

WRAP-UP: TECHNOLOGY TRANSFER COORDINATION IN NGFN-2

KICK-OFF WAS IN EARLY 2005

In the beginning of 2005, Ascenion GmbH and Max Planck Innovation GmbH were awarded a contract by the Federal Ministry of Education and Research (BMBF) to support technology transfer in the National Genome Research Network (NGFN). The goal was to coordinate all players in NGFN-2 as well as all associated technology transfer offices in order to translate NGFN findings into new product development more quickly and efficiently. “Quite a challenge”, Isabel von Korff comments, “as the NGFN-2 involves 54 grant holders from all over Germany, about 500 scientists of various disciplines and around 20 technology transfer offices.” In early 2005, she was appointed manager of the Technology Transfer Coordination Office (German acronym: KTT) within NGFN-2 that was newly established as part of Ascenion’s and Max Planck Innovation’s approach. One of the very first tasks of KTT was a kick-off event in April 2005 to touch base with major NGFN-2 representatives and introduce them into the new concept.



Dr Isabel von Korff (right), Project Manager of KTT and Claudia Keller (left), Assistant of KTT

WHAT WAS NEW?

A new set of rules was established and agreed upon in individual contracts between KTT and each grant holder within the NGFN-2. Major innovations were:

- All NGFN grant holders had to commit themselves to a technology transfer agency at the start of their projects.
- The agency of choice could request additional support from Ascenion or Max Planck Innovation should particular life-science expertise or experience be required during the commercialization process.
- A new patent fund totaling 350 000 € was available to grant holders to support priority-claiming patent applications.

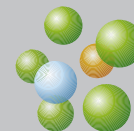
- KTT would centrally screen all NGFN-related publications for IP-relevant contents.
- KTT would make all commercially relevant findings accessible and searchable on an internet platform.
- KTT would monitor progress of all technology transfer projects in the NGFN and report combined results to the BMBF.

WHAT HAS BEEN ACHIEVED?

In the two and a half years since its inception, KTT has screened over 1850 publications or abstracts and helped coordinate the different players within NGFN-2 in many ways. For instance, it has helped draft, negotiate and close over a dozen consortium agreements between NGFN-2 participants, supported the work of the NGFN Project Committee and provided opportunities for those involved with technology transfer to learn and share their views and experiences.

Total patent applications resulting from NGFN-2 research amount to 22 so far, 16 thereof were partly financed by the patent fund. In terms of marketing, KTT has been very proactive in increasing the visibility of these inventions to industry. The “Genome Marketplace”, a new Internet platform for the commercialization of findings from the NGFN-2 was quickly launched, and 28 technology offers have been posted so far. These cover different fields in the life sciences such as bioinformatics, diagnostics, devices or therapeutics and also include animal models and other commercially viable research tools that can well be marketed without patent protection. In parallel, all technology offers were made accessible through major data bases such as Pharmatransfer, Tech-Ex and Life Science Link. Moreover, KTT has engaged in direct dialogue with the private sector. Isabel von Korff joined dedicated partnering conferences such as BIO or BIO Europe and presented selected technology offers in the context of international technology transfer meetings such as this year’s ATUM meeting in San Francisco. On a national level, an alliance was closed with BIO Deutschland, Germany’s biotechnology industry association. Its members, who are ideally positioned to acquire and progress technologies and product ideas from public research, now receive accelerated access to NGFN-2 findings and can confidentially post tailored “wish lists” of in-licensing needs with KTT.

Thanks to these efforts and with the help of the various technology transfer agencies, many projects have already been advanced to the stage of commercialization. Two examples:



Marketing NGFN-2 inventions

POTENTIAL NEW TREATMENTS FOR ADVANCED NEUROBLASTOMA

NGFN-2 researchers from the German Cancer Research Center (DKFZ) and Heidelberg University discovered a fungal toxin as potential treatment of neuroblastoma, a cancer of the nervous system which is particularly common in children. The data from *in-vitro* studies which suggest that the compound is superior to established treatments were identified as highly IP relevant by KTT during its regular publication screen. Following an in-depth market analysis by Ascenion, a patent lawyer was assigned and just two months after invention disclosure a first medical use claim was filed for the fungal toxin on behalf of the inventors. Marketing activities were initiated in 2006 and Ascenion rapidly attracted two potential partners, a Swiss and a German biotech company. Both signed confidentiality agreements in the second half of 2006 to further evaluate the data and a potential fit of the project with their own development programs. Negotiations are still ongoing and should be further accelerated by new data from animal models which are expected by the end of this year.

NEW DIAGNOSTICS FOR PARKINSON'S DISEASE

Another exciting project relates to a novel gene called LRRK2 that is associated with a particular heritable form of Parkinson-related syndromes. It was discovered by an international team of inventors including NGFN-2 grant holders from GSF – National Research Center for Environment and Health and Tübingen University Hospital. Following a joint patent application, marketing activities were started by Ascenion on behalf of its partners to exploit LRRK2's strong commercial potential – for therapeutic as well as diagnostic applications. A royalty-bearing license agreement is to be signed shortly with a US-based diagnostics company that has already developed a PCR test for LRRK2. The test will help physicians to decide on an appropriate therapeutic strategy for patients.

OVERALL: ABOVE AVERAGE RESULTS

Although no commercialization contract has been reported to KTT so far, it should be considered a success that a range of NGFN-2 projects have met with considerable interest from industry and are now being negotiated with potential partners – in particular, when taking into account that KTT just started two and a half years ago. In terms of patent applications, KTT can report impressive results: in 2005, for instance, 13 priority filings resulted from the work of about 500 scientists in NGFN-2, i.e. 26 per 1000 researchers, compared to an average of 9 filings per 1000 researchers in European public research institutions as was reported by the Association of European Science & Technology Transfer Professionals (ASTP).

The KTT project will end with the second phase of the NGFN project, presumably in December this year. A third phase of NGFN will follow, but so far it is unclear how the coordination of the technology transfer will exactly look like. The experience of KTT, however, will be extremely valuable. “We have learned a lot,” Isabel von Korff says, “and this will certainly help to create an adapted approach for successful technology transfer in NGFNplus and NGFNtransfer once its structure has been defined.”