

# SPANISH RAPID METHODS AND AUTOMATION IN FOOD MICROBIOLOGY: A STAR IS BORN

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In the history of Arts and Science once in a while something important happens and that development will have an impact for a long time in a particular field and location. Such is the case of the Spanish Rapid Methods and Automation in Food Microbiology organized by Dr. Josep Yuste and Dra. Marta Capellas at the Universitat Autònoma de Barcelona (UAB), Spain, a university with about 50,000 students. Yuste visited my laboratory as a post-doc fellow with a NATO grant in 2000 and immediately immersed in several successful research projects which resulted in several Journal publications. More importantly, he observed and assisted in the World renowned Kansas State University (KSU) International Workshop on Rapid Methods and Automation in Microbiology in Summer of 2000. After he completed the nine month post-doc training, he returned home to UAB to continue his career as a food microbiologist. The experiences he had at the KSU impressed him so much that he decided to start a workshop similar to the one held at KSU since 1980. In 2002, he worked diligently and followed many of the strategies of the KSU workshop and decided to start his own workshop in Barcelona with the cooperation of Marta Capellas as the co-director. He invited me to be the Key-note speaker as well as the principal lecturer in this 4 day workshop which they named "Métodos Rápidos y Automatización en Microbiología Alimentaria". The first workshop occurred in November, 2002.

It was a great success with about 200 scientists and students who attended the 4 day workshop. After the first successful workshop, Yuste and Capellas continued the series in 2003, 2004, 2005 and 2006 averaging about 200 participants per workshop. I was fortunate enough to be the key-note speaker of the budding workshop series in all these workshops. Our scientific interactions and friendships developed rapidly

and positively. At the 25th Quarter Century Celebration of the KSU workshop in 2005, I appointed both Yuste and Capellas as "Quarter Century Fellow" to Manhattan, Kansas and they presented a delightful lecture in the celebration.

What makes this Spanish Workshop a success?

## EXCELLENT LECTURES AND PRESENTATIONS

Yuste and Capellas not only invited me as the key-note speaker and principal lecturer in the workshop, they invited many outstanding scientists at their own university and other institutions to present world class lectures. I gave six lectures during the workshop and used my 2002 article "Fung, D. Y. C. 2002. Rapid Methods and Automation in Microbiology" as the key article to develop the six lectures. These lectures were delivered in English and simultaneously translated into Spanish by a team of truly excellent translators to the participants. They also invited Dr. Cécile Lahellec, one of the most respected microbiologists in Europe and the former Director of Food Hygiene of Paris and Associate Director of the French Agricultural Experiment Station in Ploufragan to give the opening lecture in this workshop series concerning the current status of microbiological developments in Europe and international harmonization of microbiological methods.

I was truly honored that at the end of the 2006 workshop, the Dean of the Veterinary School presented to me the prestigious title of "Distinguished Professor" of Veterinary School of UAB due to my contributions to this workshop series. I was the first scientist so honored at UAB. It was one of the highest honors of my long career in Microbiology since 1969.

Besides these academic lectures, the co-directors invited outstanding experts

from major companies to present the theories and applications of the cutting edge diagnostic kits, instruments, and systems for rapid detection, enumeration, and characterization of all kinds of microbes in food science. These were not "sales" talks but rather scientific expositions of the newest systems in the world in rapid methods and automation in Microbiology. As a scientist working in the field for more than 30 years, I can attest to the fact that the standard of the Spanish workshop is second to none in intellectual presentation as well as practical implications of the methods in the field.

## PRACTICAL EXPERIENCES

The majority of the participants attended the two day lectures but a smaller group of participants took part in the day long intensive practical experience of the newest and best diagnostic systems and instrumentation. Many of the systems were tested in a spacious and well equipped laboratory with the assistance of company representatives and special assistants. The participants were also involved in "rotations" of specific systems throughout the day. It was a long day but many important concepts and actual contact of valuable systems were made. I even spend about an hour each day to demonstrate some of my unique developments in applied microbiology such as the Fung Double tube, Fung-Yu Tube, adhesive tape method, miniaturized microbiology technologies, etc. to the group. It was a most enjoyable interaction for all concerned.

## EXCELLENT MANUAL AND HANDOUTS

Yuste and Capellas spent inordinate amount of time in constructing a world class Rapid Microbiology Manual for

the Workshop (198 pages!!). Most of the information were presented in English but many were also presented in Spanish. I have seen many Manuals like this in my traveling and lecturing, and I consider this one of the best. As a matter of fact, I held the Manual up high in the first day of the workshop and said: "Just getting this valuable Manual is worth your while to come to this workshop". Commercial companies also provided the participants with new and valuable handouts.

## FACILITIES, ENVIRONMENT AND CAMARADERIE

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UAB is located in a lovely wooded area just outside of Barcelona. The campus is full of students, faculty members, and visitors involved in many educational activities. The campus is tranquil and very orderly. The dinner facilities were great, and transportation was efficient and easily assessable. One of the most enjoyable activities during the workshop is the random distribution of souvenir from Kansas State University. Each year, I sent a big box of all kinds of "goodies" to the Spanish workshop and at the end of the workshop I would open the box and start throwing T-shirts, pens, medallions, and even folding chairs to the participants. It was truly a joyful event. We all enjoy that activity greatly. Along with Yuste and Capellas, I also sign each certificate myself. On the first day we were strangers but at the end of the workshop we were all great friends. We lined up outside of the Veterinary School each year and had a picture taken to remember the lovely workshop in Barcelona.

So, indeed, a star is borne in Rapid Methods and Automation in Food Microbiology in Spain. I am sure it will last for at least 25 more years. I will come as long as I am able and will always bless this new star to shine brightly in the field of Microbiology in Europe and in the World.

This article was written to introduce the history and activities of the Spanish workshop. Further scientific information can be obtained through:

Dr. Josep Yuste and Dra. Marta

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## References

- 1.- Fung, Daniel Y. C. 2002. Rapid Methods and Automation in Microbiology. Inaugural Issue of Comprehensive Reviews in Food Science and Food Safety, vol. 1 issue 1, pages 3 to 22.

(Electronic version through [www.ift.org](http://www.ift.org) or contact Fung at [dfung@ksu.edu](mailto:dfung@ksu.edu))