

Share 0 More Next Blog»

[Create Blog](#) [Sign In](#)

OF BACTERIA AND MEN

Maintained by Robin Tecon, microbiologist and postdoctoral researcher at the Netherlands Institute of Ecology (NIOO-KNAW), and currently visiting scholar at the University of California, Davis. This blog is about bacteria (and other microbes) and the scientists who study them.

FRIDAY, JUNE 22, 2012

Back from ASM General Meeting



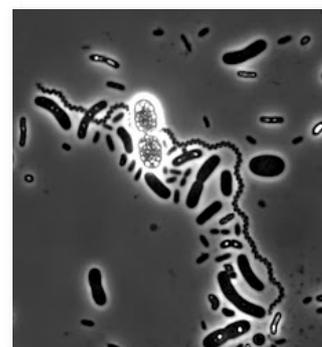
I'm just back from the [112th general meeting of the American Society for Microbiology](#), which took place from June 16 to 19 in San Francisco. The general meeting is huge: thousands of microbiologists from all over the US and abroad, representing all fields of microbiology; hundreds of talks and more than 3,000

posters presented; about 200 biotech companies showing their products.

That is something to see! It's great to feel part of this large community of microbiologists. We are one big family, even though we work on topics as varied as human health, environmental ecosystems, agriculture, food safety, biotechnology, etc.

Since most sessions run in parallel, it is of course impossible to attend every talk, so everyone does his/her personal selection among many possibilities. Hence, during breaks between the talks you can see cohorts of people walking swiftly from room to room as they make their way to a new session, which gives the whole thing a definite 'rush hour' style.

This year the 'hot topic' was arguably the human microbiome, with a couple of extra sessions added at the last moment in order to cover the latest releases from the [human microbiome project](#). Apparently some surprises are around the corner, such as the impressive variability of the microbiome between individuals and the overlooked role of phages. I skipped the session, but I attended the 'ASM live' broadcast that took place immediately after. That was not a great idea. I expected a digest of the session, highlighting the findings of the project—instead the discussion was led as if everyone had been at the



Bacteria from a waste water treatment plant in Switzerland

SEARCH THIS BLOG

ABOUT ME

**Robin Tecon**
[View my complete profile](#)

RELATED INFORMATION

- [My page at NIOO-KNAW](#)
- [My PhD thesis \(University of Lausanne\)](#)
- [My publications with links](#)

SUBSCRIBE TO

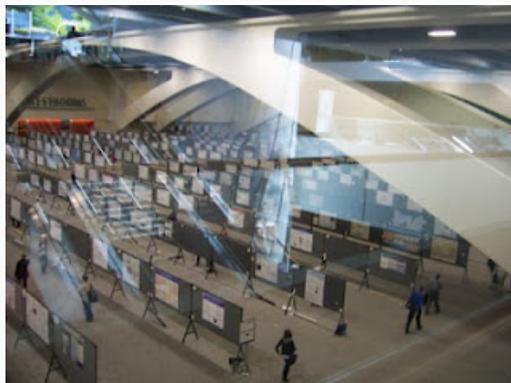
- Posts
- Comments

FOLLOW BY EMAIL

POPULAR POSTS

previous session (and actually I felt as if I was the only attendee who had not...) and I had to wait until the end to hear a summary of some sort. (Yes, I could have opened my mouth, but everyone else in the audience seemed pretty happy with the discussion as it was...) My view is that the organizers may give some additional thoughts as to the precise role of these 'live' sessions.

Another topic that recently made the public news was to be found in a special symposium on **H5N1 research** and the so-called dual-use issues. During this session **Yoshihiro Kawaoka**, from the University of Wisconsin-Madison, presented his results on mutations of the H5N1 virus that facilitate its transmission among



Poster hall in the Moscone conference center.

humans (**these results were published in Nature this week**). The avian virus typically binds to human alveola (lungs) but not to human trachea, which makes it poorly infectious in humans. The new mutations discovered make the avian virus binds to the trachea cells as well! Kawaoka also reiterated his defense of H5N1 research (he did it previously in *Nature*). Not everybody agrees to this vision, although the **NSABB committee** finally changed its mind about the publication of the H5N1 research papers.

I won't detail everything I saw, but I'd like to mention some talks which I thought were pretty cool, and the related groups and topics that I wish to learn more about.

First, the group of **Nicole King**, a professor at UC Berkeley, studies the possible transition from single cell life style to multicellularity in choanoflagellates. What she proposes is very surprising: bacteria that are ingested by choanoflagellates may be the trigger for the initiation of multicellularity! Thus, it is tempting to suggest that bacteria may have had their say in the genesis of metazoans... Possibly another point for team bacteria!

Secondly, **Stuart West** and **Kevin Foster**, who both are evolutionary biologists at the Oxford department of zoology and thus take a fresh look at classic microbiology topics – mostly the evolution of cooperation among microbes. Many microbiologists (and I include myself in the lot) tend to lack education on ecology and evolution, which is regrettable. Some important mechanisms, for instance quorum sensing, are discussed without proper understanding of the way natural selection operates, which ends up in errors such as the idea that quorum sensing is a form of 'group selection', something that the current theory of evolution does not support.

Well, excellent food for thought during that conference. And the lovely scenery of San Francisco is always enjoyable.

Posted by **Robin Tecon** at 6:57 PM

[Recommend this on Google](#)

[Filamentous bacteria under the microscope](#)

[Indole teaches persistence to bacteria](#)

[Reporter bacteria to monitor arsenic concentration in groundwater](#)

[Jacques Monod and the study of bacterial growth](#)

MY BLOG LIST

 [coastalpathogens](#)
the hunt for phages
1 day ago

 [Small Things Considered](#)
Directed Science, Curiosity-Driven Science, and Striking the Balance
1 day ago

 [The Tree of Life](#)
The best writing in science papers part 1: Vladimir Nabokov in Notes on Neotropical Plebejinae (Lycaenidae, Lepidoptera)
1 day ago

[Tomorrow's Table](#)
From Quackwatch: FDA Orders Dr. Joseph Mercola to Stop Illegal Claims
1 day ago

 [virology blog](#)
TWiV Special: A paradigm for pathogen de-discovery
16 hours ago

BLOG ARCHIVE

- ▼ 2012 (26)
 - ▶ September (2)
 - ▶ August (2)
 - ▶ July (4)
 - ▼ June (3)
 - [Unwanted guests](#)
 - [Back from ASM General Meeting](#)
 - [The endosymbiotic theory of Lynn Margulis](#)
 - ▶ May (3)
 - ▶ April (2)
 - ▶ March (4)
 - ▶ February (3)
 - ▶ January (3)

No comments:

Post a Comment

Enter your comment...

Comment as: Google Account

[Newer Post](#)

[Home](#)

[Older Post](#)

Subscribe to: [Post Comments \(Atom\)](#)

COPYRIGHT



This work is licensed under a [Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License](#).

Simple template. Powered by [Blogger](#).