



## **Manuel Gutiérrez-Rodríguez (1923-2009): A cytohistochemist from Cadiz**

February 23, 2009 was the sad date on which Dr. Manuel Gutierrez Rodriguez passed away in his hometown of Cadiz, Spain. He was a scientist with a background of excellent, untiring research work; equally important, he was admired and warmly loved by his fellow colleagues as well as by many students at the Medical School and the Science School of the University of Cadiz, who over the years received and were influenced by his teaching.

Manuel Gutiérrez was born in San Fernando (province of Cadiz) in 1923, and studied at the Instituto Columela in Cadiz. Forced to move because of the Spanish Civil War, he continued his studies at the Instituto Ramón Lluch in Soler (Palma de Mallorca), a place that he always remembered with fondness. Back in Cadiz, he studied at the Medical School, where he graduated in 1951. Over the next six years he served as a general medical practitioner in Alcalá de los Gazules, Cadiz, a small town in the hinterland of Cadiz that witnessed his early research as a experimentalist in haematology and blood cytology. In 1957 he returned to Cadiz and founded the Laboratory of Histochemical Embryology. In 1959 he obtained his PhD with a thesis entitled “Contribución al estudio de un nuevo fijador colorante

con especial aplicación en hematología” (“Contribution to the study of a novel fixative dye of special application to haematology”).

During the 1960s he taught at the Medical School in Cadiz. In 1964 he qualified as a specialist in Microscopic Anatomy and Pathology, and in 1965 he was awarded the post of specialist in Haematology and Clinical Analysis. At this time he felt the need to strengthen his research activities, so he took a position with an associate fellowship at the Instituto de Investigaciones Pesqueras (Institute of Fisheries Research), a CSIC Institute. In the following year he was promoted to a Tenured Scientist of the Institute.

From 1970 to 1974 he temporarily left his position at the CSIC and dedicated his time to research and teaching at both the Medical School and the Science School. In 1974 he returned to the recently reorganized Instituto de Ciencias Marinas de Andalucía, from which he officially retired in 1988. However, this did not mark the end of his intense scientific career, as he continued to supervise PhD students and colleagues and to publish research papers until almost the end of his days. It is also quite remarkable that in 1990 he obtained a PhD degree in Chemistry

with a thesis on “Nuevos colorantes biológicos y citohistoquímica de la coloración” (Novel biological stains and the cytohistochemistry of staining”).

During the more recent years, he focused on the cytohistochemistry of tuna fish, the biochemistry and histology of the production process of anchovies, the pathology of many species of bivalves, crustaceans and fishes, and the biological effects of heavy metal pollutants, to mention just a few of the subjects dealt with by this master scientist. In total, he published well over a hundred papers in both Spanish and international journals. These include two that probably deserve special mention, as they involve the development of two new dyes and staining procedures. One is Pancromo Azul G239 (1960) and the other VOF (Verde luz SF, Orange G, Fucsina acida; 1961). The first was especially designed for application in cytohaematological studies and the second is particularly useful in clinical cytology and cancer diagnosis.

Among many other merits and honours, he was a founder member of the Spanish Society of Cytology, an expert member of the FAO in Marine and Fisheries Sciences, a member-elect of the Cadiz Royal Academy of Medicine, a corresponding member of the Madrid Royal Academy of Medicine, a founder member of the Ibero-American Society of Histochemistry, a member of the editorial board of the European Journal of Histochemistry, and a member-elect of the Literary, Artistic and Scientific Circle (*Ateneo*) of Cadiz. He was awarded the Prize of the Pascual Foundation, the Special Mention of the CSIC and the Prize “2008 Cadiz Citizen of the Year”.

We think that the verses of Jorge Manrique perfectly define the truly deep feeling of all who were lucky enough to have the privilege of knowing him, being close to him and loving him:

*Así, con tal entender,  
todos sentidos humanos  
conservados,  
cercado de su mujer  
y de sus hijos y hermanos  
y criados,  
dio el alma a quien se la dio  
(el cual la dio en el cielo en su gloria),  
que aunque la vida perdió,  
dejónos harto consuelo  
su memoria*

And these beautiful poetic words (Jou in Durfort, 2007) could also show possible reflexions or visions of Dr. Gutierrez using a light microscope to observe for the first time “nice fish brain cells”:

*Ni cables ni vasos: células,  
una tras otra, una al lado de otra,  
células como árboles, como pirámides,  
como columnas, como mariposas, como redes,  
a contraluz en el microscopio,  
células próximas pero separadas  
por unos minúsculos espacios que veo por primera vez,  
ahora,  
después de tanto buscarlos  
en tantos tejidos, con tantos colorantes:  
células -neuronas-, espacios -sinapsis-  
(los nombres vendrán más tarde),  
células como astros  
en un universo de laberintos y de memoria.*

*Aquí la materia hace los saltos más prodigiosos:  
los sentidos,  
los instintos,  
la memoria,  
la inteligencia.  
Aquí la materia se vuelve  
deseo, angustia, voluntad.*

*Entraré en este bosque mágico  
que sé teñir de incendio, de otoño o primavera,  
habitaré en este paisaje de rayos invisibles,  
de canales que se abren y se cierran,  
y seré el astrónomo de este cielo interior  
y el leñador de esta espesura de electricidad y de música.*

Jou, D. – 2002. *L'èxtasi i el càlcul*. Columna, Barcelona. Also in M. Durfort (2007): La etapa barcelonesa de Santiago Ramón y Cajal. *Quark*, 39(4): 66-74.

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