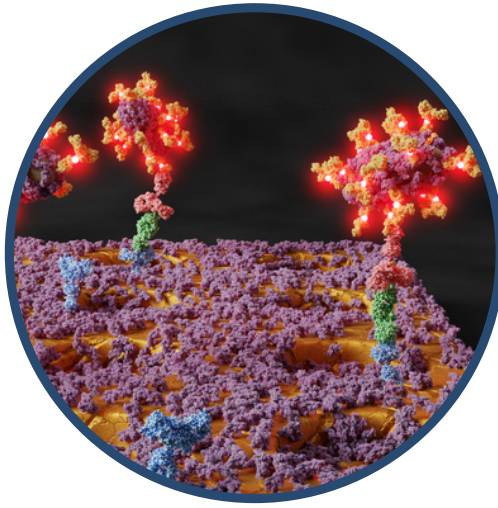
NanoBio Select@

To advance precision diagnostics with the integration of Nano- and Biotechnologies



Market Need

Ultrasensitive detection of low-abundance biomarkers is crucial for precision diagnostics of chronic diseases such as Cancer, Parkinson and Alzheimer. Existing precision diagnostics methods are either costly or low-performance. There thus is a call for ultrasensitive and cost-effective detection tools for biomarker discovery and liquid biopsy.

The immunoassay market today values at 40.2 billion USD, and constantly increases with a compound annual growth rate (CAGR) of 5.31%. We are aiming to become one of the main players like MSD and Quanterix.

Business Idea

Our novel solution based on the patentable nanodevice provides high sensitivity but is much more affordable to customers for multiplexing tests. The product includes a

- nano-plasmonic substrate
- nanotag
- nanobody

The product offers the ability to do ultra-sensitive, multiplexing immunoassays without purchasing special instruments but using their existing equipment.

Advantages

- **Ultrasensitivity:** This can enhance up to 1000 folds in comparison to current lab testing.
- **Cost-effectiveness:** Without the instrument investment and the kit costs much lower than the alternatives.
- **Compatibility:** Can be easily merged into the normal immunoassay process
- **Multiplexity:** Allowing users to do multi-tests in parallel and helping them reduce the sample and time consumption.

Competitions

Competition is restricted to the target of high performance in immunoassay detection. The main players in the market include Quanterix, Licor, MSD, and Cytiva who provide both instruments and consumables. However, they are either expensive or limited by performance such as multiplexity. NanoBio Select@'s products can be compatible with the customers' existing instruments, which can turn potential competition into business opportunities.

Current Status

- Granted by Umeå Biotech Incubator
- Further market verification
- Prototype development
- Collaboration building
- IP undergoing
- Team expansion with multidiscipline

Team

Thomas Wågberg
Co-founder
Professor, Nano Science
Umeå University

Xueen Jia
Co-founder
Senior Researcher, Biosensor
Umeå University

Nicolas Boulanger
Senior Engineer, Mechanic
Umeå University,

Xian Li
Project Manager
Business Development

XXX (Undergoing recruiting)
Project Assistant
Biochemistry

Advisor Board

Maréne Landström
Prof Medical Bioscience
Umeå University

Ludmilla Morozova-Roche
Prof Medical Biochemistry
Umeå University

Capital Need

3-5 Million to cover the costs of hiring and product development.

Partnership

We are currently seeking investors and business advisors with an interest at precision diagnostics.

Contacts

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