

### **Do-It-Yourself 'We Scientists 2035' Facilitator Pack**

Updated 12.03.2020

**Research culture** refers to the environment that researchers work in and stems from the values, norms and expectations of researchers. It influences aspects such as research integrity, openness, inclusivity, academic career trajectories, the peer review system attitude towards public engagement and ultimately affects the quality of the work being done. Fostering a healthier research culture is important both nationally in Switzerland and internationally (NAS, 2013; Nuffield Council on Bioethics, 2014; European Commission 2017). In the "We Scientists Shape Science" Project of the National Academy of Sciences (SCNAT), we aim to empower researchers - at all career stages - to implement positive changes within their own work ecosystems to foster a healthier research culture.

At the 'We Scientists' meeting in January 2017, 200 researchers and key players from all over Switzerland met to discuss the issues relating to research culture in Switzerland. As part of the its ongoing commitment to improving research culture, SCNAT has built on the 'Visions of 2035' workshops originally designed by the Royal Society of the UK (The Royal Society, 2017). In the workshops, we use speculative design scenarios to encourage novel thinking about what an idealised research culture would look like in 2035. We aim to encourage researchers to think about what their ideal culture and to start planning the first small, but concrete steps, that they themselves can do to implement small changes in their own working environment as of today. The workshop format is adaptable to a range of audiences and can be used both for big systems change but also for change in everyday practice.

The goals of the workshop are to:

- 1. Start a constructive discussion about research culture in Switzerland;
- 2. Empower researchers to act in their own research ecosystem to implement first steps towards changes;
- 3. Create a community of research culture advocates in Swiss institutions;
- 4. Bring research culture in Switzerland to the forefront of the social and political agenda.

If you use this resource, we would be very happy to receive feedback about this workshop by filling in the form: https://bit.ly/ws2035. For further questions, please contact wescientists@scnat.ch

**NOTES** 

### **Materials**

- 1 table or 2-3 together depending on size.
- 9-10 chairs /table (1 for facilitator)
- 1 whiteboard/flip
- 2 x small post-its per table
- 2 x large post-its per table
- 1 laptop/tablet for short introduction film.

### To print:

- 1 x A1 grid The Kitchen (likes, dislikes, changes).
- 1 x A1 grid The Lab (likes, dislikes, changes)
- 2 x A2 arrows
- 2 x Kitchen A3 Scenarios
- 2 x Lab A3 Scenarios

### **Notes for facilitators**

Time: 1.5-2.5 hours. The workshop is adaptable. For a shorter time (1 hour) we recommend doing only the first part (Scenarios), to raise awareness of the issue of research culture. Alternatively, it can be split into two different sessions.

Group size: 3-9 people

Facilitator: 1 person/up to 9 people

### Facilitator preparation:

- Make sure you are familiar with this document and its materials and with some issues of research culture.
- Your role is to facilitate the discussion, not to dominate it. Look for power dynamics in the groups and try to reduce them encouraging shy people or quieter voices. If this happens, ask people to write on post-its first before the discussion helps
  reduce dominance structures.
- Set the tone:
  - · Collaborative thinking
  - · It's OK to think out of the box: there are no right or wrong answers.
  - · Active listening and mutual respect

· As scientists we are trained to be critical. Instead of being overly negative and critical, reinforce the 'Yes ... and' mentality, i.e., building on ideas rather than rejecting them.

**NOTES** 

### **Additional reading**

- We Scientists Shape Science web portal: https://naturalsciences.ch/topics/wescientists
   Including link to our booklet with first results
- Research culture: https://royalsociety.org/topics-policy/projects/research-culture/changing-expectations
- Video on research culture produced by the Royal Society, UK: https://:bit.ly/royalsoc\_video
- San Francisco Declaration on Research Assessment (DORA): 'Improving how research is assessed': sfdora.org
- Nature special issue 'how to grow a happy lab': bit.ly/nature\_happylab
- Nuffield Council on Bioethics. 'The Culture of Scientific Research', December 2014.
   www.nuffieldbioethics.org/project/research-culture.
- O'Carroll, Connor, Bernard Rentier, Cecilia Cabello Valdès, Fulvio Esposito, Eva Kaunismaa, Katrien Maas, Janet Metcalfe, Karen Vandevelde,
   Isabelle Halleux, and Caroline Lynn Kamerlin. 2017, 'Evaluation of Research Careers Fully Acknowledging Open Science Practices-Rewards, Incentives and/or Recognition for Researchers Practicing Open Science.' Publication Office of the European Union.

### **Credits**

Parts 1 and 2 of this workshop (scenarios) were developed by the Royal Society (UK) as part of their "Changing Expectations" initiative. Parts 3 and 5 and letters (Appendices 1 and 2) were developed by the SCNAT.

Photography: Hugo Vincent

### **Further info and contact:**

https://naturalsciences.ch/topics/wescientists/wescientists@scnat.ch

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Timing	Stage	Instructions	Materials required/ extra remarks	
Before workshop	Preparation	Set up tables and chairs. If using laptop, place the scenarios on a loop.  Place 2 x A1 grids on table and 2x A3 copies of	<ul> <li>loop the scenarios on a projector</li> <li>2x A1 grids The Kitchen/</li> <li>The Lab on table</li> <li>2x A3 "The Lab" and "The Kitchen"</li> </ul>	
		each scenario The Lab and The Kitchen		
5'	Part 1:	Introduction round if people don't know each other.		
	Introduction	(name, position - keep brief). Facilitator introduces her/himself.		
3-5'	Part 1:	What is research culture?	Can be omitted if lack of time but only if	
	Introduction / Ice breaker	Talk to your neighbour - feedback 1-2 ideas	group already knows each other- serves as an icebreaker	
5'	Part1:	Watch short film on research culture by Royal Society	Projection of Royal society film, audio plug in link to film - bit.ly/royalsoc_video up to 2mins29sec.	
	workshops and building a constructive spirit	Specify that some change can happen top-down (policy level), but also that bottom up (individual group, institution).		
		Introduce goals of workshop:		
		<ul> <li>Identify what research culture is like.</li> <li>Form an impression of what an ideal culture could look like.</li> <li>Generate solutions that you can implement in your research environment. The objective is for everyone to go away with one concrete idea on post-it to put next to their computer.</li> </ul>		

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Intro workshops	Introduce what the workshop looks like:  - Scenario thinking - are there to stimulate	
and building a constructive spirit	innovative thinking and to get you talking. They are not meant to be a prediction, or to be real. In science we are taught to be critical, in this workshop there are no bad ideas, do not obstruct, build on ideas. If you are about to say no, then think again.	

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20-25' Part 2a. Scenario 1: The Lab Look at the scenarios carefully.

### **Read out letter:**

The Lab Annex 1

- What do you notice?
- How does it make you feel?
- What do you like?
- What do you dislike?

Write on post-its; one idea per post it, then discuss in smaller groups (2-5 people) what is on your post-its.

- What would you change if you inhabited this scenario?
- What would you like others (e.g. policy makers/institutions) to change (focus on less as is not main goal of workshop)

You will need:

Post-its, pens, 2 x A3 lab scenarios, grid of The Lab

It works well to first get people to work alone and to observe and think by themselves and then get them to discuss in smaller groups of 3-4 people. **One idea per post-it.** Some objects are there to spark discussion and are neither good nor 'bad', depends on the context. They can stay on the border.

Note on scenarios: Make sure you are familiar with the key elements in the scenarios. Ones that generate discussion are: task list, skill badges, the livestream, social media wall, the shared holiday.

Only if the conversation needs further guidance ask probing questions: what would this mean for open science, for gender equality, for work-life balance?



15'

Part 2b. Scenario 2: The Kitchen Look at the scenarios carefully.

### Read out letter:

The Kitchen Annex 2

- What do you notice?
- How does it make you feel?
- What do you like?
- What do you dislike?

Write on post-its; one idea per post it, then discuss in smaller groups (2-5 people) what is on your post-its.

 What would you change if you inhabited this scenario?
 What would you like others (e.g. policy makers/institutions) to change (focus on less as is not main goal of workshop) You will need:

Post-its pens, 2 x A3 Kitchen scenarios, grid of The Kitchen



10' Part 3. On a whiteboard, flip-chart or large It usually works to split into two groups 3-5 people NOTES paper, get participants to group each of and one group does each scenario; if there are Grouping the post-its generated based on the overlapping topics I then ask to regroup them ideas topics and identify larger topics. (e.g. intergroup communication, publishing, funding). 20-30' Ask sub-groups (2-5 people) to pick a A1 arrow, general post-its Part 4a. preferred topic and imagine and Picturing the discuss what the ideal could be. ideal Remember it is an ideal, so it differs What are the first steps? from today. Generate suggestions. There are no bad ideas. The arrow is there to illustrate a process - where we are now and where we want to get. If it helps to start from today and make small steps, then they can try this. However, do not get too fixed on the present and try to think about the future.

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10-15'	Part 4b. Generating suggestions for immediate action tomorrow	Each participant brainstorms their personal and actionable first step that they will implement as of tomorrow.  Ask participants to write their concrete suggestions on a post it that they will keep. If things that are related to system level change, put them on a general post-it.	This is often the hardest point, but important to getting them thinking constructively that research culture is a topic for which we should all be held accountable for. Note this section can be done with the one above and does not have to be done as a separate activity.
10-15'	Part 4c. Feedback to group (if time)	Feedback to larger group - what was the ideal and what is the one thing they will take back?	If not enough time, facilitator only collects 1-2 feedbacks.
5'	Feedback to SCNAT	Please fill out the form to send back to SCNAT.  bit.ly/ws2035 (ok to fill it as a group).	
	Thanks and closing	If done in a lab social environment, it can be followed by a social activity.	

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### Annex 1 'Letter from the Lab'

Dear scientists of the past,

My name is Jason. Welcome to the Yoo Labs of the future. In this reality, we scientists work in the corporate university lab of the future. In this reality, we scientists work together in teams. In Yoo Labs the skills of people are centralised and made known to the rest of the team. Thanks to a shared task list everyone knows the lab's priorities and members can join particular projects. Individual researchers can gain points for specific actions. The code of conduct is there to remind people the shared set of rules that the lab follows. Communication between labs and people is encouraged, and there is a livestream so that others outside can keep track of what is going on. This weekend, we are all going on a winter retreat together! What do you think of the changes your generation started?

Regards from the future, Jason

### Annex 2 'Letter from the Kitchen Lab'

Dear scientist of the past,

My name is Phoebe,

'Welcome to the Kitchen Lab of the future'. In this reality, we scientists are freelancers and work from home. This means that we can live wherever we want: some of us live here, others in the middle of the countryside. Is this lonely? Well we communicate! We communicate a lot in fact! How else do you think a team of solo scientists was able to farm the moon? We communicate mostly online in our digital feeds or online meetups, and very rarely at conferences. Is it tough? Well since the funding system collapsed back in your time, we have to crowdfund everything, so that takes time. But we are free to work where we want, when we want to and with who we want. In fact, we have a lot of options as anyone with a kitchen that has crowdfunded a lab can become a kitchen scientist. What do you think of the changes your generation started?

Regards from the future, Phoebe

### **Annex 3 Visual Materials Scenarios and Grids (overleaf)**

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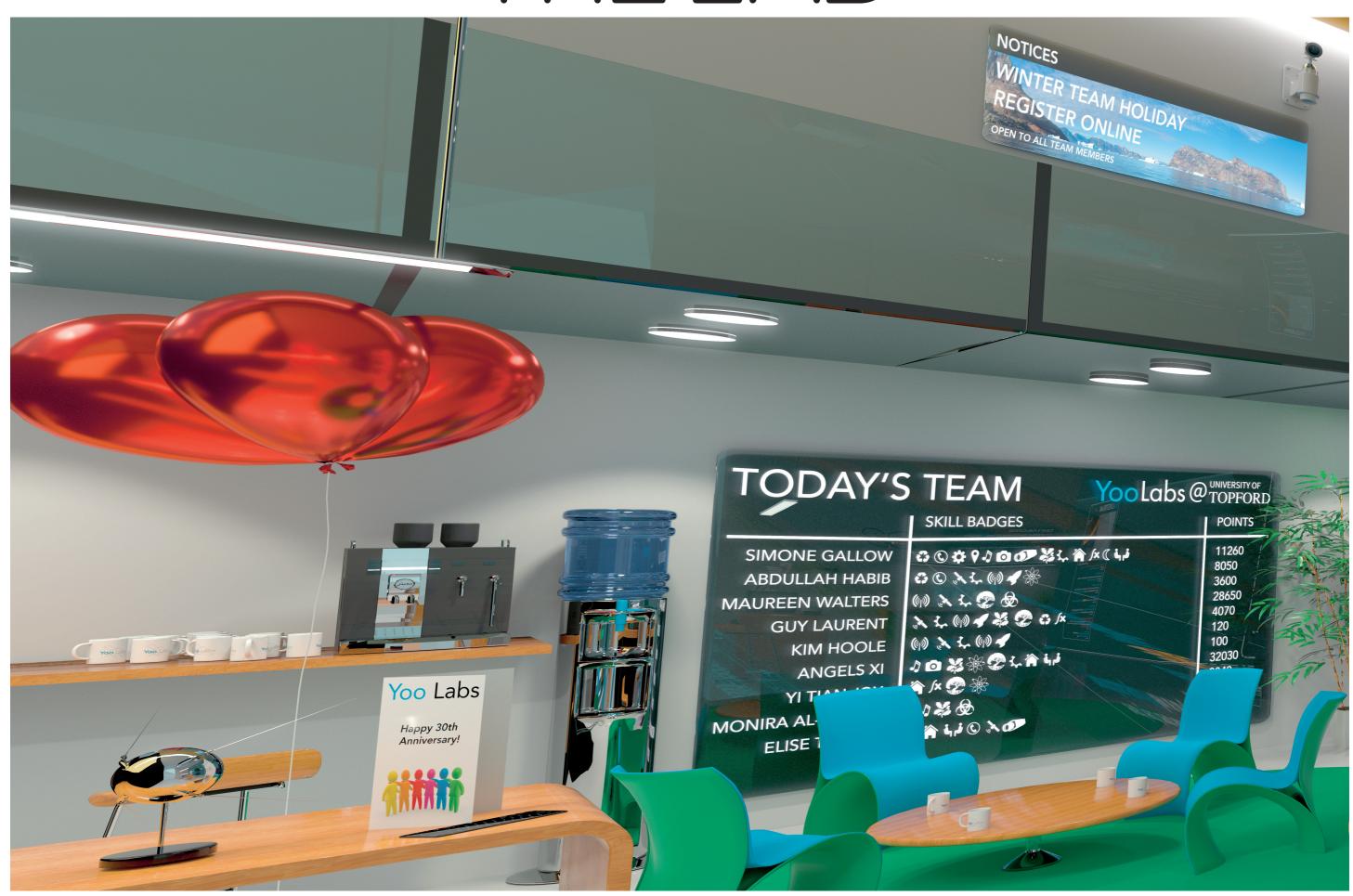
The Kitchen What do you like?	What do you dislike?
What would <b>you</b> change?	What would you like <b>others</b> to change?

- 1

The Lab What do you like?	What do you dislike?
What would <b>you</b> change?	What would you like <b>others</b> to change?

Discussion Topic:				Group/sub-group number:	
Vhat are the first teps?	What would	d you do to get there	What would the ideal be?		

### THELAB



### THELAB



### THELAB



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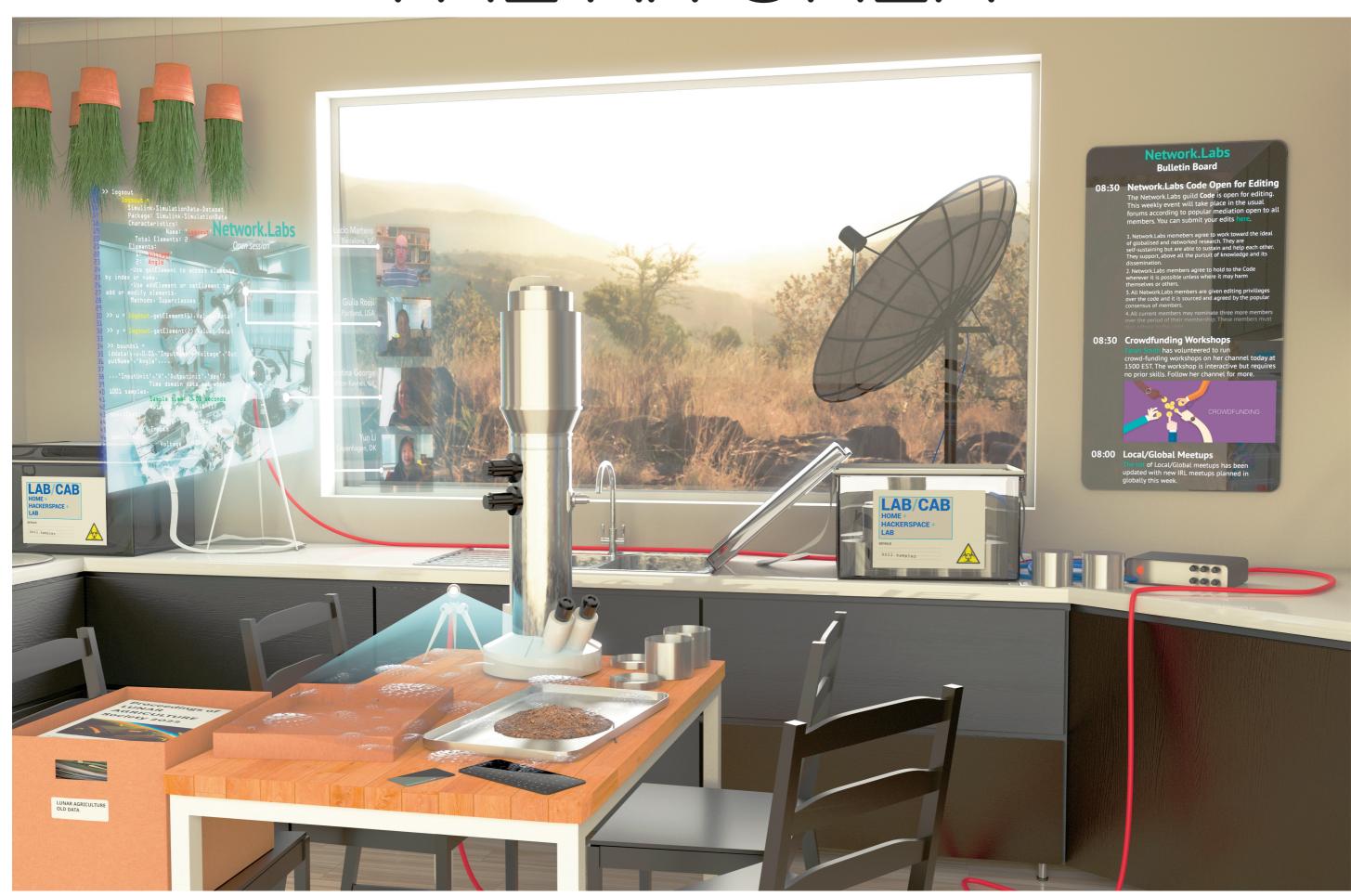


### THE KITCHEN





# THE KITCHEN





# THE KITCHEN



