

## **The successful benefit prognosis of a medical research idea**

All successful medical research demonstrates the benefit to patients. In addition to a concrete idea, the medical expertise in the cooperative research environment of different disciplines (biochemistry/medicine/AI), access to relevant data from cutting-edge research and sufficient financial resources guarantee successful research.

The public funding programs are under the political legitimacy of the pressure to succeed, the proof of the benefit for the patient, the citizen. The chances of success of research proposals are therefore very significant! Researchers seeking funding must demonstrate convincingly that their proposed study is effective in improving patient health in an increasingly polluted environment and significantly expanding medical knowledge.

**Mosaiques Diagnostics offers the analysis of the molecular level of the proteome - the entirety of the proteins/peptides - using a proven, valid and reproducible technology for decoding diseases (see: [www.power-of-proteomics.com](http://www.power-of-proteomics.com))! This defines and recognizes the level of the cause of the disease for the first time!**

**So far, only the effects of the disease, the organ damage caused by this, could be determined and the disease concluded!**

With the proteome analysis by mosaiques, it is possible to show the potential of research for improving patient health on a scientific level and help to obtain funding applications in the field of medicine and health with significantly greater chances of success.

Diseases arise from the molecular changes in cells that control proteins. With this method, which is valid and reproducible for the first time, it has already been possible to define and identify important chronic diseases at an early stage and to prove their benefit in evidence-based studies.

**Mosaiques Diagnostics has been developing clinical proteome analysis since 2002. The technology used to define the proteome has played a key role in over 100 clinical studies for a wide range of indications, which have been created in collaboration with over 1000 scientists worldwide and published in over 400 publications.**

### **I. What does mosaiques specifically offer and what added value does mosaiques have?**

The proteome analysis by mosaiques improves and accelerates clinical-scientific research to an unprecedented high level!

Initially, **pilot studies** using the proteome analysis by mosaiques on the basis of 50 to 100 samples (also from the proprietary Mosaiques urine proteome database) serve to prove the benefit prognosis on a scientific level. In view of the high quality of the platform and the new data obtained from the pilot study samples, the expected benefit of the full study can already be predicted at an early (pilot) stage with a very high degree of certainty. This makes the risk of clarifying the research idea, financial and temporal, very manageable.

## **II. How do you proceed?**

### **1. The concrete idea of medical progress comes from you!**

Your advantage:

Clinical proteome analysis has great potential to revolutionize healthcare and advance personalized medicine on a scientific basis.

The proteomic analysis makes it possible to improve a large number of problems that have arisen in medical care. Some, mostly chronic, diseases have already been defined in extensive clinical studies. These evidence-based studies are regarded as fundamental proof of the functionality of the applied proteomic pattern method, the comprehensive data from which are now accessible from the database and are used for the relevance of their idea of medical improvement. (You will soon find many suggestions of ideas in the chat room from renowned medical professionals.)

The information associated with proteins can be efficiently extracted from a single body fluid sample - the proteome (total of proteins) - to map the current health (disease) status. For the first time, this enables an early and precise diagnosis of the molecular disease before the consequences of the disease, the more massive organ damage. Likewise, the prognosis of the course of the disease is possible as well as the prediction of the response to a therapy.

The advantage of the proteome-based approach lies in the versatility of the proteome. The insight from this allows to image stable, intrinsic factors that normally cannot be changed (like genes), and also the effects of external factors like diet, environment, lifestyle, etc. Most importantly, all drug target proteins are all proteins! Proteins integrate all information and are responsible for all non-communicable diseases and can alter their disease-related activity.

### **2. The curdled expertise**

By examining more than 20,000 individual and defined urinary peptides, Mosaiques Diagnostics has shown that well-defined patterns, typically based on more than 100 different individual peptides and highly significant with the desired outcome (e.g. diagnosis, prognosis or prediction of response ) are associated. This enables disease assessment with unmatched accuracy and stability. Such performance cannot be achieved on the basis of individual biomarkers. As a result, the US Food and Drug Administration (FDA) recognized one of these panels, CKD273, which consists of 273 individual peptides, in a letter of support. This approach, combining multiple biomarkers into a high-dimensional classifier, is only possible based on advanced machine learning algorithms, borrowings from artificial intelligence, and a large database of hundreds of millions of data points.

### **3. Access to Data and Resources**

The robust and routine CE-MS technology enabled the generation of over 85,000 high-quality and reproducible urine proteomics datasets, which are now being used for collaborative, targeted, in-depth studies to improve patient health, personalized interventions, identify predictive and prognostic biomarkers, and develop new treatment approaches are available.

If you are interested, please contact us. We are glad to be here for you:

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