A Projection to the Very Near Future

simplyblood.org/2016/10/collaborations-projection-to-very-near.html

ISEH Headquarters October 27, 2016

Collaborations: A Projection to the Very Near Future

Scientists all know how important it is to collaborate. We can see it among the groups around us and we engage in it ourselves. We go to conferences and meet interesting people that can help us evolve our projects with innovative ideas or technological advances. We often seek collaboration when the projects have already advanced and we know what we have to gain or lose. But maybe this is not enough? How can we become even better at collaboration? I think this is a really important issue that we should contemplate. First, research in life sciences has become more specialized and complicated. We have become increasingly aware that a single line of expertise is not enough. To publish a good paper, you need to provide ample data and cover a wide range of high-level techniques. We all know that it takes a great deal of effort and resources to become an expert in "everything". This problem affects smaller labs and junior group leaders, in particular, who do not have the resources to adapt every technique to the needs of their lab. Also, now, more than ever, biologists integrate physics, chemistry and mathematics to try to explain the complexity of life, thus expertise beyond the field of life sciences is also needed. Last but not least, collaboration brings innovation. The truth is that every question can have different answers depending on the point of view of the person asking the question and looking at the data. To fully tear apart a question, we need more than perspective. We should seek collaborators with brains that are wired differently from our own and can take a fresh look at scientific data; brains that are open-minded, full of curiosity and possess a love for science. In the end, given these benefits, how long should we really wait till we join forces and perform science at a bigger scale? Beneficial collaborations are not only achievable for the powerful and well connected, they are possible, at least to some extent, for all of us. That is why we have to become better at collaborating. *What is the secret of success?*

Choose participants carefully. Collaborations stem from common interests, but some people are incompatible when it comes to working in a team. People should be willing to collaborate and work as a team. It also works best if participants are diverse enough to bring their own value to the collaborative project.

Forget leaders, members should be equal. One danger of collaborations is the development of negative feelings, like frustration or impatience. Somebody contributes more and somebody else less. Somebody takes over the conversation and formulates all decisions. This team will not hold for long, unless all members give up control and wait for their turn to shine. **Share your honest opinions.** The participants should feel free to discuss their ideas and problems, but they should equally accept the fact that the team might disregard some of their ideas. So, don't be discouraged, just share your frank opinion with the team, be open to giving and accepting criticism. In some cases, many approaches can

be explored. **Foster trust.** Sometimes it is hard to collaborate because science is a very competitive field. However, a good collaboration should be built on trust. The members should not be afraid that they will lose their data or not get enough credit. It is difficult to really ensure that all members will behave ethically, but consistent meetings and equal distribution of workload should ensure that all members contribute and are equally valued. **Energize, motivate and listen.** Be open about ideas, but also encourage people to share their ideas and visions about the collaborative project. Listen to them carefully before you form an opinion. **Encourage diversity and set limits.** As mentioned before, you need to look at problems from different angles. Just collaborate with people who share different expertise and approach problems in diverse ways. However, always keep in mind that collaboration does not mean that you can easily step into each other's field. Respect the expertise of other members and value their opinion. **Establish communication and learn how to manage virtual teams**. Nowadays, collaborations
take place with people who are physically all over the globe. Set up regular meetings and use some of the virtual tools available to make communication livelier. Since it is not so easy to communicate online, try to have a routine that all participants will get used to. There are also wonderful books written about managing teams. Just read a couple! **Develop a shared vision.** Given how difficult it is to build a really good collaboration, it is important to make sure a well-established collaboration lasts. Once you bring a team together, try to have broad conversations that will go deep into the scientific question. It should not only be about technicalities, collaborators should be willing to have long term goals beyond an initial publication. **Manage conflict.** If there is a conflict among the members of the team, this should be solved as soon as possible before it poisons the relationship. Read about conflict management, it will always be a useful tool. **Give credit.** Small successes are equally important as bigger ones. Don't wait till the end to celebrate! Reward your people and acknowledge credit where credit is due. **Be accountable.** Feel responsible and try to deliver, as promised, for the benefit of the end result. These are some of the many suggestions you can find regarding fruitful collaborations. The point is that we need to be in a collaborative mind-frame. Collaboration should not be considered only when the need arises. Collaboration must be a strategic decision of every lab that will ensure long-term success and competitiveness in a diverse and constantly changing field.

Eirini Trompouki
ISEH Publications Committee Member

Max Planck Institute of Immunobiology and Epigenetics
Stübeweg 51, 79108
Freiburg, Germany http://www.ie-freiburg.mpg.de/trompouki