

## Club biotech: a story of success

*Andreas Pichlmair and Andreas Bergthaler*

It was four years ago that we - Andreas Pichlmair and Andreas Bergthaler - met and decided to start a club that would convey scientific information to students in an attractive and digestible manner. Although we were undergraduate veterinary students at the time, we had already gained some experience of research by working in molecular biology labs while still studying. We had come to believe that there was a need to improve the reputation of science amongst our fellow students as well the broader public and we wished to play a part in bringing this about. The following account describes how our determination and enthusiasm resulted in the establishment of Club Biotech, a platform for students (and anyone else) interested in science and research.

### How it began

We met while studying at the University of Veterinary Medicine in Vienna and our mutual interest in science and research meant we were rather atypical veterinary students at that time. As previously mentioned, we were already working in research groups and enjoyed spending our spare time in the lab. It was this experience that made us think that research in our vicinity was fragmented, and thus inefficient at times, but above all it was difficult for students to break into due to misunderstandings and the poor exchange of information. We asked ourselves whether we could do anything to improve this situation and, having decided we could, the idea of a student initiative called Club Biotech was born.

The original concept of Club Biotech was to provide students, and any other interested parties, with easy access to science-related information. Before going public we spent six months talking with scientists and companies about how we should set about starting such a project, and asked whether they might be able to support us. Now, more than three years since its foundation [\[1, 2, 3\]](#), we are delighted to say that Club Biotech has evolved into something far greater than we had ever imagined. It successfully fulfils multiple functions, such as collecting and broadcasting essential information about life sciences in the Vienna region, as well as initiating its own activities that have a positive impact on the scientific community [\[4, 5, 6\]](#). In these ways, Club Biotech actively bridges the gap between students and professional scientists and, most notably, encourages young people to take a closer look at the world of science.

### How did we manage this?

It should be stressed that starting Club Biotech was not an easy undertaking. First, we had to convince ourselves of the whole idea: Could we - two 'insignificant' veterinary students - bridge the scientific gap between university staff and students, and between academic institutions and commercial companies? The answer was a self-confident 'yes' and so we started to plan the next stages of the platform's development. However, no matter how detailed these plans were it was often a long and tortuous road of trial and error because none of us had ever done anything like this before. But on the way we had thrilling and often encouraging experiences, like presenting our ideas to government and academy officials and to representatives from several universities as well as to CEOs/CFOs of biotech companies. Inevitably, there were also less enjoyable tasks that had no immediate reward, such as sticking up countless posters late into the night. The rewards came, however, in seeing our ideas materialise and in convincing disbelievers.

It was apparent from the start that communication was crucial to the success of Club Biotech - what use are the best events and information if no one knows about them? Thus, in the early days a great deal of our time and energy went into public relations and advertising. By using word-of-mouth, handouts, flyers, large posters, press releases, our homepage and e-mail list (all of which carried our self-designed logo) we wanted the world to know that Club Biotech had been created and a team of young people was bringing a new and fresh spirit into the scientific community. It was also important that we showed consistency and continuity in our activities so we tried, for example, to schedule events at the same time of day and on the same day of the week. A standard poster layout also

ensured Club Biotech was easily recognised from a distance.

One highly successful way in which we heightened the profile of Club Biotech was to organise guest lectures by prominent scientists. When we started this initiative in 2000 we focussed on the hot topic of prion diseases, at the time making us among the few in Europe to benefit from the BSE crisis. We organised various events including a lecture by one of the leading prion researchers, Professor Adriano Aguzzi from Zurich, which brought a crowd of 220 to the lecture hall. Although the event itself was a great success not everything went smoothly leading up to it; just days before we had no idea how we were going to refund Professor Aguzzi's travel and accommodation expenses, which we had promised to do. Now, however, we look back on this first event as the beginning of the Club Biotech success story. It was a milestone in the Club's development and helped open many doors in the future. To address the problem of financing further activities of a similarly high standard we embarked on a period of intensive fundraising. It soon paid off as we attracted one sponsor after the other and no longer had to worry about the financial constraints for holding similar events.

## Current activities of Club Biotech

Club Biotech is now a well-established institution in the Vienna region. It is an independent, interdisciplinary, non-profit making organisation, which promotes science. Being run by students, it tries particularly to encourage young people to take a closer look at the exciting world of science.

Club Biotech distributes information on scientific events such as seminars, lectures and workshops, it offers information on internships and advertises research jobs available for undergraduate students

who seek experience working in a lab while they are studying [5]. We organise trips to local biotech companies, hold scientific meetings and have a monthly, informal 'regular's table' ('Stammtisch'). The latter provides a meeting place for active Club members and is where many of our ideas are formulated – stimulated by the consumption of yeast fermented grain (i.e. beer). Club Biotech has also sent student delegations to international conferences (e.g. BIO2002 in Toronto and the IUMS Congress in Paris) and is constantly implementing new activities, thereby broadening its spectrum of services and activities it has to offer.

Club Biotech's most visible asset remains its high-profile lecture series, called 'the Club Biotech Lectures', which started with Professor Adriano Aguzzi's lecture. Eminent international scientists are invited to give a lecture on their field of study, with the aim of stimulating and motivating young people. Club Biotech has attracted the crème de la crème from all over the world to come and share their outstanding scientific contributions with us. Among others, past speakers have included the leading cloning and stem cell expert Professor Alan Colman of PPL Therapeutics, the renowned immunologist Professor Josef Penninger from Toronto, Professor Massimo Palmarini who is an expert on retroviral-induced lung-adenomatosis in sheep, and British scientist Sir Tom Blundell, one of the world's top protein structure analysts. Other memorable Club Biotech lectures have been given by such distinguished researchers as the AIDS-virus co-discoverer Professor Robert C. Gallo, Nobel Laureate Susumu Tonegawa from the M.I.T. and biomathematician Professor Martin Nowak from Harvard University [7].

It might seem difficult for a group of students to invite such prominent scientists to speak to them, but the very fact that Club Biotech is run by young, enthusiastic students seems to give us a special charm in the eyes of these successful researchers. In addition, we are able to pay our speakers' airfares and accommodation using the sponsorship money we have raised. This money also enables us to take the invited speaker out to dinner at one of the many good restaurants in the city. As students, we benefit from this enormously because we get the opportunity to meet exceptionally gifted researchers in an informal environment and can ask them, amongst other things, about their work and career paths. Often our guests also show an interest in our own plans and offer helpful advice on how we might organise our future careers.

More recently, Club Biotech developed a new and unusual way of attracting young people to science. The 'Club Biotech Schuelerforum' ('forum for pupils') was launched in February 2003 and aims to reach out to motivated high school students who show an interest and curiosity in science and research. Once a month we discuss a topical science subject (e.g. cloning, gene therapy, S.A.R.S., bioethics, etc.) in the hope that the relaxed interaction between high school students and Club Biotech members will further stimulate the youngsters' interest.

In addition to Club Biotech's publicly visible events, there is a great deal of behind the scenes networking going on. We have contact with numerous organisations, such as the Austrian Academy of Sciences, the Federal Ministry of Education and Research, public and private research institutions and agencies, Viennese universities, many biotech and pharmaceutical companies, biotech consultancies,

and national and international students' clubs that share Club Biotech's visions and goals. Systematically making these contacts has helped to raise Club Biotech's profile and has often proved to be very useful.

So far our track record has been impressive: we have more than 10 active members, about 500 sympathizers on our mailing list and well in excess of 2000 people have attended the various Club Biotech events. Furthermore, in the past the Club Biotech homepage (<http://www.clubbiotech.at/>) has had approximately 5000 visitors annually and traffic is constantly increasing.

## **What is the secret of Club Biotech's success?**

Not too surprisingly, it soon became apparent that the most important factor determining the success of the Club Biotech initiative was the character of the individuals involved. It is people who determine whether something is going to succeed or not; they need to be highly motivated, dedicated individuals with a will to make things happen. Building up such an organisation is time consuming, especially during the start up phase, so it is essential to have a group of people who can work together to push ideas forward. Thus, when we (the two founding members) were joined after a few months by a small number of new members, this team of like-minded people could more easily convince the sceptics that our ideas, and the project as whole, was valid and worth supporting.

## **Why veterinary students initiated Club Biotech**

Many people wonder why it was veterinary students who started Club Biotech. We could argue, of course, that veterinary medicine has always been at the forefront of biotechnology and science - one outstanding example of this being the discovery of the first virus, the foot and mouth disease virus (FMDV). But to link this historical event to the creation of Club Biotech would be inappropriate. We do, however, believe that the fertile, academic environment at our university (University of Veterinary Vienna) has played a crucial part. Veterinary medicine is a more intimate course of study than many others and the close and highly interactive community of ours in Vienna has the luxury of working on a new purpose built campus. Students not only know each other very well but also know many of their professors who are always available to discuss problems. Especially in the beginning, we were heavily dependent on the support and positive attitude of some of these professors. We also benefited from a very well organised students' association at our university, which offered us an office and infrastructure within the campus. Like a virus, the idea of Club Biotech spread and started to 'infect' people from other faculties and universities and this is reflected in the heterogeneous group of active members, who include graduates of biotechnology, business, genetics, medicine, microbiology, nutritional science, pharmacology, human medicine and, of course, veterinary medicine.

## **The conclusions**

For us, the founding of Club Biotech has been one of the most fantastic experiences ever. We built something from scratch and it is continuing to evolve and grow beyond all expectations. The concept behind Club Biotech was and is shared by many; it just needed someone to make it happen.

Retrospectively, we believe the hours of work invested since Club Biotech's foundation have definitely paid off in terms of the highly successful outcome. Furthermore, the benefits to those of us actively involved in running the club are potentially enormous. We have established close contacts amongst peers and professors, leading scientists and business people, we have worked with the media, have had experience in logistics and time management, and have developed leadership and organisational skills as well as social skills, all of which may be critical to our future careers.

Ultimately, it is our intention to address fellow students because they have the potential to bring about further improvements to our science and research environments. You do not need a DVM, PhD or to be a postdoc before making an impact on the scientific community. It is rather a state of mind that is required. In other words, one needs to be excited and motivated about a certain topic as well as open minded to new ideas and concepts. What matters most is one's interest and engagement in a topic and one's readiness to contribute to a larger picture. Thus, to anyone who has an ambitious idea such as ours we advise that you get on and do it. Initial drawbacks might make you feel that you aimed too high but sooner or later the effort and work will pay off!

## **References**

1. Bernkopf, M. (2000) Studenten gründen "Club Biotech". Uni. Vet. Wien Report 4/00, pp 15.
2. Pichlmair, A. and Bergthaler A. (2000) "Club Biotech" - You are welcome! VUW Students Magazin Rectum 5/2002, pp 22.

3. Bergthaler, A. and Beck, A. (2001) Deux étudiants viennois militent pour les biotechnologies. La Semaine Vétérinaire N°1022, pp 34.
4. Bernkopf, M. and Bergthaler A. (2002) Club Biotech - eine junge studentische Wissenschaftsinitiative setzt Impulse. VUW - Press Release (21 January 2002). (<http://www.vu-wien.ac.at/ai/PDF/1JahrClubBiotech.pdf>)
5. Infotransfer für die Biotechnologie. (2002) ORF ON Science Website. (<http://science.orf.at/science/links/47185>)
6. Bergthaler, A. (2002) Club Biotech: How Students Can Make a Difference. Science 19, 297 (5580):295. (<http://nextwave.sciencemag.org/cgi/content/full/2002/07/17/12>)
7. Bergthaler, A. (2003) Studenten bringen Nobelpreisträger für Vortrag nach Wien. Uni. Vet. Wien Report 1/03, pp 22-23.

## Links:

Club Biotech website <http://www.clubbiotech.at/>

University of Veterinary Medicine Vienna (VUW) <http://www.vu-wien.ac.at/>