# The SEED (Science Speed Dating) Project

An innovative method to foster interdisciplinary research projects

Apollonia Goll, Mascha Rauschenbach & Federico Vegetti, University of Mannheim

# I The Current Situation – physical and substantial distance between PhD students of different fields



The status quo: Relative isolation between three disciplines

- People are more prone to interact with those who are more similar to them (*similarity-attraction effect*, Gutkinet al. 1976).
- ♦ This happens at the Graduate School of the University of Mannheim.
- Three disciplines, three centers: Economics (CDSE), Business (CDSB), Social Science (CDSS).
- Little cross-center contact between PhD students.



*Our goal*: Reduce the isolation and increase the chance of interdisciplinary work

- Outstanding research is often inspired by developments and methods in neighboring areas of scholarship.
- Interdisciplinarity is an important condition for innovative research (Ruef, 2002).
- There is need to create a learning environment that fosters interdisciplinary and innovative research collaboration.

#### II Science Speed Dating – adapting a romantic partner matching method to academia

Science speed dating is a social event where pairs of scholars have a fixed amount of time to talk to each other about their research. After each date, participants are asked to write down whether they would do some research work together with the person they just met. To keep a sense of a nonymity, participants are identified only with a code. The matching couples are encouraged to collaborate.

Before our implementation, this format has been adopted at universities for other purposes (see Muurlink et al. 2011 for a review).

#### The goals

- Maximize information about the research topics of fellow graduate students.
- Enhance social connections and therefore well-being and identification with the graduate school.
- Train skills to promote/explain one's research interests within seconds (elevator pitch) to scholars from other disciplines.
- Stimulate and support the production of interdisciplinary research projects.

#### The procedure



4 4 1 Business (16) 4 1 10 7 1 Economics (5)

Number of matches within and between the three centers of the Graduate School. Numbers within a circle are matches within one field, numbers in the overlapping areas are interdisciplinary matches. Tota I number of participants from each center in parentheses. The event produced 27 matching couples, 12 between-center and 15 within-center. After three months we were sent 5 co-authored research proposals. After anonymous peer-review, 2 of them were evaluated as the most promising and innovative, and are now eligible for funding.

Very importantly, 43% of the participants were female, whereas other Graduate School researchrelated events (e.g. the Research Day) were attended mostly by males. This could mean that the Speed Dating format motivates a more diverse group of people to discuss about research.

The unusual set-up helped the participants open up to ideas from different fields. A survey we conducted shortly after the event indicates that they liked the location and the atmosphere and that they got into a creative mood.

## IV Conclusion – "Spread more SEEDs!"

Our first trial of a Science Speed Dating Event at a Graduate School was a success. We conclude that Science Speed Dating is a very good innovative and easy to implement method to foster the social bonds and interdisciplinary thinking and research projects at graduate schools.

#### References

Gukin, T.B., Girdley, G.C., Gregory, C., and Wendt, J. M. (1976). 'Effect of Initial Attraction and Attlude Similatly – Dissimilatly on Interpresonal-Attraction.'' Cornell Journal of Social Relations, 11(2), 153-160. Santee, R.T. (1976). 'Effect on Attraction of Attitude Similatly as Information About Interpresonal Reinforcement Contingencies.'' Sociametry, 39(2), 153-156. Ruef, Matrin (2020). Strong ties, weak ties and islands: structural and cultural predictors of organizational innovation. In: Industrial and Corporate Change, 11(3), 424-449. Rusterholz, Peter (1998). Universität am Scheideweg. Herausforderung en Probleme - Stategien. Zirich: volf Hochschulvel. AG an der ETH Zirich (Publikation der Akademischen Kommission der Universität Bem).

## The Concept of Science Speed Dating

Science speed dating is a social gathering in which pairs of researchers get a fixed amount of time during which they exchange with each other over their research. This event produces matches of researchers who then engage in research collaboration. The concept has been borrowed from romantic speed dating which is an organized form of matchmaking with the aim to meet a partner.

### Science Speed Dating at the University of Mannheim

We organized a science speed dating event, with the aim to foster interdisciplinary research among research from the three graduate centers of the social sciences, economics and business studies. Science speed dating was an adequate tool to enable innovative interdisciplinary research collaboration by assuring first, that researchers get to students learnt what their fellow students were working on and by putting them in a creative mode necessary for generating innovative and unusual research ideas. The project unfolded as follows:

We asked all PhD students at the GESS to take part in a survey to see how many were interested in attending a science speed dating event. With the positive response from the students we applied for funding for the event and booked a room in an art museum. About two weeks prior to the event, we contacted the students again, so that they could register online and asked them to supply us information about their research areas. Based on this information we created to randomized groups, stratified by research center they belong to, in order to create two balanced groups.

At the event one of the groups sat at two-person tables and the other group moved around from table to table in a given order. The dates lasted 6 minutes. After each date the participants had two minutes of a break to note down on a match sheet whether they would like to coauthor a paper with their date or not. The event lasted three hours with a half hour break after the first half and it consisted of fifteen dates per person. After the event we analyzed the match sheets and told each participant individually per email about his or her matches. The resulting pairs of students were then allowed two weeks to meet each other and hand in a 2-page research proposal. These proposals were blind reviewed by researchers from the corresponding disciplines and the board of the graduate school decided on the most promising joint research proposals. Two of the proposals won funding for the realization of the joint research collaboration.

## Adapting Science Speed dating to your context: Best Practices

### Environment:

Host the event in a different location from usual work environment of the participants. This will help them focusing on their research in a more abstract way, moving their attention from the means (i.e. the tools and the routines employed for doing research) to the goals (i.e. what is the scope of their research, what they want to show and why this is relevant). Remember: the goal of a speed dating is not to develop a full-working research project, but to arouse their curiosity towards what other people are doing, and to motivate them to ask themselves what are the common points with their own interests. As with romantic relationships, many dates lead to nowhere. However, some of them have the potential to establish fruitful connections. They are waiting to be found.

## Dates:

Allow for 6-8 minutes-long dates. That would avoid the participants to enter too much into technical details, and will not exhaust their curiosity. Allow for short breaks. Some research-free socialization can help participants to relax. Maximum of 15 dates per event and participant. Participants can get really exhausted at this event.

### Date Selection Procedure:

The idea of speed dating requires two groups. In the "original" speed dating, the choice about which group a participant should joint is rather straightforward: a man will join the male group, a woman will join the female group. However, graduate schools can involve several departments. In our case, there are three different centers: Economics, Business, Social Sciences. Our aim to keep the event as simple as possible led us to avoid exploring three-group configurations. In our understanding, the event should not be too long, and it should not be too complicated for the participants to understand what is going on. Thus, the question: how to decide who goes in one group and who goes in another? This can be the hardest part of the science speed dating event. Currently, we are studying an algorithm which, based on some information asked to the participants during the registration, will allow us to create two clusters which are *close enough* (e.g. an economist and a psychologist working both on employee recruitment) and *far enough* (some difference between the disciplines of two daters) from each other to stimulate fruitful interdisciplinary ideas.

### Management of dates:

Create two or more groups and provide them with a visual marker that indicates what group they belong to (e.g. a sticker in a particular color to put on their shirt). Given the probability that two fellows from the same Graduate School know each other, participants should be identified in the most impersonal way. A way to keep prior personal considerations a little bit further away from the speed dating is to provide each participant with a number, and ask them to report their response about the others on the match sheet identifying them through their number.

Members of one group should be seating, while the members of the other group should move from one table to another following an easily-recognizable path.

### Review of research ideas:

Motivate the participants to continue the exchange after the event. The possibility to get their research project funded (i.e. money to buy data, to run an experiment or to present the paper at a conference) should provide them a positive incentive for the work.

Organize a blind peer-review process for the research proposals which are eventually handled by the matching couples. Let the "invisible hand" of human curiosity and ambition do the rest of the job.