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**Report summarising the conclusions
of a full debate on the merits of a new
European systems biology society**

**Work package 5
Community Building and Synergies**

ISBE WP5 Coordinators:
James Sharpe and Jutta Steinkoetter

Main responsible authors:
Joaquim Calbó, James Sharpe
Centre for Genomic Regulation (CRG)

Contact:
joaquim.calbo@crg.eu

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Author(s)	Joaquim Calbó, James Sharpe
Project coordinator	Richard Kitney
EC Project Officer	Keji-Alex Adunmo

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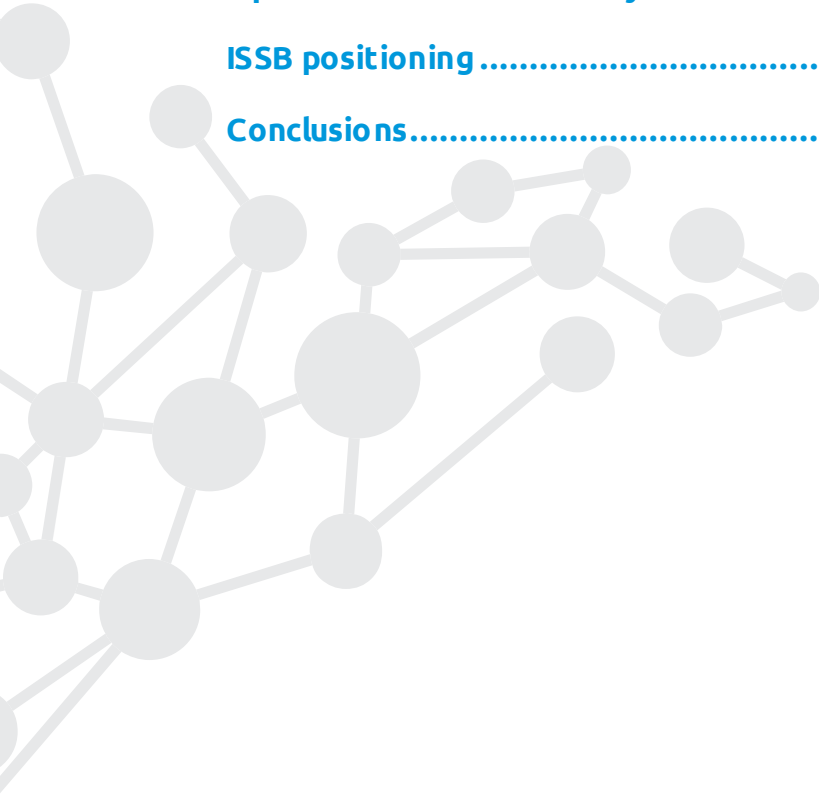
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ISBE

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Introduction:

As previously described in Deliverable 5.1 (landscape of the European SB community), Systems Biology SB is a very heterogeneous and rapidly evolving field of research in terms of expertise involved, previous training, research topics, and geographical distribution of expertise. Its unique interdisciplinary character involves collaborations between molecular biologists, geneticists, computer scientists, physicists, as well as mathematicians. These researchers often consider themselves as experts in tightly-defined disciplines, rather than as part of the SB community. Nonetheless, some common themes help defining the identity of SB community, like the focus on models, networks and pathways; the equilibrated mix of expertise (computer science, maths, and biology); and the frequent involvement of technology and methodology development. Systems biologists mainly orientate their research towards very different fields of fundamental research in Life Sciences, and also towards health-related research. However, other applied areas (energy, environment, food production) are also addressed by systems biologists. The SB community is highly dynamic and rapidly growing, as can be deduced from the increasing availability of specific SB training at the undergraduate and postgraduate levels.

SB-involved researchers are often members of international societies focused in research topics or in specific expertise areas, or even of generalistic societies of more local character. In this context, the SB community, at least the European one, lacks a single and strong scientific society capable of influencing national and European policies and strategies, and of providing support in relevant aspects like networking and collaboration, training and education, and communication with other stakeholders (industry, users, society in general).

The aim of the activities reported in this deliverable is to discuss within the community, whether demand exists for a new European Systems Biology (SB) society, and to address the following questions:

- Would there be value for a single European voice for lobbying funding agencies?
- Or for lobbying national regulatory agencies, to standardise rules and regulations across Europe?
- Or alternatively, the International Society for SB (ISSB) can already fulfil these roles?

In order to address these questions, ISBE-WP5 has established a dialogue with the community using different means: a survey, and a debate platform on the community website. Additionally, ISBE-WP5 has discussed the possible involvement of in providing a solution to the needs of the European SB community.

ISBE Survey:

ISBE-WP5 addressed a number of questions to the research community through the [ISBE questionnaire](#) launched as a collaborative effort of several ISBE-WPs. The questionnaire was placed as a link into the project's [website](#), and was also distributed via e-mail to the >500 SB group leaders identified in a web search activity. By December 10, 2013 more than 120 respondents had completed the questionnaire.

The questions related to Scientific Societies and the obtained responses follow:

Which scientific societies do you belong to?

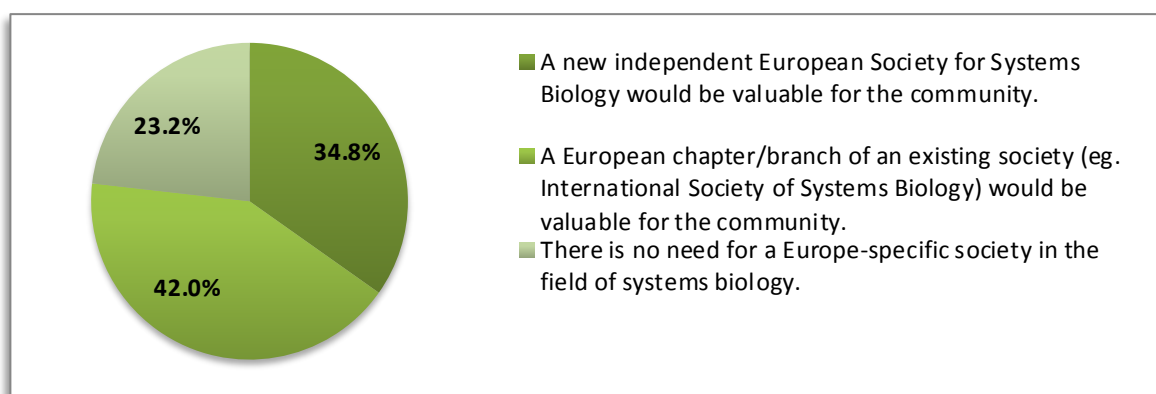
36 respondents (out of 120) stated to belong to one or more societies, listing up to 50 different ones. The only societies mentioned by at least 3 respondents are: ISCB (International Society for Computational Biology, [8]) and ASM (American Society for Microbiology, [3]).

Please list any other societies which organise meetings relevant to your research:

Regarding societies that organise Systems-Biology-relevant meetings, the 21 researchers that responded identified the following: ISCB (5), EMBO (4), ISSB (3), and FASEB (2).

In your opinion, could the creation of a European Society for Systems Biology be valuable to the community?

About $\frac{3}{4}$ of the respondents appreciate the need or usefulness of a European society for systems biologists, although more than half of them consider that creating a European branch for the International SB Society would be sufficient or more efficient. Taking these results as a starting point, we now aim to get a larger share of the SB community involved in the discussion.



Open Debate in Community Website

An open debate has been initiated using the debate platform of the community website, and invitations to participate have been sent to more than 300 registered members of the community website. The question “**Would the creation of a European Society for Systems Biology be valuable to the community?**” and community reactions (new posts and votes) can be found in the following link:

<http://community.isbe.eu/questions/would-creation-european-society-systems-biology-be-valuable-community>



European Systems Biology Community | ISBE | Search the community | Debate | Disclaimer

Would the creation of a European Society for Systems Biology be valuable to the community?

The Systems Biology community in Europe is broad and diverse, as can be explored through this web portal. The integration of this community into an European scientific society could have, among others, a potential value in lobbying funding agencies, national and European funding programmes and regulatory bodies.

What is your opinion? Do you think that a branch of a currently existing society (i.e. the International Society for Systems Biology, ISSB) would cover the needs of this community or rather that only a new, independent European Society for Systems Biology could do? Or do you consider that there is no need for a Europe-specific society in the field of systems biology?

Mon, 06/29/2015 - 14:17

Systems Biology | Societies, Scientific | [Social Media Icons]

Centre for Genomic Regulation | Joaquim Calbó

Answers

2 points

Special interest group in a larger society

As a lapsed member of multiple biology societies I think best approach is one that requires least effort to join and administer e.g. ticking a box for a special interest group focussed on European Systems Biology when joining ISSB. That way the European specific group can benefit from the administration & membership base of the larger organisation and avoid all of the overhead that would come from setting up an entirely new society.

Even within the framework of a special interest European group in a larger society I think

Tue, 07/07/2015 - 11:46

Colm J. Ryan

Screen capture of the open debate on the community website platform.

The debate is open for all website visitors, but in order to vote or contribute opinions, visitors need to log in or register. Although the community participation in this debate is scarce likely reflecting a lack of urgency in this matter, the posts and votes suggest that the option of a European chapter of an international society like ISSB is the more sensible one in the current situation.

ISSB positioning

ISBE-WP5 contacted different members of the ISSB Executive Board and discussed with them the potential role that ISSB could play as the Society of reference for the European Systems Biologists. We obtained the following statement, provided by Nicolas le Novère and supported by Hiroaki Kitano and Matteo Barberis, president and director of the ISSB:

*“The International Society for Systems Biology intends to be **worldwide home for systems biologists**, with a broad remit when it comes to the field. At the moment, **we do not feel that it should merely be a federation of regional societies**. Instead it should **play global coordination and advocacy** functions with direct management of ICSB and other conferences. There should also be a global membership.*

*However, the ISSB executive board does understand Europe wishes to have a certain level of autonomy, in particular in view of the current structuring led by ISBE. Moreover several sources of funding are limited to Europe (the same can be said of other regions). Therefore, **the scenario it favours would be the existence of regional chapters, such as ISSB-Europe**. These chapters could be legal entities, able to receive funding and establish contractual agreements. ISSB-Europe could organise its own events and activities. ISSB-Europe would then have a formal agreement with ISSB. If establishing its own memberships, all members would be de facto members of ISSB.*

*The ISSB executive board thinks **a fully independent European Society for Systems Biology without coordination would be counter-productive for Systems Biology on a global scale**. This would lead to duplications, incompatibilities and ultimately would damage the worldwide cohesion of the field and weaken its voice compared to other fields of the life science.”*

Conclusions

Summarizing the reported activities and impressions obtained therein, we arrived to the following conclusions regarding the merits of a European Systems Biology Society:

1. Mixed community, different backgrounds and interests:
2. SB scientists are members of several different societies
3. No strong SB society currently existing
4. A new society does not seem to be perceived as highly needed
5. Still, the majority believe that a European chapter of an international society would have value for the community
6. Opportunity for ISSB

The SB community is heterogenous which is both a challenge and an opportunity for a new society. On the one hand, SB community members are often members of other societies; on the other hand, a single voice representing the interests of this community is missing.

The relatively low involvement of the community on this debate and the fact that this topic hardly ever arises spontaneously within systems biologists, suggest that the creation of a new European SB Society is not perceived as an urgent issue to be addressed. However, when questioned, most European systems biologists consider that the creation of a European branch of an international society (namely, the ISSB) is a more sensible and feasible solution than the emergence of a purely independent European Society, which would likely duplicate efforts and reduce critical mass and representativity.

Altogether, in the context of a re-launching of the ISSB as a more organized society (i.e. with membership and activities beyond the organization of the annual international conference), has the opportunity to cover this gap and strongly engage with the European SB community.