

### Interview with Antonio Villalobo IIBM, CSIC-UAM- Madrid, Spain



Prof. Antonio Villalobo

*Antonio Villalobo, is Research Professor at the “Instituto de Investigaciones Biomédicas” “Alberto Sol” IIBM, Biomedical Research Institute of the National Research Council of Spain (CSIC), Madrid since 2006. He obtained his M.D. and Ph.D. respectively in 1974 and 1976 at the University of Seville, Spain. After his Ph.D., he spent 3 years as Postdoctoral Fellow in Physiological Chemistry at The Johns Hopkins University, School of Medicine, Baltimore MD, USA. Followed by 3 years as Postdoctoral Fellow and Research Associate at the University of Louvain, Louvain-la-Neuve, Belgium. In 1982 he moved to Vancouver BC, Canada, as Senior Research Associate and Research Scientist at the Faculty of Pharmaceutical Sciences, University of British Columbia, where he stayed until 1988. At the end of this period he returned to Madrid, Spain at the Biomedical Research Institute IIBM, CSIC-UAM. The initial appointment in 1988 was as Research Scientist, during 1989-2005 he held the position of Senior Research Scientist and since 2006 he is Research Professor in the same Institute. In 1995 he spent a sabbatical year as Research Associate in Pathology at the Brigham and Women’s Hospital, Harvard Medical School, Boston MA, USA. His research interests are focused on understanding new regulatory mechanisms implicated in the control of cell proliferation and cell migration, cell signaling and intercellular communication, and their alterations in tumors cells.*

**What made you opt for a career as a researcher? How would you define your job?**

My interest in Science developed when I was a kid. Well before I entered in the Faculty of Medicine I was committed that after graduation I will pursue a Doctorate in basic research and a career in Biochemistry, as I was convinced that only understanding the molecular mechanism of life could help to understand diseases. Thus, this long journey was initiated at the Department of Biochemistry of the now extinct section of Biology in the old Faculty of Science of the

University of Seville. The premise was located in the historic building of the *Real Fábrica de Tabacos de Sevilla*, now the headquarters of the Rectorate of the University, which in the XVIII century was as its name indicate a tobacco factory. Incidentally, where Carmen, the protagonist of the famous opera of Bizet, suppose to have worked.

***The definition of my job, as any job in Science, can only be described as the most exciting of all possible jobs.***



We'd like to catch a glimpse of your daily activities. What is a typical day (or week) for you?

The main part of my daily activities is spent reading and writing papers, supervising students and planning new experiments. From time to time bureaucracy gets in the way, and writing grants and doing other administrative duties take its toll.

You have been a researcher for about 40 years, can you name the scientific achievement that you are so far the most "proud of" or happy about?

*For a scientist the achievement that may be the most relevant is always the one that it may come from the next experiment.* In any event, I feel particularly happy about my contributions on the role of calmodulin on systems implicated in the control of cell proliferation such as the epidermal growth factor receptor and related receptors and other signaling proteins.



Building at IIBM- CSIC-UAM

Antonio, you had the chance and opportunity to get some position in prestigious universities: The Johns Hopkins University, USA, the University of British Columbia, Canada, the University of Louvain, Belgium, and Harvard Medical School, for a sabbatical year in USA. Can you tell us about what these experiences brought you?

To get experience in different labs before to be established as an independent researcher was for me a must-to-do job when I was starting my career. Exposure to different research topics, great supervisors, sharing excitement with fellow colleagues in the lab and new ways to focus scientific problems was the most important experience when working in those Institutions.



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Let's move on to DYNANO: DYNANO is now in its final year: have the research-industry collaborations reached your expectations?

I must say that the research-industry collaborations should improve in the area of research in which I am working.

Antonio, you are from a "Biochemistry field": what do you bring to the multidisciplinary DYNANO project and what does DYNANO bring you?

I find exciting to realize that **we humans are chemical machines, and that when we get sick our machinery need a tune-up** where chemists, molecular biologists and clinicians must have a say to repair it; the formers providing basic knowledge to understand the disease processes, and the latters applying this knowledge caring for the patients. **Thus, I have learned a great deal from colleagues in DYNANO with different areas of expertise, alien to what I normally do in my daily work. I hope my colleagues from the Chemistry quarters in DYNANO find of interest too to pursue biomedical projects in the future.**

**Another important aspect of DYNANO, and the previous project DYNAMIC, was to have the opportunity to supervise the work of highly motivated students.**

*"we human are chemical machines....when we get sick our machinery need a tune-up"*

*Prof. Antonio Villalobo*

Which advice do you have for the new generation of PhD students/ Postdocs?

My advice to starting Ph.D. students is: **get in this path only if you really feel passion for Science**, otherwise look for another job before starting; and to the Postdocs: work hard and **get as much experience as possible to define your own research path as an independent researcher in the future.**

*Thank you Antonio, and all the best for DYNANO and other projects you are involved in.*

*Interviewed by Laurence Bosch*

### DYNANO in brief

Starting date: 1st November 2011

Project duration: 48 months

Number of partners: 15

Project Coordinator: Dr. Mihai BARBOIU,

European Membrane Institute -IEM, Montpellier, France.

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