building scientific communities

Tuesday 27th October 2015
BioRN Lounge, Print Media Academy, Heidelberg, Germany

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why do I care about community building?

doing science can be amazing

thrill of discovery

thrill of discovery

of something no one else has ever seen before

freedom to explore your curiosity

opportunity to innovate, to make something new and useful

travel to interesting places

flexible working hours and conditions

but doing science can also be tough

lonely

isolating

feeling like you don’t belong

feeling like you don’t belong

perhaps feeling like an imposter

don’t know who to trust

junior scientists have these feelings

http://www.phdcomics.com/comics/archive.php?comicid=1259

http://www.phdcomics.com/comics/archive.php?comicid=1488

(slide originally shown with comics you find at the above links included - I had permission to use the images in the presentation, but not to share under a CC-BY license)

"Ready, set..." - originally published 12/2/2009 ; ”The Daily Routine" - originally published 4/20/2012
Piled Higher and Deeper by Jorge Cham www.phdcomics.com

senior scientists have these feelings too

“I still suffer from ‘Imposter Syndrome’”

Athene Donald, Master of Churchill College Cambridge, UK
Professor of Physics, 2013

“Athene Donald: I still suffer from ‘Imposter Syndrome’”, Indrayani Ghangrekar. June 21st 2013
http://blogs.nature.com/naturejobs/2013/06/21/athene-donald-i-still-suffer-from-imposter-syndrome

Athene Donald's Blog “Getting away with it”, February 2nd 2014
http://occamstypewriter.org/athenedonald/2014/02/02/getting-away-with-it/

so, as I said

science can be tough if you feel like you're alone and isolated

but doing science can feel different

it can look like this…

Heidelberg Unseminars in Bioinformatics

“Biggest Challenges in Bioinformatics”

Join us to discuss what they are and how to solve them.

Thursday 18th October

19:00 – 21:00

Grabengasse 3-5, Building 2170, Hörsaal 12a

HUB is a participant-driven meeting where people with an interest in bioinformatics come together to discuss hot topics and exchange ideas.

Organisers:

Adam Gristwood
Aidan Budd
Andrew Brown
Grainne Kerr
Jing Zhou
Jon Fuller
Katja Linssen
Matthew Betts
Pavlos Pavlidis
Rebecca Wade

Tell us what you want to talk about...
Let us know if you're coming...
www.hub-hub.de

Contact: jonathan.fuller@h-its.org

HUB is collectively organized by bioinformatics scientists and science communicators from across Heidelberg, including from these institutions and more:

- EMBL – Heidelberg
- Heidelberg Institute of Theoretical Studies
- University of Heidelberg

EMBO reports

meeting point

Biggest challenges in bioinformatics

Jonathan C. Fuller, Pierre Khoueiry, Holger Dinkel, Kristoffer Forslund, Alexandros Stamatakis, Joseph Barry, Aidan Budd, Theodoros G. Soldatos, Katja Linssen, Abdul Mateen Rajput & HUB Participants

The third Heidelberg Unseminars in Bioinformatics (HUB) was held on 18th October 2012, at Heidelberg University, Germany. HUB brought together around 40 bioinformaticians from academia and industry to discuss the 'Biggest Challenges in Bioinformatics' in a 'World Café' style event.

The Heidelberg Unseminars in Bioinformatics (HUB) are participant-driven meetings. As Wikipedia notes (as of 18th January 2013), "the term 'unconference' [unseminar] has been applied, or self-applied, to a wide range of gatherings that try to avoid one or more aspects of a conventional conference, such as high fees, sponsored presentations, and top-down organization". At HUB, we have experimented with several formats to encourage participation in the meetings. For the third

Data deluge

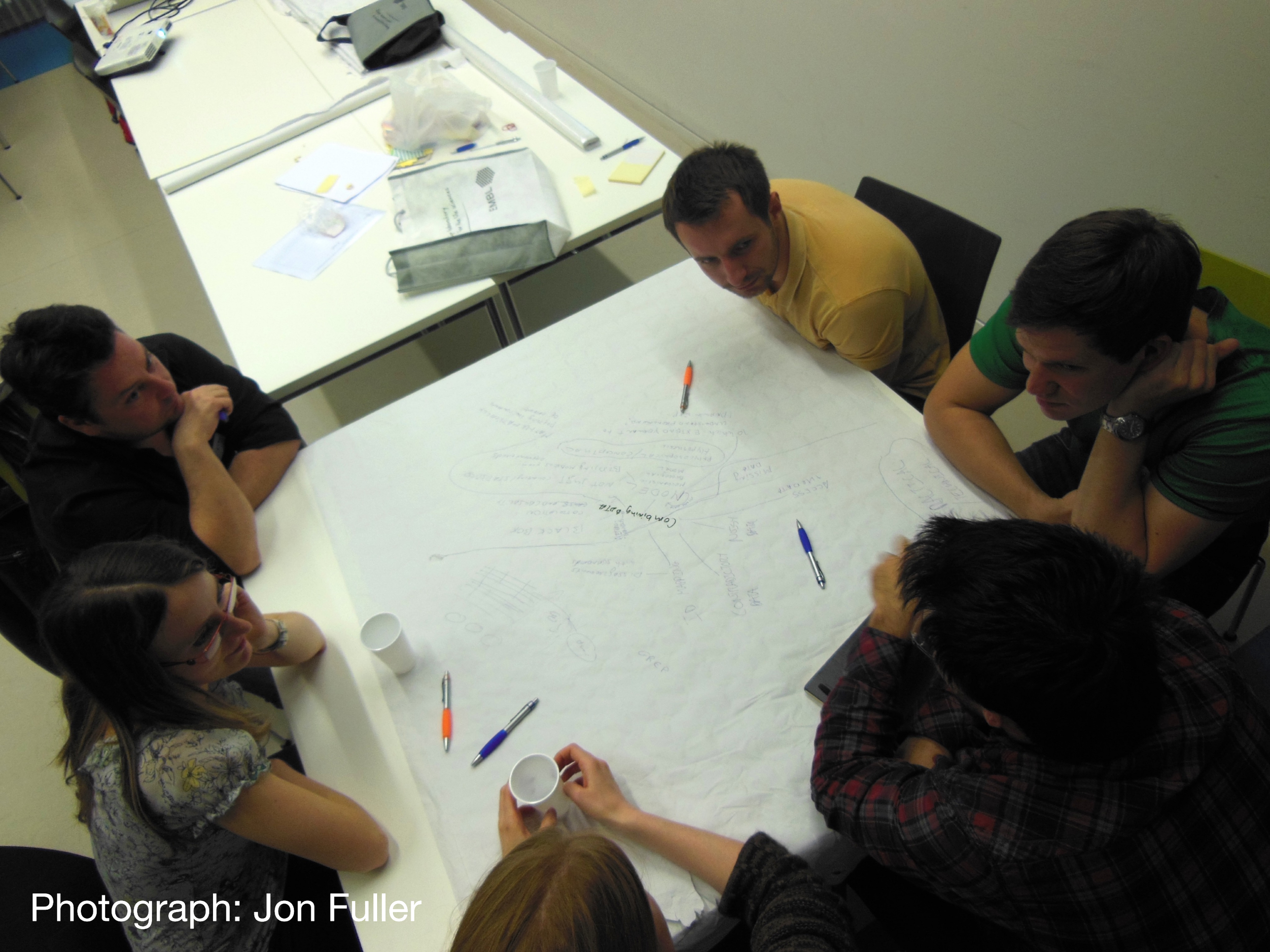
The continuing development of high-throughput measurement techniques is leading to a constant increase in the volume of data available for analysis. For each piece of biological information in a measurement, any number of technical variables can be included, and it is not always clear which of these are relevant. Biological conclusions come only after multiple steps of quality control, filtering, normalization and processing have been undertaken, all of which

a truly useful cost–benefit ratio score. As the suggestion of the formula was only made at the end of a session, determining an absolute measure for 'scientific value' remained an open question, given that several participants considered this aspect hard to define, subjective and occasionally biased. A consensus from HUB participants was that quantitative scores should act only as an aid to those managing the data. Some data sets can never be recreated and so should arguably be archived even when their value to

Photograph: Jon Fuller

Photograph: Jon Fuller

Photograph: Jon Fuller



Photograph: Jon Fuller

Photograph: Jon Fuller

Photograph: Jon Fuller

help people find things they want to talk about and do together

helping them make these things happen

different images from the earlier lonely isolated ones

part of the difference is about

“community”

being around people you trust, where you feel you belong

being around people who share your interests, goals, values

chances to make things happen you would not have done on your own

and can help reduce feelings of isolation

helping people experience more of this

can be great for them

and great for science

and great for science

by forging useful collaborations

what is community?

a social container

i.e. a group of people with something in common

“the Ensembl user community”

but also

a characteristic of the interaction within such a group

more specifically…

a shared sense of belonging and trust

Caron, B (2015) Getting a Handle on Community, retrieved 25.10.2015 http://dx.doi.org/10.6084/m9.figshare.1439803

group has a weak sense of shared belonging and trust?

a weak community

group has a strong sense of shared belonging and trust?

a strong community

what do you find in a strong community?

members of strong communities typically have strongly overlapping…

members of strong communities typically have strongly overlapping…

interests

members of strong communities typically have strongly overlapping…

values

members of strong communities typically have strongly overlapping…

goals

members of strong communities typically

share a strong collaborative spirit

“community building”

helping make weak communities stronger

why invest in building community?

members of strong communities typically

volunteer to work together

members of strong communities typically

interact frequently and effectively

members of strong communities typically

enjoy working together - making their work more productive

members of strong communities typically

engage in knowledge-sharing

members of strong communities typically

are strong advocates for their community

members of strong communities typically

identify and address inefficiencies

members of strong communities typically

volunteer feedback

members of strong communities typically

are innovative

where might you want to build community?

building community within your organisation

members of the organisation; e.g. staff (community as “social container”)

if this group develops community-sense

more discussion about shared interests and goals

discussions uncover new opportunities for collaboration and innovation

greater commitment and loyalty to shared goals and values

more cheerful and productive members

members feel empowered – motivates them but needs careful management

building community around your product

group of users/customers/clients (community as “social container”)

if this group develops community-sense

more feedback about their experience with your product

more ideas about possible developments of the product

more advocacy to other potential users

more loyalty from your users

also… an increased sense of ownership amongst your users - needs to be carefully managed

how can we build community?

1. facilitate development of trusting, high-quality relationships
2. give the group the power to make happen what they want to happen
3. trust the community - trust them to want to make good things (for you and them) to happen

1.

facilitate development of trusting, high-quality relationships

provide contexts for people to meet (in person and/or virtually) and find their common interests, goals, and values

1.

facilitate development of trusting, high-quality relationships

commit to clear transparent respectful effective open communication

1.

facilitate development of trusting, high-quality relationships

commit to clear transparent respectful effective open communication

publicise a clear concise description of the goals, vision, and mission of the community

1.

facilitate development of trusting, high-quality relationships

commit to clear transparent respectful effective open communication

publicise a clear concise description of the organisational structure of the group

1.

facilitate development of trusting, high-quality relationships

commit to clear transparent respectful effective open communication

ensure contributions are acknowledged and publicised

1.

facilitate development of trusting, high-quality relationships

commit to clear transparent respectful effective open communication

support and encourage the use of a range of communication channels - although need to strike a balance of not providing too many

1.

facilitate development of trusting, high-quality relationships

commit to clear transparent respectful effective open communication

make an extra effort to welcome and engage with any (potential) new members of the group

1.

facilitate development of trusting, high-quality relationships

commit to clear transparent respectful effective open communication

make it easy for people who might want to join the group to find out about it and start joining in

2.

give the group the power to make happen what they want to happen

resources

2.

give the group the power to make happen what they want to happen

decision-making powers

3.

trust the community - trust them to want to make good things (for you and them) to happen

if they are your users - then who knows better what they need your product to do for them? If they really want to make this work for themselves, then trust them and their opinions

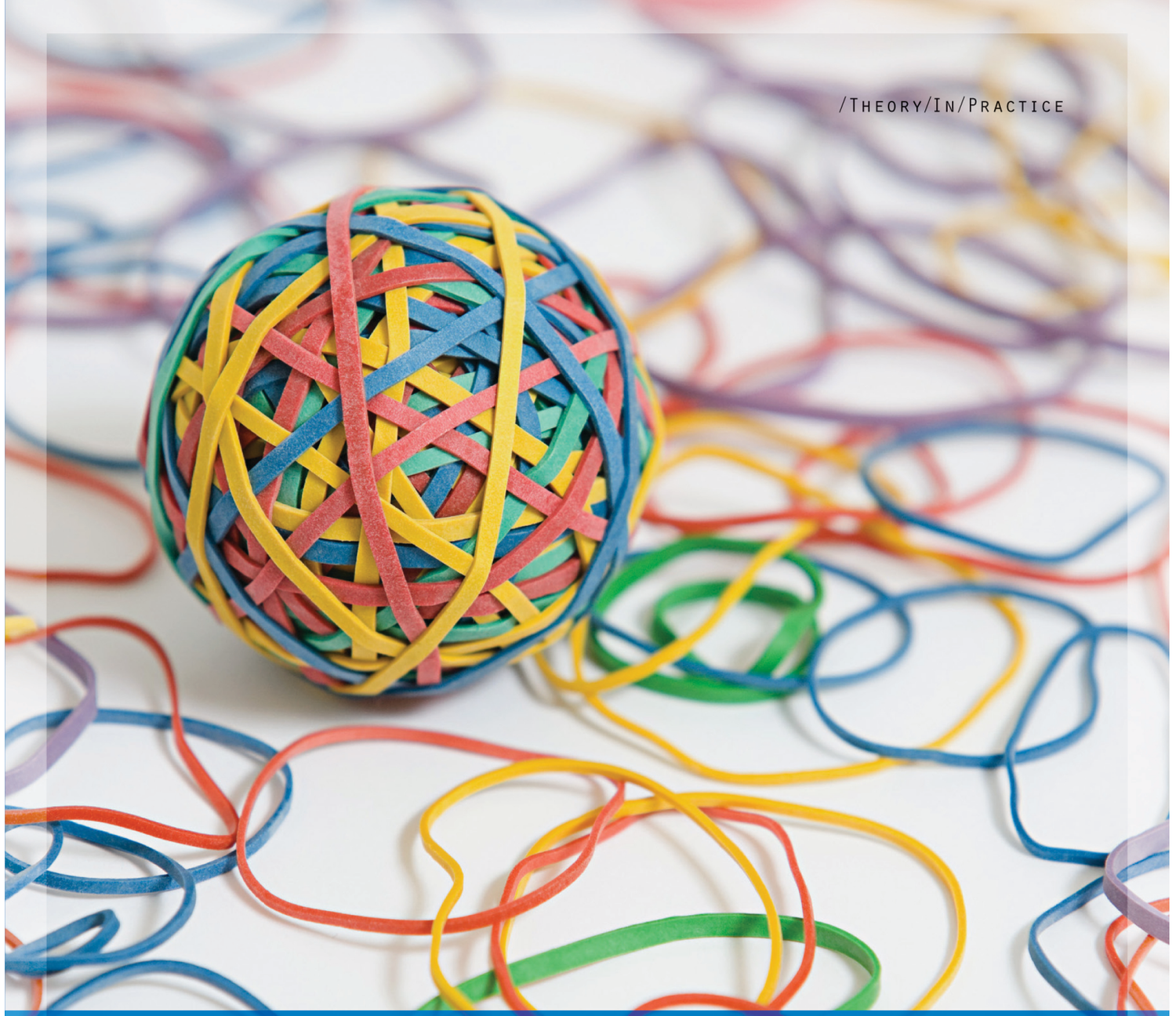
challenges for community building?

building high-quality relationships takes time and resources

enabling growth of a strong community cedes control from other sources of power

want to read more?

/Theory/In/Practice



The Art of Community

Building the New Age of Participation

Second Edition

O'REILLY®

Jono Bacon

Social in silico

Spinning together the threads of the social web

Lou Woodley's blog
https://socialinsilico.wordpress.com/

Virtual Democracy

We all want more say in our online lives

Bruce Caron's blog
http://cybersocialstructure.org/

Association of community professionals
http://www.communityroundtable.com/

OPEN ACCESS

EDUCATION

A Quick Guide for Building a Successful Bioinformatics Community

Aidan Budd, Manuel Corpas, Michelle D. Brazas, Jonathan C. Fuller, Jeremy Goecks, Nicola J. Mulder, Magali Michaut, B. F. Francis Ouellette, Aleksandra Pawlik, Niklas Blomberg

Published: February 5, 2015 • DOI: 10.1371/journal.pcbi.1003972 • Featured in PLOS Collections

EMBL etc. SCIENCE

How to crowdsource a paper

BY SONIA FURTADO NEVES SCIENCE 8 MIN READ
6 FEBRUARY 2015

A crowd's diverse knowledge can bring added value to a paper, but not all types of paper are equally suited to the approach. PHOTO: Heidelberg Unseminars in Bioinformatics

Having taken an unconventional approach to writing his latest scientific articles, Aidan Budd shares tips on what to do – and what to avoid.

aidanbudd / bosc2015

Using BOSC2015 unconference sessions on building successful open source bioinformatics communities to write an open collaborative article

98 commits **1** branch **0** releases **12** contributors

Branch: **master** **bosc2015** / +

aidanbudd Added comments from googledoc and added the github handles of the peo… Latest commit `47c1cd4` on 24 Sep

documentsFromUnconferenc…	added html versinos of etherpads from second days's unconference session	3 months ago
minutesOfMeetings	added docx version of googledoc used to build new version of list of …	a month ago
LICENSE	Initial commit	4 months ago
README.md	mentioned in README that Bjoern and Aidan decided to focus on code-pr…	3 months ago
bosc2015UnconfWriteupDesc…	updated the description of the process used to write the manuscript t…	a month ago

thanks

thanks

to BioRN for the invitation

thanks

to you for listening

thanks

to Peer Bork and Toby Gibson at EMBL

thanks

to de.NBI for my funding

thanks

to my collaborators and other community members