



## EDUCATION PROGRAM IN ANAEROBIC BACTERIOLOGY



### Market need and potential

The health care systems in Europe are losing competence since many experts in anaerobic bacteria are reaching retiring age. This might jeopardize the patient security! The skills need to be sustained and shifted to younger colleagues. Undergraduate programs have limited teaching on anaerobes, leaving the duty to maintain vital knowledge to the clinical labs. Very few external courses are present.

Anaerobes are susceptible to oxygen. Mistakes in sampling of specimens for analysis can cause errors leading to delayed or wrong treatment decisions, that may result in morbidity and mortality. Antibiotic resistance among anaerobes is increasing.

Anaerobic bacteria belong to the human normal micro-flora. Under certain conditions like trauma, previous surgery or underlying diseases, they may cause severe infections requiring rapid diagnosis and treatment. Studies have shown that about 5 % of all positive blood cultures contain anaerobes, representing 2000 cases/year of anaerobe sepsis in Sweden.

### Business idea

diANox will meet this increasing medical and educational need by offering a combination of face-to-face and web-based courses for different medical staff groups (nurses, clinicians and lab-personnel). The courses will be developed in close contact with the target groups to enable that they get the special design required for each profession. The education programs will be initiated on the Swedish market with further expansion to the European market in the next step. Initial discussions with The Swedish Institute of Standards displayed a great interest for standardizing procedures at clinical anaerobe laboratories within Europe. The end-users of the education programs will be well equipped to keep up the patient security.

### Competition

A market analysis demonstrated that no web-based education programs on anaerobic bacteria and related infections can be found. At present, only a handful of courses in clinical anaerobe bacteriology are arranged around the world.

The Swedish professional association for biomedical scientists (IBL) is currently arranging further training in all laboratory disciplines, and co-operation with diANox for education on anaerobic bacteriology has been discussed.

### Advantages

- The online education program can be used repeatedly at any time desired.
- The online program may be combined with practical trainings.
- With better diagnostics, the patients time spent at the hospital can be reduced. If a severely ill patient spends only one day less at the intensive care unit (ICU), about 40 000 SEK/patient/day can be saved.
- Further training will make the working situation more interesting and satisfactory, thereby creating confidence in the professional role.
- By support from diANox the end-users will spend less time searching for useful information on the topic and the information delivered is regularly updated with recently published research data.

### Current status

Interviews and a workshop confirmed the urgent need of education on clinical anaerobic bacteriology. Based on this, a pilot basic course for new employees at clinical bacteriology labs is planned to March 2019. Contacts have been made with SIS concerning the possibilities to certify the education.

Advisory board is under construction with representatives from Europe.

## COMPANY PROFILE

### Contact

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### Website

www.dianox.se

### IPR

Registered trademark in EU (2018)

### Capital need

2.0 MSEK 2019-05-01 – 2020-06-30  
To launch the first education program, develop a broader product portfolio and recruit personnel for sale and support in clinical issues to participants during and after the courses.

### Partnership

diANox seek further funding from private and institutional investors, and are also interested in strategic partnerships with interest in clinical bacteriology and related products.

### Management / Board

Maria Hedberg  
CEO, PhD, Associate Professor

Professor Sheila Patrick  
Scientific advisor, Prof. Emerita, Queens Univ. Belfast, UK

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