



*The SOL Newsletter*

We are in the midst of an exciting international partnership to create a network of knowledge about the Solanaceae family and related taxa. Communication between all groups will be critical to the success of this effort. The purpose of this newsletter will be to keep everyone informed and connected. The newsletter will be sent via e-mail to participants and also posted on the Solanaceae Genomics Network (SGN)

<http://sgn.cornell.edu>

The format of the newsletter is a work in progress, and suggestions for content can be sent via e-mail to Joyce Van Eck at [jv27@cornell.edu](mailto:jv27@cornell.edu).



*Introduction - contributed by Dani Zamir*

In the coming 10 years The International Solanaceae Genome Project (SOL) will create a network of international research groups and knowledge about Solanaceae aimed at answering two of the most important questions relating to life and agriculture:

1) How can a common set of genes give rise a wide range of morphologically and ecologically distinct organisms that occupy our planet? 2) How a deeper understanding of genetic basis of plant diversity can be harnessed to better meet the needs of society in an environmentally-friendly and sustainable manner?

This September we made another important step forwards in the first SOL workshop. The meeting that was held in Wageningen was attended by 300 scientists and demonstrated the high quality of the research conducted by our community. The excellent setting and organization of the meeting gave an overview of the status of SOL research and provided many opportunities for interactions and discussions. At the end of the meeting we conducted an open session of the Steering Committee and defined the following main objectives for the coming year:

- 1) Start the sequencing in all the participating countries -US (Chromosomes 1, 10, 11), Korea (2), China (3), UK (4), India (5), The Netherlands (6), France (7), Japan (8), Spain (9) and Italy (12).
- 2) Set up the pipelines for standardized genome annotation and the "one stop shop". A whole day meeting of the sequencing and bioinformatics groups took place in Wageningen and another meeting is planned in PAG 2005 (Organized by Lukas Mueller).

- 3) Raise funding for international collaborations. A proposal will be submitted to the EU entitled "High quality Solanaceous crops for consumers, processors and producers by exploitation of natural biodiversity". SOL-AMERICAS is a new initiative that will integrate science in the continent that harbors the rich Solanaceae biodiversity.
- 4) Integrate SOL with the "Coffee Community", the "Systematic Community" and the agro-industry.
- 5) Work out "fair" guidelines for publication that respect the unique contributions of the participating countries and scientists (discussions were already initiated during the Wageningen meeting).
- 6) Develop an educational module to demonstrate the essential role of biodiversity in improving our quality of life.
- 7) Update the SOL White-Paper (Draft III is already on line) particularly with respect to genetic and genomic resources for the various crops.
- 8) Assist in organizing the next SOL Meetings (2005 Italy, 2006 US, 2007 Korea).

Marc Zabeau who co-chaired SOL Steering had asked to step down from his role. Marc's contribution was invaluable in jump-starting the whole initiative and we thanked him very much for his enthusiasm and friendship. Marc will of course continue to promote SOL and plant sciences in his role as the chairman of the European Plant Science Organization (EPSO).





## *Updates on Tomato Genome Sequencing Effort*

In the upcoming months, each group participating in the sequencing effort will provide a brief update to Joyce Van Eck. The updates will be compiled and included in the SOL newsletters. Information will be provided on progress and any problems encountered. Joyce has contacted a representative from each group to identify a contact person who will be responsible for these updates. If you have not provided her with a contact, please do so by November 30.



## *Bioinformatics - contributed by Lukas Mueller*

SOL bioinformaticians met for the first time the day before the Wageningen SOL meeting to discuss how to best tackle the tomato genome from a bioinformatics perspective. Researchers from The Netherlands (Ralph van Berloo (NL) and Roeland van Ham), Great Britain (Gerard Bishop and Sarah Butcher), France (Farid Regad), Italy (Silvana Grandillo, Mara Ercolano and Maria Luisa Chiusano), US (Lukas Mueller), Belgium (Stephane Rombauts) and Germany (Heiko Schoof) attended the meeting.

We agreed that project-wide standards should be adopted to generate data that is consistent between the different chromosomes, which are being sequenced by different countries. We also decided what data and where it should be archived, and questions of nomenclature were resolved. A second meeting will take place during the PAG meeting in San Diego in January 2005; see Page 3 of this newsletter for details.

## *What's New on SGN? - contributed by Lukas Mueller*

A Tomato Sequencing project page has been added to SGN ([http://sgn.cornell.edu/help/about/tomato\\_sequencing.html](http://sgn.cornell.edu/help/about/tomato_sequencing.html)), giving an overview of the project and statistics on the progress of the sequencing, on a per chromosome basis, and information about the centers and funding agencies involved. Please contact SGN at [sgn-feedback@sgn.cornell.edu](mailto:sgn-feedback@sgn.cornell.edu) if you have more information to be added to the page, such as links to your project specific page. You may also want to subscribe to the SGN mailing list ([sgn-announce@sgn.cornell.edu](mailto:sgn-announce@sgn.cornell.edu), go to <http://caffeine.sgn.cornell.edu/mailman/listinfo/sgn-announce/>) and enter your profile in the SGN people database ([http://sgn.cornell.edu/cgi-bin/search/direct\\_search.pl?search=directory](http://sgn.cornell.edu/cgi-bin/search/direct_search.pl?search=directory)). Verify if you are already in the database. If your profile is not in the database, you can add it by clicking on 'add/modify my information' link.

## Upcoming Conferences



### International Plant and Animal Genome XIII Conference (PAG-XIII)

January 15-19, 2005

Town & Country Hotel in San Diego\*

\*Lukas Mueller has organized a SOL bioinformatics meeting on Saturday, January 15, 2005 from 1:00PM-6:00PM in the Dover room. The meeting is not limited to bioinformaticians. It is open to everyone who is involved in sequencing. Please let Lukas know if you will attend and what topics you would like to see discussed. Lukas's e-mail address is lam87@cornell.edu.

If anyone is aware of conferences that would be of interest to members of this group, please send the information to Joyce Van Eck ([jv27@cornell.edu](mailto:jv27@cornell.edu)). She will post conference information in the newsletters.