MicroProbes for Life Science

ACCURACY IS EVERYTHING.

Contact: Michael B. Jackson
Location: Gaithersburg, MD
Email: michael.jackson@microprobes.com
Tel: 301.330.9788
Website: www.MicroProbes.com

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES National Institutes of Health — Larta Institute

National Institutes of Health Commercialization Assistance Program (NIH-CAP)

Company Overview

Industry Sector:

Life Science Research / Medical Devices

Company Overview:

MicroProbes for Life Science, an ISO 9001:2008 registered firm, is a leading global provider of implantable microelectrodes, multi-channel arrays, and related systems for neural recording and stimulation. Our devices for interrogating and stimulating neural elements in precise parts of the brain and other tissues are helping neuroscience researchers worldwide develop a broad range of innovations for both acute and chronic neurological conditions.

Target Market(s):

MicroProbes for Life Science boasts an extensive list of satisfied neuroscience research customers around the world, ranging from university-affiliated and independent research facilities to Fortune 500 pharmaceutical and medical device companies. Targets also include users and developers of clinical neuro-prosthesis applications.

Key Value Drivers

Technology:

MicroProbes for Life Science has developed high-precision microfabrication techniques for neural microelectrodes and advanced communication interfaces. This facilitates the efficient customization of probe sets made with precious metal raw materials, including platinum and iridium, while improving accuracy and reliability. The result is a user-defined product designed to satisfy the protocols of any application.

Our next-generation microelectrode arrays, which we are developing in collaboration with Sigencis, Inc. and the Illinois Institute of Technology, will offer investigators advanced capabilities for wired and wireless neural communication.

Competitive Advantages:

Credibility: Extensive global list of satisfied customers
Longevity: Company leadership has over 35 years experience in this market
Innovation: SBIR grants from NIH for next-generation product development
Quality: ISO 9001:2008 certification, demonstrating an organizational commitment

Management

Martin Bak, BSEE: Founder and CEO
Mr. Bak holds three U.S. patents and has authored or co-authored over thirty journal articles and scientific papers. In 1995, he received the NIH Award of Merit for his contribution in the first human implant of pure iridium “Hat Pin” microelectrodes into the primary visual cortex to generate visual images for a blind human subject.

Michael Jackson, MBA: Director, Marketing and Business Development
Michael is responsible for sales and strategic marketing, and is the catalyst behind the company’s recent corporate development and rebranding programs. Michael leverages 15 years of progressive sales and marketing experience in related industries including technology, biopharmaceutical, and medical devices.

Claudia Tsas, MS: Manager, Quality Assurance
Claudia is responsible for Quality Management, business operations, performance metrics, and process validation. Claudia brings more than 17 years of experience in business administration and international business management to her position.

Product Pipeline

Next-Generation Array Technology

- **Active Floating Microelectrode Array (AFMA):** The AFMA incorporates ASIC (Application Specific Integrated Circuit) multiplexing technology, along with a head connector and a minimal 4-wire micro cable, for efficient bi-directional communication regardless of the required number of active channels.

- **Wireless Floating Microelectrode Array (WFMA):** The WFMA is a completely implantable microelectrode device that can wirelessly transmit and receive data to and from external recording and stimulation systems.

In 2009, both technologies were featured in poster sessions at the 39th Annual Meeting of the Society for Neuroscience, the world's largest organization of scientists and physicians devoted to advancing understanding of the brain and nervous system.