



Troisième plateforme Santé de la Région capitale suisse:

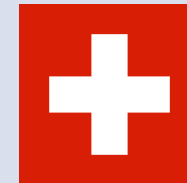
*Formation et perfectionnement dans la
domaine pharmaceutique et dans celui des
biotechnologies*



OVERVIEW of BCC – September 2016

Prof. Ian Marison, CEO

Fribourg / **Switzerland**



What is the BCC SA?

Not-for-profit company supported by the State of Fribourg and the Swiss Government

Principal company functions:

- 1. Provision of training** to the biopharmaceutical and related sectors: supply a highly trained workforce
- 2. Technical services** to the biopharmaceutical and related industries; incl. process design, development and optimization
- 3. Design of new modular and flexible training, research and production facilities;** new process design and implementation.



www.bcc.ch

How did the idea for the BCC SA originate?

Extensive market study indicated that:

- An important need exists worldwide for highly trained personnel to drive the growing biopharmaceutical developments
- Switzerland is one of the key players in the biopharmaceuticals development in terms of:
 - innovation
 - patent applications
 - start-ups
 - implantation of pharmaceutical production facilities
- Consequently need personnel to drive this development and make Switzerland the centre of excellence in the field

How did the idea for the BCC SA originate?

Extensive market study indicated that:

- Local new developments in biopharma include:
 - UCB Farchim
 - Merck Serono
 - CSL Behring
 - Celgene
 - Biogen
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- In past new development meant transfer of large part of a work force from one company to the next
- Replacements cost extensive time to find, recruit, to train and become operational
- Need to create a knowledgeable, well trained critical mass of people to lead these developments

How did the idea for the BCC SA originate?

Switzerland has a world-renowned education system based on:

- Primary education
 - Secondary education
 - Apprenticeships
 - Engineering Schools (HES)
 - Universities
 - Federal Polytechniques (ETHZ and EPFL)
-
- Need is to create programmes in which the educational programmes provided by the educational organisations are tailored to the needs of the biopharmaceutical industry

bioFactory Competence Center

Training facility for the biopharmaceutical sector

- Offer practical and theoretical training courses in:
 - Aseptic training
 - Upstream processing (USP)
 - Downstream processing (DSP)
 - Single-use vs re-usable technologies
 - Analytical methods
 - Process monitoring and control (PAT)
 - Protein characterisation
 - Continuous bioprocessing
 - Tailor-made courses defined by client companies (e.g. Client process training)

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Training facility for the biopharmaceutical sector

- Levels of training:
 - Basic, intermediate and specialist programmes
 - New graduates: preparation for working in industrial environment
 - Operators: production
 - Cross-training: training people formed in one field (e.g. food technology, bakers, dairy industry, etc.) to work in biopharmaceutical industry
 - Specialist training (e.g. in DSP, continuous bioprocessing)
 - Senior management
 - Vendor personnel in new technologies, to enable technical support of products; training of clients

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Training facility for the biopharmaceutical sector

- Aim: to provide new skills, improve existing skills, in areas required by the biopharmaceutical and support industries
- Aim: to create a Center of Excellence for the provision of a highly trained workforce
- Aim: to use this highly trained workforce to support the development of companies already based in Switzerland
- Aim: to use this highly trained workforce to attract new companies to Switzerland
- Aim: to work closely with universities and HES to provide practical industrial training for new graduates/ graduate training programs

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Collaborations

- It is not the aim of the BCC SA to employ subject matter experts in all areas of biopharmaceutical processing.
- BCC SA will collaborate with other organizations (e.g. Universities of Applied Sciences) to provide specialized training.
- Services to industry will also be achieved through collaborations (e.g. bringing together experts from different industrial and academic organizations.)
- BCC SA will seek scientific collaborations for grant applications (e.g. CERS with academic institutions.)
- The BCC SA will not enter into competition with academic institutions but intends to work together with them.

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Located in Fribourg/ Switzerland on the ground of the blueFACTORY



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blueFACTORY/BCC – Halle Bleue / Blue Hall



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Clean rooms: Cell bank



bioFactory Competence Center

Clean rooms: USP mammalian cell



bioFactory Competence Center

Clean rooms: USP mammalian cell



bioFactory Competence Center

Clean rooms: USP



bioFactory Competence Center

Clean rooms: USP





If you are interested in discussing with us possible requirements for training, collaborations or technical/consultancy services, or if you would like to know about our activities, please contact us and come for a visit! www.bcc.ch



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