Epigenetiks Company

Epigenetiks is a biotechnology company based in Turkey that provides innovative solutions in the fields of **microbiome**, **epigenetics**, **next-generation sequencing (NGS)**, **and rare diseases**. The company develops AI-based **analysis platforms** for personalized health solutions and supports diagnostic and treatment processes through multi-omic data analysis. Additionally, by offering **gut microbiome analysis** and **genetic testing**, Epigenetiks aims to provide personalized **nutrition programs** and make a significant impact in the health and wellness sector. The company has participated in both **local (TÜBİTAK, KOSGEB)** and **international (EU-funded)** projects.

1. Areas of Expertise

- Microbiome Analysis: Examination of gut health and disease-related bacterial profiles.
- Artificial Intelligence Integration: AI-based modeling using microbiome and genetic data.
- **Epigenetic Regulations**: Study of gene expression and epigenetic modifications.
- Next-Generation Sequencing (NGS): Extraction of genomic information from biological samples.
- Bioinformatics-Based Innovations: Omics data analysis and software development.
- Multi-Omic Approaches: Holistic assessment of genomic, transcriptomic, epigenomic, and microbiome data to understand disease mechanisms and develop health solutions.

2. Our Goals

- ✓ **Localization of Microbiome Analyses**: Reducing dependency on foreign services by conducting analyses in local laboratories, lowering costs.
- ✓ Enhancing Data Analysis Capacity with Bioinformatics and AI: Developing health solutions through multi-omic data integration.
- ✓ Increasing Global Competitiveness: Strengthening Turkey's position in the biotechnology sector by leading international projects.

3. Collaboration Opportunities

- Some Clinical Research Organizations (CROs) for access to broader datasets.
- Al and Bioinformatics Companies for developing joint solutions.
- SMEs and Large Companies in Epigenetics and Biotechnology for multidisciplinary R&D projects.

4. Technological Innovations

- **Simultaneous analysis of microbiome and epigenetic data** to create personalized disease risk maps.
- Fast and precise analysis of NGS data using artificial intelligence algorithms.
- Development of cloud-based analysis platforms integrating multi-omic data.
- **©** Creation of personalized nutrition and health programs based on genetic and microbiome data.

5. Target Sectors

- Microbiome analysis
- Artificial intelligence and bioinformatics
- Next-generation sequencing (NGS)
- ★ Health and wellness

6. Branches

Epigenetiks is actively expanding its corporate presence in the United States and Germany. In Germany, a newly established entity named Epigenetiks GmbH has been founded as part of this international expansion.

7. Our Team

Epigenetiks operates with a highly skilled and academically accomplished team. Our team consists of four PhD researchers, one postdoctoral researcher, and one dietitian. By adopting a multidisciplinary approach, we provide innovative solutions in biotechnology, artificial intelligence, bioinformatics, genetic analysis, and nutritional sciences.

8. Our Projects

- ↑ Investigation of Molecular Pathways Associated with Response to Neoadjuvant Therapy in Triple-Negative Locally Advanced Breast Cancer and Development of a Scoring System (National)
- pevelopment of a Diagnostic Kit for Rapid Detection of Various Candida Species (National)
- Web-Based Microbiome Analysis Platform (National)
- → Development of a Serum IgE Prediction Model Based on Microbiome Composition and a Web-Based Microbiome Analysis Platform (National)
- 📌 EpiSystem Epigenetics and System Biology of Stem Cells and Reprogramming (International)
- Modeling Mechanisms Affecting Obesity through Gut Microbiome and Development of a Diet-Based Microbiome Modulation Platform (National)
- Cell2Cell (International)
- Development and Production of a Dynamic SARS-CoV-2 (COVID-19) Screening Kit (National)