Agilent Technologies
Agilent Laboratories
Fact Book

March 2015

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Description

Agilent Laboratories is a world-leading industrial research center whose purpose is to power Agilent Technologies' growth through breakthrough technologies. Agilent Laboratories creates competitive advantage through high-impact technology, driving market leadership and growth in Agilent's core businesses and expanding Agilent's measurement footprint into adjacent markets. At the cross-roads of the organization, Labs is able to identify and enable synergies across Agilent's businesses to create competitive differentiation and compelling customer value.

The majority of Agilent Laboratories research is located in the United States in Santa Clara, Calif., with additional Labs locations in the US and Israel.

Fundamental strengths of Labs include deep technical expertise, a strong base of technology disciplines, a core competence in transferring technologies to Agilent's businesses, and employees who enjoy the richness of a broad, world- class science and engineering environment.

Research

Agilent Laboratories conducts three kinds of research to meet the needs of Agilent's customers across a range of markets and industries:

- Research that will lead to breakthrough and disruptive technologies and applications to grow Agilent's existing businesses bio-analytical measurement systems;

- Research that leads to technologies that create new businesses adjacent to Agilent's current markets but within Agilent's field of interest; and

- Basic research that contributes to the fundamental understanding of areas critical to Agilent's future.

Research in Agilent Laboratories advances measurement across Agilent's businesses. Customers need the highest quality data, the resources to understand this data rapidly in the context of their application domains and results that provide insights into their increasingly complex measurement goals.

Research to advance life-sciences, diagnostics and applied markets enables new understanding of living systems, more precise analysis of organic and inorganic compounds, accelerated drug development, and medical research for the diagnosis and treatment of disease. This research benefits from the trends of miniaturization and integration that are converging nano-scale science and engineering with biological understanding. Areas of bio-analytical research include the following:

- **Cellular Imaging and Analysis;** Advance the means to image, analyze and sort single cells in their multicellular environments for research and diagnostics.

- **Omics;** Increase speed, accuracy and utility of multiplex measurements of DNA, RNA, proteins, metabolites and their chemically modified forms.

- **Nucleic Acid Synthesis and Function;** Create and apply next generation DNA and RNA synthesis technologies to advance research, engineering and diagnostics.

- **Intelligent Systems;** Deepen data acquisition, analysis and tracking with informative algorithms, visual analytics, and adaptive, measurement-responsive instruments.

- **Cellular Reprogramming;** Develop tools to purposefully modify and control cells, tissues and organisms.

- **Life Science and Pathology Workflow Engineering;** Invent and develop components that enable rapid, diagnostic interpretation of quantitative assays. Create fluidics solutions for emerging multiplex assays.

Agilent Laboratories focuses externally to monitor emerging trends, and to co-develop, validate and advance our technologies with industry and customer thought leaders. Labs researchers collaborate around the world with universities, government research organizations, start-ups and corporate partners to further these goals. Agilent Labs researchers are active in developing and contributing to industry standards and provide leadership in the science and technology community as members of numerous centers of excellence, and academic and government-sponsored technology advisory, standards and editorial boards.

Agilent Laboratories/business partnerships

Agilent Laboratories and Agilent's businesses collaborate closely to provide innovative solutions to customers. These partnerships are critical for achieving successful business results.

Teams from Labs and the businesses collaborate formally and informally at all levels of the organization to understand continually evolving market conditions, customer needs and technology goals.

Labs and business teams work together on product development and commercialization. Labs tracks technology advances and the businesses have the best perspectives on evolving customer needs and markets. These teams also collaborate to identify and understand 'problems that matter for Agilent's customers. These are problems in need of new technology - that if solved, could create significant value for our customers and new opportunities for Agilent's differentiated leadership.

Contributions to Agilent

Labs measures its success based on the financial impact of the technologies that are transferred from the Labs to the businesses and by its contributions to the scientific community.

Labs is a key competitive advantage to Agilent because addressing the complex problems Agilent's customers face requires teams of people with deep knowledge and experience in multiple disciplines. About 70 percent of Labs research staff have advanced degrees that cover a wide range of scientific and engineering fields, including biology, chemistry, computer science, image processing, materials science, mathematics, microfabrication, microfluidics, software, informatics, physics, physiology and signal processing.

Labs researchers care deeply about their research and about the people around them. They are committed to longer range, high-risk research and are driven to help achieve business results.

Key Executive

Darlene J.S. Solomon, Ph.D., Agilent Chief Technology Officer and Senior Vice President