



Towards an Italian RSG ?





Towards an Italian RSG ?



- *What is ISCIB?*
- *What is ISCIB-Student Council?*
- *What is an RSG?*
- *Why start an RSG-ITALY?*



What is ISCB?

The International Society for Computational Biology (ISCB) is dedicated to advancing the scientific understanding of living systems through computation. ISCB communicates the significance of our science to the larger scientific community, governments, and the public at large. It serves a global membership by impacting government and scientific policies, providing high quality publications and meetings, and through distribution of valuable information about training, education, employment and relevant news from related fields.

ISCB membership offers many benefits including reduced conference registration fees to several high impact events and reduced subscription prices for a selection of journals of Computational Biology and Bioinformatics.

The annual international meeting of the ISCB is Intelligent Systems for Molecular Biology (ISMB), the annual european is European Conference on Computational Biology (ECCB). Over the past sixteen years the ISMB conference has grown to become the largest bioinformatics conference in the world. The ISMB conferences provide a multidisciplinary forum for disseminating the latest developments in bioinformatics. ISMB brings together scientists from computer science, molecular biology, mathematics, and statistics.

For more information about ISCB please visit: <http://www.iscb.org>

What is SC?



The ISCB Student
Council

=

All young members
of the ISCB



What is ISCB-SC?

The ISCB Student Council (SC) is a section of ISCB dedicated to facilitating opportunities of development for students and young researchers in the field of Computational Biology and Bioinformatics. ISCB-SC was the vision of Manuel Corpas and was officially approved by ISCB Board of Directors (BoD) during ISMB 2004.

The declared mission of the ISCB Student Council is to promote the development of the next generation of Computational Biologists through provision of scientific events, networking opportunities, soft skill training, educational resources and career advice, while attempting to influence policy processes affecting science and education.

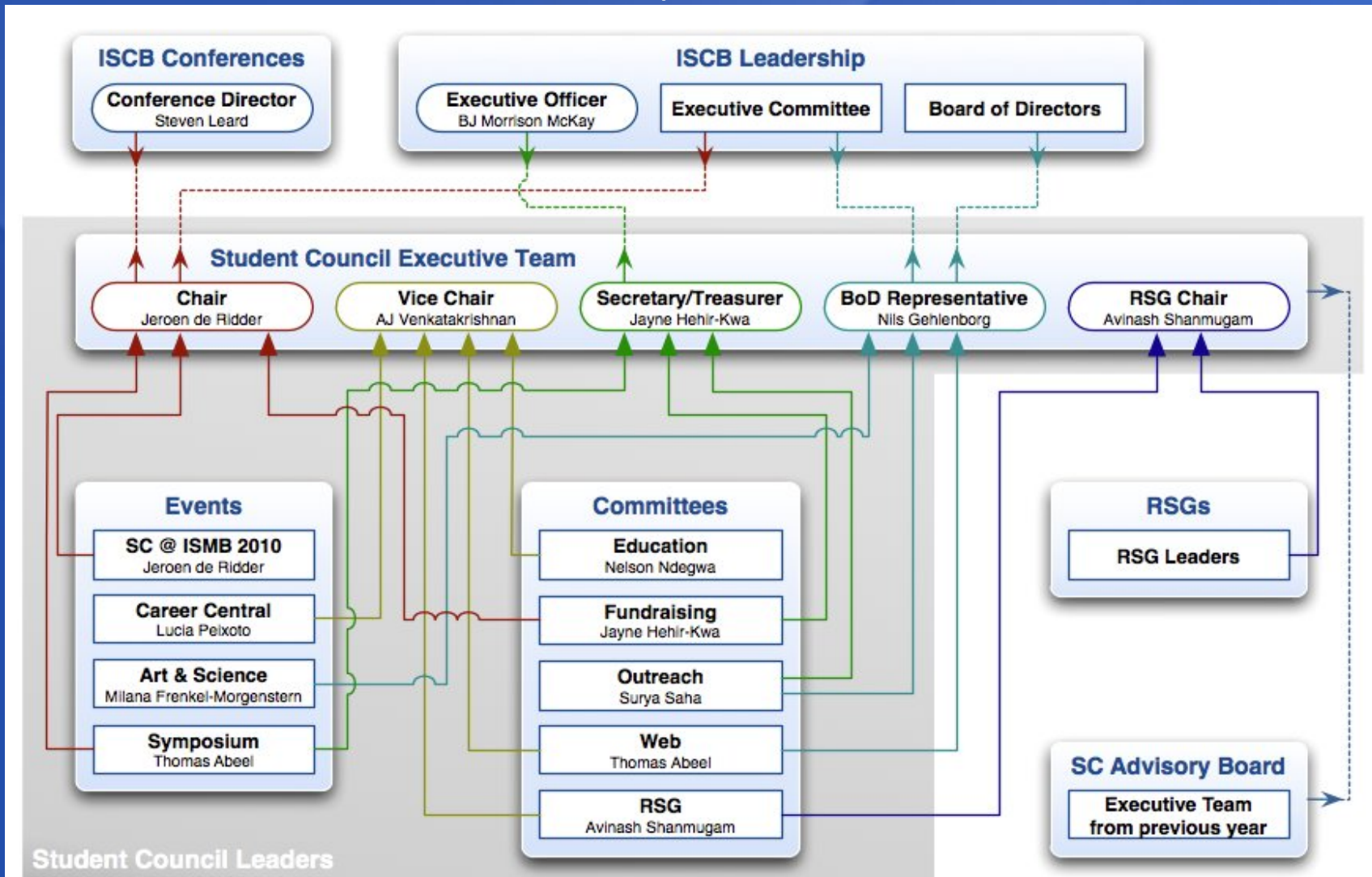
The annual meeting of the SC is the Student Council Symposium (SCS), which is held in conjunction with ISMB.

For more information about the SC please visit the official ISCB Student Council website: <http://www.iscb-sc.org>

Organization

The Student Council (SC) is an international student group which is organized into several different teams and committees, each with their own tasks and responsibilities. As part of the ISCB the SC works closely with the ISCB leadership to achieve our goals. Here you can see how the teams and committees are related.

Student Council in 2010 RSGs' relationships with the SC and the ISCB.



Very dynamic website

www.iscb.org

The Student Council website is a resource for the global computational biology student community and offers many features that allow you to get in touch with your peers and to find out about events and initiatives for computational biology students - no matter where in the world you are.



Get In Touch
Stay Connected
Become A Member



ISCB STUDENT COUNCIL

- Home
- News
- Organization
- Events
- Initiatives
- Publications
- Regional Student Groups
- Forums
- Shop
- Contact

STUDENT COUNCIL SHOP

Did you always want to get your own personal Student Council coffee mug or T-shirt? You can now buy these and many other Student Council-branded items in the **ISCB Student Council Shop**. Even better: At the same time you will be supporting our work! [More ...](#)



[Login](#) | [Register](#)

The ISCB Student Council Welcomes You!

Welcome to the ISCB Student Council, the student organization of the [International Society for Computational Biology](#).

Our mission is to promote the development of the next generation of computational biologists. We achieve our goal through provision of scientific events, networking opportunities, soft-skills training, educational resources and career advice, while attempting to influence policy processes affecting science and education.

The Student Council website is a resource for the global computational biology student community and we offer [many features](#) that allow you to get in touch with your peers and to find out about events and initiatives for computational biology students - no matter where in the world you are. If you have questions or comments don't hesitate to [contact us](#).

Read on below for the latest news on everything Student Council-related.

Student Council 2011 Executive Team Elected

Submitted by Nils Gehlenborg on October 20, 2010 - 6:44pm.

Posted in [Elections](#) | [News](#)

We are pleased to announce the 2011 Executive Team, which was elected by our members and will take office on January 21st, 2011:

EVENTS AT ISMB 2010

For everyone at **ISMB 2010 in Boston** we have a [complete listing](#) of all our events and activities that will take place during the conference. Please make sure to visit our booth (#13 and #14) in the exhibit area. [More ...](#)



FEATURED EVENT

The ISCB Student Council is organizing the **6th ISCB Student Council Symposium** to be held on Saturday, July 9th, directly preceding the Tutorials' Day of ISMB 2010 in Boston, MA, USA. [More ...](#)



COMING UP

[Postponed - BioCafé - How to get a Nature cover](#) (Group event) (61 days)



[more](#)



European Student Council Symposium



SYMPOSIUMS

The Student Council Symposium is a forum for students and young researchers in the fields of Computational Biology and Bioinformatics.

Participants will have the opportunity to present their work to an international audience, build a network within the computational biology community and develop important soft skills in an environment that fosters exchange of ideas and knowledge.

The ISCB Student Council organized the 6th ISCB Student Council Symposium, it was held on Friday, July 9th, directly preceding the Tutorials' Day of ISMB 2010 in Boston, USA.

The ISCB Student Council and its European Regional Student Groups organized the first European Student Council Symposium, it was held on Sunday, September 26th, the Tutorials/Workshop Day of ECCB 2010 in Ghent, Belgium.

Program

Sunday September 26, 2010

The full day program runs from 9 am to 5 pm. At 5:30 pm the first plenary lecture of the main conference starts.

- 9:00-9:30 ICE-BREAKER presentations
- 9:30-10:30 **KEYNOTE**
"Generating hypotheses for molecular biology through (top-down) systems biology"
Yves Van de Peer, *VIB and University of Ghent, Belgium*
- 10:30-11:00 Coffee break
- 11:00-12:30 Student presentations
Exploiting synergy between computational biology and X-ray crystallography for solving challenging macromolecular structures
Presenter: Tim Wiegels
Teaser: We present a novel method for completing fragmented models automatically obtained from low-resolution electron density maps, exploiting the presence of intrinsic information - the non-crystallographic symmetry (NCS).

A framework for functional selection of biomarkers
Presenter: Virpi Kivinen
Teaser: Molecular biomarkers can be used for evaluating the physiological state of an individual. Here, a framework for biomarker selection is presented, and the ability of the selected markers to cover different diseases is evaluated.

Repositioning Drugs with Chemical Networks and Binding Site Similarity
Presenter: V. Joachim Haupt
Teaser: We present a method for the analysis of drug-target interaction networks, combining Power Graphs and binding site comparison. With this approach, we can identify candidates for drug repositioning. We present some examples to demonstrate its validity.

Towards a more detailed representation of biomolecular text mining results
Presenter: Sofie Van Landeghem
Teaser: Contributing to a more detailed representation of text mining results in the biomolecular domain, we carried out the first study of predicting non-causal relations, targeting relations between genes and domain terms such as "member-of" and "part-of".
- 12:30-13:30 Lunch and [poster session](#)
- 13:30-15:00 **SOFT SKILLS WORKSHOP**
"Presenting Science using the theatre approach"
Gijs Meeusen
- 15:00-15:30 Coffee break
- 15:30-17:00 **SOFT SKILLS WORKSHOP**
presentation skills continues
- 17:00-17:25 [Poster session](#)
test your new presentation skills!

Agenda

Location: Room 200

8:00 am - 8:45 am

Registration

8:45 am - 9:30 am

Scientific [speed dating](#) and Opening remarks

9:30 am - 10:15 am

Keynote

Predicting protein-protein interaction networks from the genome

Gary Bader, University of Toronto

10:15 am - 10:45 am

Coffee Break

10:45 am - 12:00 am

Session 1: Proteins

- **Modeling protein-peptide interactions using protein fragments: fitting the pieces?**
Peter Vanhee, *Vrije Universiteit, Brussels, Belgium*
- **Bridging the Gaps: Atomic Simulation of Macromolecular Environment Brings Together Protein Docking, Interaction Kinetics and the Crowding Effects**
Xiaofan Li, *Cancer Research UK London Research Institute, London, UK*
- **Exploiting physical properties in protein structure alignment**
Shweta Shah, *Carnegie Mellon University, Pittsburgh, USA*
- **Structure-based kernels for the prediction of catalytic residues and their involvement in inherited disease**
Fuxiao Xin, *Indiana University, Bloomington, USA*

12:00 pm - 12:30 pm

Research and Industry Partners Session

12:30 pm - 1:30 pm

Lunch Break

1:30 pm - 2:15 pm

Keynote

Thinking Big: How Artificial Intelligence and Molecular Biology can transform each other

Larry Hunter, University of Colorado

2:15 pm - 3:30pm

Session 2: (Epi)Genomics

- **A hidden Markov model for detecting multi-gene chromatin domains**
Jessica Larson, *Harvard University, Boston, USA*
- **Genome wide association study of nonsynonymous Single Nucleotide Polymorphisms for seven common diseases**
Praveen Surendran, *University College Dublin, Dublin, Ireland*
- **is-rSNP: A novel technique for in silico regulatory SNP detection**
Geoff Macintyre, *The University of Melbourne, Victoria, Australia*
- **Next Generation Genome Annotation with mGene.ngs**
Jonas Behr, *Friedrich Miescher Laboratory of the Max Planck Society, Tübingen, Germany*

3:30 pm - 4:00 pm

Coffee Break

4:00 pm - 5:00 pm

Session 3: Bioinformatics of Health and Disease

- **Analysis of the functional properties of the creatine kinase system using a multiscale "sloppy" modeling approach**
Hannes Hettling, *VU University, Amsterdam, The Netherlands*
- **Designing and implementing chemoinformatic approaches in TDR Targets Database: linking genes to chemical compounds in tropical disease causing pathogens**
María Paula Magañaños, *Universidad de San Martín, San Martín, Argentina*
- **A computational pipeline for diagnostic biomarker discovery in the human pathogen Trypanosoma cruzi**
Santiago Camona, *Universidad Nacional de San Martín, San Martín, Argentina*
- **A bioengineering approach for rational vaccine design towards the Ebola Virus**
Sophia Banton, *Florida Atlantic University, Boca Raton, USA*

5:00 pm - 5:45 pm

Keynote

Genomic Variation and the Inherited Basis of Common Disease

David Altshuler, Broad Institute of MIT and Harvard

5:45 pm - 6:00 pm

Closing Remarks

6:00 pm - 7:30 pm

Poster Session

Symposium

- * Discussions
- * Keynotes
- * Oral communications
- * Posters
- * Speed dating
- * Industry partner session
- * Workshops/Tutorials

Awards

- * Posters & Presentations
- * Travel Fellowships

Other ISMB Events

- * Art & Science exhibition
- * Career Central/Lounge
- * Open Business meeting
- * Social Event
- * Social HQ

Art & Science Exhibition

Chair: Milana Frenkel-Morgenstern



<http://www.youtube.com/watch?v=7SI6fvCfGrw>

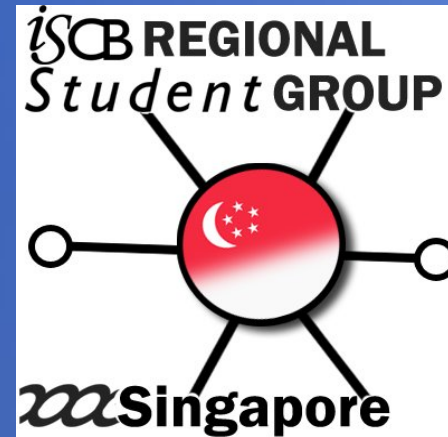
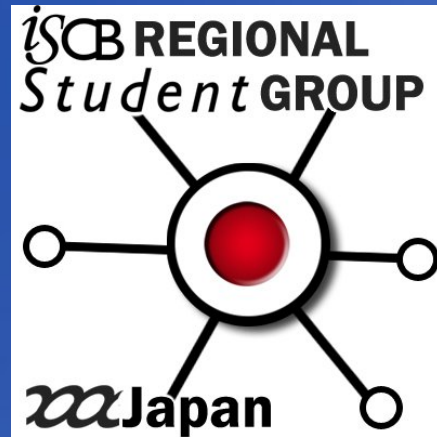
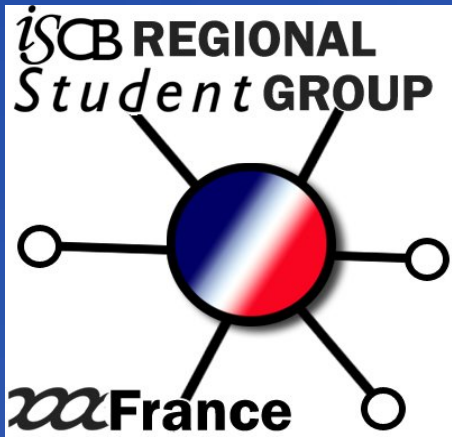


An initiative by the Student Council to address the career development needs of its members.

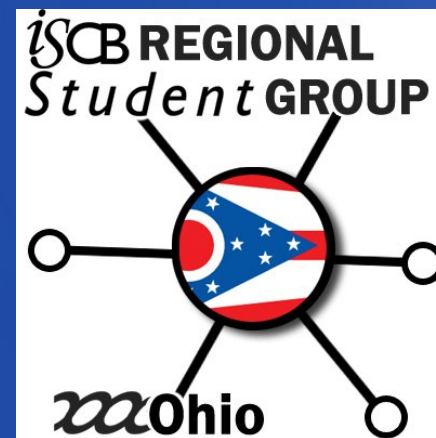
www.iscb.org/content/career-central

Activities/Events

- Career Central/ SC Lounge initiated @ ISMB/ECCB
 - CV critique service
 - Career seminars
 - Online CV submission service
 - Job posting board
- Internships for students from developing countries



Regional Student Groups of Student Council





- Local community (region, country, continent)
- Specific regions => Specific needs => specific projects

What is an RSG?

Regional Student Groups (RSGs) are groups established and managed by the SC. RSGs primarily aim to provide a supra-institutional organization, capable of initiating events that would bring together students and young researchers within a country or region. You can see these regional groups of students as local windows to global opportunities.

Creation and maintenance of a global network of Computational Biology students is a vital and challenging task that requires an organization in place. For this purpose, the SC set up the 'RSG-Committee', which manage RSGs across the world. This committee closely liaises with the leaderships of RSGs and periodically reviews their activities. The SC still remains the parent body of the RSGs.

Regional Student Group



The mission of an RSG is to organize events, provide activities and information useful for the development of the students within their local community. An RSG can initiate and establish contacts with local industry and academia creating career opportunities for the students.

The advantages of an RSG are listed below:

- Students of Computational Biology and Bioinformatics from more than one institution in a region get together, thus expanding each member's network.
- Students connect with regional and international institutions, thus strengthening bioinformatics in the region.
- Students benefit from the umbrella of the Student Council and the broader opportunities it provides: leadership roles, access to its network, collaboration tools, web-space, support with event planning and help with marketing.

Regional Student Groups

Interaction among students pursuing research in the field of Bioinformatics and Computational Biology. Over the past few years, SC has successfully established many RSGs globally and the number is on a steady rise. Presently, the RSGs comprise of more than 1500 members across the world.

Thanks to an allocation of funds from the ISCB, the Student Council is providing funding support to selected proposals for events or initiatives from RSGs.

Active Regional Student Groups

- ***RSG Europe***
- ***RSG Netherlands***
- ***RSG Poland***
- ***RSG Germany***
- ***RSG Spain***
- ***RSG France***
- RSG Committee
- RSG Pakistan
- RSG Singapore
- RSG Brazil
- RSG Ohio
- RSG Australia
- RSG India
- RSG Japan
- RSG Korea
- RSG Northern Africa
- RSG Eastern Africa
- RSG Central Africa
- RSG Southern Africa
- RSG Western Africa

OK, but.....

Why am I here ?!

Because.....

I am thinking about



Why start an RSG-ITALY?

A mission could be to provide activities and information useful for the development of a students community. Could initiate and establish contacts with local industry and academia creating career opportunities for the students.

- Students from different Italian institutions get together, thus expanding each member's network and strengthening Bioinformatics and Computational Biology in our region.
- Information sharing and communication via the Internet, Exchange and collaboration with other groups in related research fields.
- The Student Council may provide: leadership roles, access to its network, collaboration tools, web-space, support with event planning and help with marketing.
- Creating and maintaining a scientific and social network is challenging, and requires opportunities for PhD students to meet each other to initiate and stimulate scientific progress.
- Annual research meeting to present and discuss research progress, (BITS 2011?)

Thank you for your attention!

**If you are interested I am
available during the meeting
to discuss future initiatives**