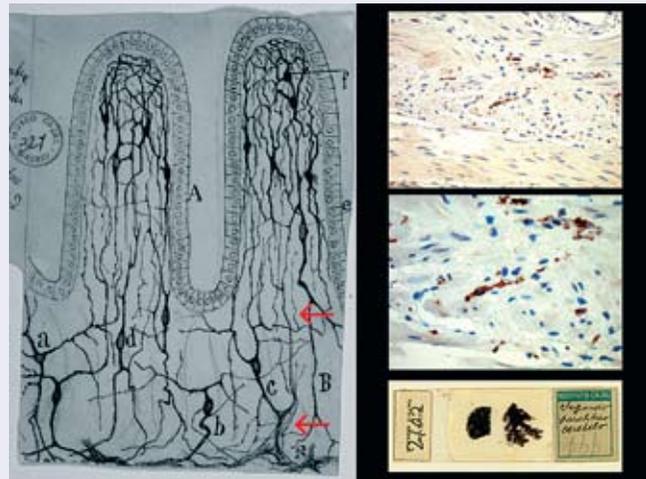
*The microscopic section on the bottom right is one of Cajal's thick section, silver stained preparations from which he made his drawings of the nerve cells in the body.*

By combining his skills in drawing and in anatomy he showed that each nerve cell was an entity that related to adjacent cells by contiguity (not continuity) thanks to small contacts between their processes. Then the nerve impulse was transmitted to other cells in a polarized way, from their dendrites towards the soma, and from this structure towards other cells through their axons and their fine collateral filaments. In his studies he made thousands of drawings.

In 1906 he was awarded a Nobel Prize in Physiology or Medicine for his contributions to the understanding of the anatomy of the nervous system and the innervation of organs.

In the late 20th century one of the observations he made in 1893 on the innervation of the gut received special attention. In some of his drawings he illustrated the plexuses of Meissner and Auerbach in the gut. He also recognised some fine filaments that did not belong to either of these systems. He called these the Interstitial cells. It was found that the Gastrointestinal Stromal Tumour (GIST) one of the less common tumours of the gut arises from these 'Interstitial cells of Cajal.'

His nerve sections were made using different staining techniques. However, one of the most used, at least at the beginning of his studies, was the Golgi impregnation: small solid pieces of nervous tissue were hardened in potassium dichromate for several days (4-7) and then soaked for a couple of days in a weak silver nitrate solution. The stained pieces were then embedded in large beeswax blocks. At first he cut thick freehand sections from



*Above: Oil paintings by Santiago Ramon y Cajal*

*Below: Cajal Institute of Bioscientific Research*

*Far left: Cajal's Nobel Laureate certificate*



# The Royal National Academy of Medicine Madrid



Above: National Academy of Medicine: Presidential table with the Curator, Jose Manuel Perez, Robin Cooke and Julina Sanz. Portrait of King Henry 5th and on the right the flag of the Academy and on the left the flag of the King.

Left: National Academy of Medicine: Presidential table with some of the chairs for the Academicians in the foreground.

This Academy was established by King Philip 5th in 1734. The headquarters building in Madrid was constructed in 1913. It is situated in a street beside the Opera House in the centre of the old city. (Arrieta Street 12, 28013, Madrid, Spain)

The Academy consists of 50 members, each of whom is eminent in their sphere of learning. 40 of them are medical doctors, and the rest are from 6 other scientific professions related to Medicine such as veterinarians, pharmacists or sanitary engineers. Each member has a numbered chair in the lecture theatre. There is currently one female member. New members are appointed when an existing member dies.

The Office bearers of the Academy are a Chairman, a Vice President and a Secretary.

In the Academy building there is a lavishly decorated lecture theatre with a capacity for approximately 300 people. At the front of the theatre there is an elevated table for the President and officials. The Academicians sit in their chairs below the bench and beyond this there are seats for visitors on the floor level and also in a balcony. Every Tuesday during the academic year, guest lecturers are invited to speak to the Academicians and visitors. The Presidential table is flanked by a flag of the King on the right and one of the Academy on

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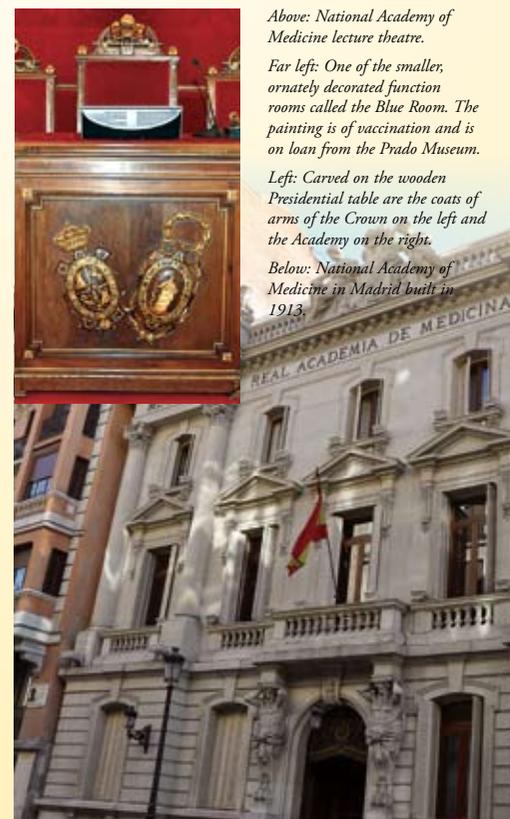


Above: National Academy of Medicine lecture theatre.

Far left: One of the smaller, ornately decorated function rooms called the Blue Room. The painting is of vaccination and is on loan from the Prado Museum.

Left: Carved on the wooden Presidential table are the coats of arms of the Crown on the left and the Academy on the right.

Below: National Academy of Medicine in Madrid built in 1913.



the left. On the front of the wooden table there are carved coats of arms of the Royal Crown (the King) and the Academy. The upper gallery is decorated with symbols of the Apothecaries because the Academy had its origins in the dispensers of herbal medicines, managed by José Hortega. Also in the upper gallery there are portraits of famous medical eminencies, such as Hippocrates, Galen, Koch and Pasteur.

The Academy has subsidiary branches in a number of the main cities in Spain where there are Medical Universities. Other categories of membership include Honorary Member and Corresponding Member, both national and foreign.

The Academy Library contains modern books, and also a wide collection of historical ones. The oldest book in the collection is on Astronomy. It was written by Mr. Arnau de Vilanova, and was published in 1509. The printing is in the style of the Gutenberg press. There are a few other smaller, ornately decorated function rooms.

In the historical book section is the oldest book in the collection, a 1509 tome on Astronomy by Arnau de Vilanova printed in the style of the Gutenberg Press.



## Jack Strong retires from the position of Treasurer of the IAP

Jack Strong served with distinction in the decision making bodies of the USCAP and the IAP for the past 40 years. Since 1992 he has played a very valuable role in guiding the finances of those two bodies. The senior positions which he has held in that time were: President USCAP 1978-79; Treasurer USCAP 1992-2008; President IAP 1988-90; Treasurer IAP 1992-2012. Comments follow from some fellow office bearers who have worked closely with him:

### Kristin Henry, President of the IAP

*Jack's contribution to the affairs of the IAP has been enormous, not least his skilful mangement of the IAP finances which have been left in such good order.*

### Florabel Mullick, Immediate Past President and former Secretary of the IAP

*Jack Strong has been a Pillar of knowledge and wisdom*



## Vale William (Bill) Gardner (1939 - 2011)

Bill had a stroke and died suddenly during the night of 10-2-2011. His death is a blow not only for his wife, Ann and his family but for the International Pathology community as well. At the time of his death he was about to be Treasurer of the IAP and take over from Jack Strong.



### Message from Florabel Mullick:

*Bill has been a friend, colleague, and advisor to me for many years. We worked side by side at the AFIP during most difficult times and we managed to preserve our friendship and loyalty to each other during those most difficult times. Bill I will miss you terribly.*

### Message from Kristin Henry:

*I first met Bill in 1998 on my appointment as IAP European Vice President. Over the years I have admired and appreciated his dedication to the IAP and have counted him as a supportive and loyal friend.*

### The following commentary has been written by Allan Tucker, his successor as Professor at the University of South Alabama.

*This is a very sad day for pathology, and for many of us personally. I had the privilege of knowing Bill Gardner for 33 years. He was an outstanding teacher, administrator, mentor, and counsellor. He had a remarkable career, moving directly from a residency position to chief of service at the Veterans Affairs Hospital in Charleston with Dr. Hennigar as chair.*

*He moved to Vanderbilt University in Nashville, Tennessee, where he served as chief of service at that VA and also as vice chair to Dr. Bill Hartmann. He then took the position as chair at the University of South Alabama for 21 years with a distinguished record. He was known for his work in prostate pathology. One of his contributions along with Dr. Betsy Bennett, was to describe prostatic crystalloids. He left to become executive director of the American Registry of Pathology in Washington, when no one could have imagined the challenges that would be faced with the closing of the AFIP. I will greatly miss this dear friend of my family and me.*

*as Treasurer of the IAP. His contributions to the Academy have been unmatched.*

### Fred Silva, Immediate Past Executive Vice President of the USCAP.

*Jack Strong has always lived up to his name! He has been a stalwart of the IAP and the USCAP. In fact the financial foundation of these great societies/academies is based upon some of the very wise financial decisions he has made over the last couple of decades (or more!).*

*Jack and Mihoko have always been great friends of mine, and they are great role models for all. One of my favorite opportunities during the IAP and USCAP meetings has been to go to dinner with these two incomparable people. Some may know that Jack Strong received the biggest honor from the Association of Pathology Chairs a few years ago - the biggest honor that can be given to a former or present Chair of Pathology. It was very well deserved. I was honored to be in the audience when it happened.*

*Jack and Mihoko, we love and respect you, and only*

was invented. He used a large bellows type camera, and in many of his family photos he can be seen with the remote camera release cord in his hand.

Cajal graduated from the University of Zaragoza which is one of the oldest Universities in Spain. He became Professor of Anatomy in succession in Valencia, Barcelona and Madrid. He was then appointed the first Director of the Cajal Institute of Neuroscience Research. In the year before his death he decided to withdraw from this position. He was succeeded as Director by a series of distinguished researchers who have ensured that the Institute is still an important centre for research. During his life time he received numerous awards apart from the Nobel Prize. For example, he was an Academician of the National Academy of Medicine in Madrid, and to acknowledge his astronomical interests he had an asteroid named after him.

One of the lecture theatres in the old University of Madrid Medical School is called the Aula of Cajal. The walls are decorated with photographs of Cajal and his students, and with some of his drawings of nerve cells. In pride of place are photos of his Nobel Prize certificates.

Both brothers Ramón y Cajal had big families and many of them became doctors. A great grandson of Pedro Ramón y Cajal, Santiago Ramón y Cajal Agüeras, who works at the University Hospital Vall d'Hebron in Barcelona, presented a paper on the work of Pedro Ramón y Cajal in the session on History of Spanish Pathology at the Conference. Francisco Jose Martínez-Tello, a great grandson of the second Director of the Cajal Institute presented a paper on his great grandfather, Jorge Francisco Martínez-Tello Muñoz. Julian Sanz Ortega, a grandson of the 6th Director of the Cajal Institute and a son of a recently retired Professor of Pathology in Madrid, Julian Sanz Ibáñez attended the history session. The present Julian is a leader in the field of Molecular Pathology.

*Information for the articles on Spain was provided by: Aurelio Ariza, Executive President of the Congress; Juan De Carlos, Department of Molecular, Cellular and Developmental Neurobiology, Instituto Cajal, Madrid; Jose Manuel Perez, Curator of the Royal National Academy of Medicine, Madrid, (with translations by his son, Guillermo Perez-Alonso); Julian Sanz-Ortega, Professor of Pathology, Madrid; Marcial Garcia Rojo, Universitario de Ciudad Real; Santiago Ramon y Cajal, Hospital Vall d'Hebron, Barcelona; Francisco José Martínez-Tello, Universitario 12 de Octubre, Madrid.*

*hope that our dinners can continue for a very, very long time. Take care and bless you for all that you have done and are. As they say: "if you seek his monument, just look about you". The IAP and USCAP is what it is because of you. PS: Oh yes Jack: GO TIGERS!*

### David Hardwick

*I have had the great pleasure and privilege of working closely with Jack for several decades during which he has always answered the call to serve instantly when asked, with dedication and perseverance.*

### Jim Crimmins

*I have been involved with the IAP and USCAP for 40 years and have worked with Jack for all or most of this time. He has been a force in the financial affairs of the organization and has done the job with amazing thoughtfulness, intelligence, and integrity. The organization owes him a tremendous debt of gratitude for his guidance over these many years as I do personally for the chance to work with him. He will be missed.*