

BBS Position Paper on Student Internship

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1 Preamble

BBS is acknowledging the importance for private companies and public institutions to participate in the education cycles of future biostatisticians, biometricians and data scientists. Tomorrow good professionals should be trained today.

Welcoming student interns is one way the companies and institutions can express their support. BBS is engaging its members in offering student internship at different student levels.

For companies, training students is expressing a corporate social responsibility and citizenship engagement. It has multiple benefits which outweigh the effort.

BBS is recognizing the value of diversity in trainings and levels. BBS is encouraging its members considering internships for master and bachelor students as well as for PhD students.

BBS is issuing this manifesto for engaging its members in training more interns, and for sharing some consideration for facilitating internship possibilities.

This BBS position paper is focused on student internships in biostatistics, statistical programming, biometrics and data science. It may apply to other professions which are not in the scope of BBS.

2 Mutual benefits

2.1 Benefit for the company

Student internship is an opportunity for companies for additional resources and for preparing future collaborators. Methodological research (including synthesis of a method or a group of methods) which could help advancing knowledge acquisition is a typical example where companies might not always have prioritized resources to perform in deep work, and where having a student intern might bring a lot of values. Other examples are developing sets of procedures or programs for application of a new method, or re-visiting some data sets with new angle, etc.

Welcoming students in such projects is an opportunity to have fresh and naïve eyes on a project. By their questions, they will help to think outside the box and move away the tendency to do things because we always did it that way. A certainly more solid explanation than the habit is expected by students, and this can help the company itself solidifying its arguments. Students can help companies to start implementing changes in the regular practice. Generally, outside people, and particularly students, have less barriers and can bring new solutions that people in their daily work may not see anymore.

Furthermore, students can introduce in the company new methods or new tools they learned or heard in the university and which are not yet in the company. The students' agility associated to the professional expertise in the company will help it having an efficient adoption of new technologies.

Another expected benefit for the company is early identification of young talents the company would like to acquire in the future. In that aspect, proposing student internships is a good pre-hiring tactic. In fact, we often see that interns are hired later.

In addition, student internships can strengthen the collaboration between the company and the universities. For example, we often see that an internship topic leads to a master thesis at university and can by that stimulate the collaboration between industry and academia.

Finally, supervising student interns can also be motivating for the mentors, providing them with additional opportunities to grow. Generally, people like working with interns and this source of motivation can help having a highly engaged staff in the interest of the company.

2.2 Benefit for the student

Student internships facilitate the transition from the student status to professional workforce by applying theoretical knowledge into real practice.

The first benefit for students is discovering the daily biostatistics job in the company working environment, before a definitive career choice. One direct outcome of an internship is to confirm the student's future engagement in the biostatistics profession in clinical research.

On top of the practical application, students will certainly discover that there is a lot to learn above the course they received; not only technical skills are needed but soft skills are also important. Companies are offering this complementary learning, and students will discover that professionals engage themselves in a continuous learning all long their life.

Internships are offering opportunities for students to test, develop and assess themselves their employability before entering in the job market. They will start networking in their future profession and benefit from the coaching or friendly advices from experienced colleagues.

2.3 Benefit for the university

Student internships are additional and complementary assets to theoretical trainings. They are providing opportunities to professors as their students to confront the academic knowledge to the real problems which may impact how methods are used.

As already discussed above internships can also stimulate the collaboration between the company and the university, not only by adding interesting theses but also by leading to interesting collaboration topics. Depending on the research questions addressed, it allows for unique opportunities for co-creation between industry and academia. The more valuable the opportunity, the more relationships between university, industry and student must be well specified.

3 Tripartite agreement and working contract

Objectives and terms of the internship shall be clear to avoid potential misuse of the internship.

3.1 Tripartite agreement

BBS is considering that student internship can be a step within the student cursus which is part of the student initial education. For making it real, BBS is advising the university to be included in the student internship agreement. As an option, a tripartite agreement can be advised for fixing the roles and responsibilities of the company, the student and the university, in terms of educational objectives.

Being part of the education, the internship may receive a form of assessment or validation from the university.

During the internship, students may continue to benefit from their student status. It is advised they receive mentoring from both the company and the university.

The tripartite agreement can define the internship period with respect of the cursus. It can also include if the student will have to go back to university for some courses or exams during the internship period.

BBS is encouraging reducing the bureaucracy and having the agreement at the right level according to the internship context: light agreement when possible, more detailed agreement when, for example, a research project should be kept confidential.

Recognizing that a tripartite agreement is not the standard today, it should not be redundant with a working contract when existing, and it may be considered either a good alternative or a good addition to the usual working contract. Notably, it could be useful to the student for creating evidences that the contractual relationship with the company is included in his/her academic cursus.

3.2 Role of the company and working contract

No official status exists for student interns in Switzerland at federal level. Therefore, BBS is advising that a regular working contract is signed between the company and students, considering that the concept of internship is implicitly associated with a temporary position.

Of note, confidentiality is often one aspect covered by the working contract. Thus, it may not be necessary to cover it again in the tripartite agreement if no additional confidentiality aspects involving the university are needed.

The student internship should have a clear educational objective for the student. Thus, the student internship is not for sourcing a regular job, and it is not a way for hiring a temporary worker. However, BBS is recognizing that regular activities have their place during the internship as part of the training and the student should complete them with professionalism while the company should take into account that the student is not yet a certificated professional. At least, this is an important part of experience an internship can offer to students.

Remuneration of the student should reflect the work done by the student as well as the educational benefit is receiving from the internship and the company engagement in it.

The primary purpose of a student internship is not to resource any regular job. BBS advises not including student interns in full time equivalent (FTE) workers account.

It is also not expected that temporary worker agencies are used for hiring student interns on behalf of companies.

BBS will support that a certificate is delivered to the student at the end of the internship.

3.3 Special note concerning non-Swiss students

BBS is engaging universities in clarifying with local authorities which internships are required or advised in their cursus. Indeed, at the time a student is accepted for studying in Switzerland, her/his residence permit should reflect all the aspects of her/his studies, including internships which are part of them.

Importantly, considering internship is not a regular job and it is part of the cursus; BBS is supporting that the internship time is not counted by authorities in the foreign student working allowance associated to her/his permit. In a way, the student should receive the authorization for internship in the same time is receiving her/his Swiss residence permit for her/his studying.

In addition to the tripartite agreement, a general document, issued by the university, explaining the importance of the internship in the cursus could help the student in the defense of her/his position to local population offices, and particularly when the company is not seating in the same canton than the university.

3.4 Patents, intellectual properties and publications

Internship is a fantastic opportunity of value co-creation between industry and academia, in which the student is a major actor. A tripartite agreement may closely define the rules for handling rights on possible values created.

Publication is generally one expected outcome from an internship. However, making public the internship work may not always be allowed as the student may work on data that should stay confidential or which can't be published before a date. Rules for allowance/restriction of publications have their place in the tripartite agreement.

Some internships may provide the support of a thesis. However, making the research public may come as a limitation to the internship for the industry. Thus, it is important that such possibility and limitations are discussed and fixed upfront between the 3 parties. A panel of solutions may exist, including confidentiality agreement for the thesis jurors, combined open and private sessions in the thesis defense, etc...

APPENDIX. Advised sections in the tripartite agreement.

- Objective of the internship
- Date and location of the internship
- Commitments, role and responsibilities from each party.
- Who is the supervisor in the company? Role and function.
- Is there a supervising assistance from the university?
- Internship final assessment, from each party.
- Publication of the internship outcome, thesis, articles, presentation
 - Limitations to publication. Could it be made public? By who and at which conditions?
- Engagement from the Company for providing proper tools and material.
- Engagement from the University for providing knowledge support and access to documentation.