Young Investigator Network:

Helping young researchers develop external partnerships through intensive industry coaching in small groups

Copenhagen, Denmark

General Information

Title	Young Investigator Network
Pitch	Helping young researchers develop external partnerships through intensive industry coaching in small groups
Organisation	University of Copenhagen
Country	Denmark
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Nature of interaction

- ☑ Collaboration in R&D
- ☐ Commercialisation of R&D results
- ☐ Mobility of staff
- ☐ Academic entrepreneurship
- ☐ Governance
- ☐ Lifelong learning
- ☐ Joint curriculum design and delivery
- ☐ Mobility of students
- ☐ Student entrepreneurship
- ☐ Shared resources

Supporting mechanism

- ☐ Strategic
- ☐ Structural
- ☑ Operational
- ☐ Policy

Summary

The Young Investigator Network was set up at the Faculty of Science, the University of Copenhagen, in 2011 to help bridge the gap between the university and industry. Young researchers from different parts of the Faculty are selected to take part in a series four intensive sessions during which each participant will prepare a case of external collaboration and present it to coaches from leading Danish companies for feedback and advice.

The researchers are asked to step outside of their academic comfort zone and work on their approach to engaging external partners. With only 10-12 researchers included in each cohort, the programme allows the participants to engage in in-depth, confidential discussions with industry coaches and fellow young researchers about their ideas and challenges. The programme has helped improve the participants' confidence and understanding of their own situation as well as that of external partners. An alumni association of past participants has been set up to facilitate continued discussion between young researchers across the faculty and contribute to cultural change with respect to external collaboration.

Introduction & Overview

1. BACKGROUND

The Young Investigator Network was initiated in 2011 in the University of Copenhagen as part of the Faculty of Science's strategy to strengthen collaboration with public and private partners. Rather than leaving this task to the university management alone, the network was one among several efforts to mobilise researchers, and particularly young researchers.

2. OBJECTIVES AND MOTIVATIONS

The initiative aims to bridge the gap between the university and industry through a series of coaching sessions. The objective is to enhance the participants' ability to create strong and valuable relations to external partners by increasing, among other things, their knowledge of:

▸ their own personal strengths and weaknesses, thus refining their own professional profile, and

▸ the conditions of the external party (public or private), including understanding value creation.

Industry partners have been involved in setting up and running the programme from the outset, partly motivated by a desire to contribute to the general good of society but also because they see an interest in helping in the creation a culture at the university that is more open to external engagement.

3. STAKEHOLDERS

The Young Investigator Network involves the following groups of stakeholders:

▸ **Young researchers:** Between 10-12 young researchers are chosen for each round on the basis of applications. The chosen participants are asked to present a short case about business collaboration or about how to establish relations with business. They will engage with the industry coaches during 'hot seat' sessions and with each other about how to develop good external relationships.

▸ **Industry Coaches:** Each round of the programme involves two coaches from industry who play a crucial role in engaging with the young researchers to provide feedback on their cases. Large Danish companies in different sectors have taken part, such as Novo Nordisk (pharmaceuticals), Arla (food) and Novozymes (enzymes). These are companies with which the Faculty already has a close relationship and they are usually engage at a high level. In the past, industry coaches have been at the level of CEOs, Research Directors and Sector Heads.

▸ **Faculty of Science's office for Private and Public Sector Services:** It is responsible for organising the programme, recruiting candidates from the various research communities at the Faculty and planning the introductory sessions.

Implementation

4. INPUTS

The initiative is primarily based on internal resources, including the time of the participants to prepare and attend the sessions and the time of the faculty's Private and Public Sector Services staff to organise the programme. Cash expenses are relatively modest, primarily the cost of wine gifts for the industry coaches. The Faculty does not use external consultants or buy in other services for these activities.

5. ACTIVITIES

The programme consists of a total of four sessions, including two 'internal sessions' and two 'coaching sessions', spread over the course of a semester and each lasting a half or a whole day.[i]

Two **preliminary internal group sessions** take place without the industry coaches and are primarily intended to introduce the participants to the case process and finding 'sparring partners' among their peers with whom they will discuss between sessions. The 10-12 participants are tasked with preparing their case as a one-page PowerPoint presentation and to train for their 'elevator pitch'. The one-page presentation describes the participant's major challenge in relation to external collaboration, answering the following questions:

- ▶ What does the challenge involve? What are the obstacles?
- ▶ What is difficult?

The second internal group session focuses on pitch/presentation of the one-page presentation and the participants present their case as an 'elevator pitch' (maximum of two minutes).

During the subsequent **coaching sessions**, participants present their cases to the coaches and also receive feedback from their peers. The sessions are structured in the following way:

- ▶ The first coaching session lasts a full day during which each participant will take part in a 30-minute 'hot-seat exercise' in front of the coaches and the other researchers. They give a short pitch (2 minutes) describing their case using the one-page presentation prepared during the previous sessions. The pitch addresses the challenges they have met and the achievements they have made in establishing relations with the business community. They also prepare a summary of the exercises focussing on learning outcome before opening up the floor for discussion

- ▶ At the second coaching session, planned to take place two months after the first one, the participants take stock of what has happened since the first coaching session, possibly with an updated version of their one-page presentation. This is a half-day session with 15 minutes allocated to each participant as well as time for networking and topical discussion.

The small number of participants - 10-12 researchers in each cohort – allows for intensive interaction between the two coaches and researchers and provides an environment where the researchers can discuss their ideas freely and in confidence.

6. OUTPUTS

Six cohorts and a total of about 65 young researchers have completed the programme so far. The frequency has varied slightly depending on the number of applications and available resources.

The outputs from the sessions are primarily related to the personal development of the young researchers participating. Based on feedback from participants, it is estimated that more than half have acquired more confidence with respect to understanding the mechanisms at work between universities and external partners. Testimonies suggest participants have learned more about their own strengths and weaknesses as researchers and industry collaborators and consequently have become more aware of whether they wish to engage further in activities at the interface between academia and industry. Those who want to continue with industry engagement learn about pitfalls to avoid and best practice to follow in dealing professionally with industry partners. They get help to sketch possible pathways for future engagement and find solutions to concrete problems they face. The quote below exemplifies the kind of outcomes achieved:

> *"From participating in this I gained an awareness of where I am in my research trajectory and where I am in relation to the partners I have on board in my project." (Participant)[ii]*

In addition to the feedback from coaches, participants also highlight the interaction with peers as an important benefit. The newly formed alumni association will further build on this to enhance long-term learning and development.

Industry coaches are primarily there to help young researchers develop but there are also examples where the companies involved have benefited from the interaction more directly. Companies may learn something from the interaction they can use, and there are concrete examples where companies and researchers have established collaboration as a consequence of discussions about specific knowledge during the session. However, such outcomes are not the main priority of the programme.

7. IMPACTS

Longer-term cultural change can be difficult to discern at this stage but there is evidence that the scheme has had an impact beyond the individual researchers involved. The Faculty recently established an alumni association to provide an opportunity for the participants to continue discussions on university-business engagement. 45 of the 65 past participants have expressed interest in being part of the alumni association. With the involvement of a critical mass of young researchers spread across different communities, this will contribute to a cultural change at the Faculty.

The Faculty does not see the need to get all researchers involved in collaboration with external partners. Many researchers excel at other tasks and should arguably concentrate on that. Rather, it is hoped that the 5-10% of researchers who do have an interest in working with external partners will be well equipped to engage effectively.

☑ Support & Influencing factors

8. SUPPORTING MECHANISMS

The Young Investigator Network is part of a large portfolio of initiatives described in the Faculty's "Sub-strategy and action plan for collaboration with private and public sector 2012-2017". The network is described as part of the Faculty's effort to build strategic partnerships and create cultural change (p. 11).

Other relevant initiatives that serve to raise the profile of university-business collaboration at the Faculty include 'business ambassador corps', regularly published 'Science Business News' and two prizes for business collaboration. Although not directly dependent on each other in their implementation, these initiatives all contribute to creating a positive discourse that facilitates UBC.

9. BARRIERS AND DRIVERS

The barriers to university-business collaboration at the Faculty are largely cultural and the kind of issues that the Young Investigator Networks seeks to address.

▶ **Tradition**: The University of Copenhagen has 550 years of history and has, in some ways, had a conservative approach to external collaboration. The idea of taking part in consortia working across different research disciplines and with different types of companies is a relatively new practice for the University of Copenhagen. This means that there is still a strong orientation towards basic research grants.

▶ **Norms**: Some researchers do not regard collaborative research as highly as pure academic research.

▶ **Incentives**: Companies and academics typically have different incentives. Where companies seek to innovate, researchers typically seek to publish work in top journals to advance their careers. There is a need to identify overlapping interests that encourage collaborative projects which deliver economic results for the company and publications for the researchers.

▶ **Awareness**: Researchers may also have misconceptions about what companies expect and lack awareness of opportunities for engagement.

There are, however, important drivers for researchers to engage in collaboration. Researchers tend to like a challenge and on occasions when companies have presented a clear research challenge, many researchers have shown interest and actively helped find solutions. Examples with Novo Nordisk and Grundfoss show that posing challenges in this way can lead to fruitful collaboration.

More generally, funding bodies such as Innovation Fund Denmark, focus increasingly collaborative research and cross-disciplinary societal challenges. This development creates an increasingly powerful incentive for researchers to 'follow the money' and engage in collaboration.

10. FUTURE CHALLENGES

The main challenges for the initiative are related to the challenges faced by the participants. The young researchers are required to go outside of their comfort zone and the continued development of the Young Investigator Network depends on their willingness to do so. Similarly, the contributions from industry coaches are central to the scheme.

11. KEY SUCCESS FACTORS

The achievements of the Young Investigator Network rely on several factors. The decision to keep the size of the cohorts small has allowed for a level of depth in the engagement and trust between the participants and the industry coaches that wouldn't have been possible in larger groups. Another important factor has been the ongoing strategic partnerships between the Faculty and companies in which the initiative is embedded. Finally, networking between the young researchers, now formalised in the alumni association, has been an additionally important factor that has amplified the benefits from the sessions themselves.

Further Information

12. MONITORING AND EVALUATION

Cultural change can be difficult to measure in the short run but the Faculty has collected information about the results of the initiative in several ways, for example, the industry coaches are asked about their motivations for participating. Also, the creation of the alumni association provided an opportunity to ask the researchers who participated to report on what they have achieved.

13. SUSTAINABILITY MEASURES

The alumni association established by the Faculty for past programme participants can help sustain the momentum created by the programme and possibly enhance the further dissemination of ideas and cultural change throughout the Faculty.

14. TRANSFERABILITY

The concept behind the Young Investigator Network is transferable to many other institutions, whether in the natural sciences or other fields of research. The resources required are relatively modest but it does rely on existing relationships with industry and willingness of companies to engage at a high level without an immediate, tangible return. The activity is probably most effective as part of a wider portfolio of initiatives to strengthen external engagement.

15. LINKS

Young Investigator Network: http://www.science.ku.dk/english/external-relations/young-investigator/

Faculty of Science: Sub-strategy and action plan for collaboration with private and public sector 2012-2017: http://www.e-pages.dk/ku/625/

16. CONTACT PERSON

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17. REFERENCES

[i] The exact scheduling and duration of the sessions can differ from one iteration of the programme to the next but the underlying concept remains the same. The description here is based on the plans for the sessions scheduled for the Autumn of 2017.

[ii] Participant testimony available on the Faculty's website: http://www.science.ku.dk/english/external-relations/young-investigator/