

2014 Annual Report: Forecast and Analysis of the Global Market for Laboratory Products

 Laboratory Products Association

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F R O S T  S U L L I V A N

Table of Contents

Section	Slide
Research Scope, Methodology, and Definitions	3
Global Market for Laboratory Products	8
US Market for Laboratory Products	27
Outside US Market for Laboratory Products	34
Instruments and Equipment Market	39
Chemicals, Reagents and Kits Market	47
Consumables Market	54
Laboratory Products End-user Survey Data	62
US Academic End-user Segment Market Trends	86
US Government End-user Segment Market Trends	110
US Biopharmaceutical End-user Segment Market Trends	123
US Industrial End-user Segment Market Trends	155
US Patient Care End-user Segment Market Trends	175

Research Methodology, Scope, and Definitions: Data Acquisition

Geographic Scope

- Global, segmented by US, Canada, Europe, Japan, India, China, Brazil, Mexico, and Rest of World
- Global Product Market, segmented by US and Outside US

Laboratory Product Segment Scope

- Instruments > \$20K, Instruments ≤ \$20K, and Equipment
- Chemicals, and Life Science Reagents and Kits
- General Laboratory Supplies, Plasticware, Glassware

End-user Segment Scope

- Academic
- Government
- Biopharmaceutical
- Industrial
- Patient Care

Forecast Period

- Base Year: 2013
- Actual Years: 2012–2013
- Forecast Years: 2014–2016
- Total Analyzed Period: 2012–2016

Research Methodology, Scope, and Definitions: Definitions

Laboratory Instruments and Equipment

- **Instruments > \$20K:** Major capital expenditure instruments receiving electrical current with a useful life beyond 12 months that sense a sample characteristic, such as mass spectrometers, chromatographers, and spectrophotometers
- **Instruments ≤ \$20K:** Lower-value instruments receiving electrical current with a useful life beyond twelve months that sense a sample characteristic, such as balances, pH meters, dissolved oxygen meters, conductivity meters, and recorders
- **Equipment:** All equipment receiving electrical current with a useful life beyond twelve months that do not sense a sample characteristic, such as furnaces, ovens, incubators, baths, centrifuges, refrigerators, shakers, freezers, mixers, pumps, circulators, water purifiers, pipettors with electrical current, and freeze dryers

Laboratory Chemicals, Reagents and Kits

- **Laboratory Chemicals:** All routine chemicals and reagents used in research and quality control procedures, such as solvents, acids, dyes, standards, solutions, buffers, solid phase extraction chemicals, columns, and silica gels
- **Life Science Reagents and Kits:** Collection of optimized chemicals/reagents, plasticware, and other consumables that are packaged together with specific protocols and commercialized for a designated genomics, proteomics, molecular biology, cellular biology, or protein biochemistry applications. Examples include reagents and kits for nucleic acid isolation and purification, protein extraction and fractionation, cell culture, and assays

Laboratory Consumables

- **Plasticware:** All containers and vessels made of plastics, for example PE, PF, PMP, and PS. Examples of vessels include cylinders, tubes, carboys, flasks, beakers, dishes, pipettes, and plates
- **Glassware:** All containers and vessels made of glass (flint or borosilicate). Examples of vessels include cylinders, tubes, carboys, flasks, beakers, dishes, pipettes, and plates.
- **General Lab Supplies:** All consumables other than glassware and plasticware. Examples include filtration membranes, pipettors and pipette tips, corks, rubber stoppers, tubing, clamps, gloves, wipes, absorbents, electrodes, dispensers, cans, syringe filters, dissecting tools, burners, boxes, carts, racks, regulators, timers, and disposable bioreactors

Research Methodology, Scope, and Definitions: Data Acquisition Process

Secondary Research

- Frost & Sullivan conducted a comprehensive survey of secondary sources, including past Frost & Sullivan analyses, government agency data, AAAS reports, International Monetary Fund World Economic Outlook Update, other industry reports and databases, sponsor materials, competitor materials, general media, analyst reports, scientific/medical literature, industry organization materials, trade journals, government reports, patent databases, and regulatory databases.
- Secondary research primarily focused on updates and additions to the previous year's analysis of trends affecting the lab supply market, including macroeconomic trends, funding (public and private), governmental and regulatory trends.

Primary Research

- Frost & Sullivan conducted in-depth phone interviews with >15 LPA members, each lasting 45 to 60 minutes. The interviewer followed a discussion guide as closely as possible, so that a discrete data point was collected for each question. The interviewer and respondent were free to discuss off-topic issues as they came up in addition to growth projections and qualitative market trends. The thorough exchange of views that resulted offered great insight into the relevant issues.
- Frost & Sullivan conducted an end-user survey to determine laboratory purchasing habits and trends, budget and funding trends, lab challenges, and industry drivers and restraints.

Research Methodology, Scope, and Definitions: Data Analysis

Analysis of Market Trends

- Frost & Sullivan analyzed the research findings accord to standard protocols for consulting and market research: the interviews were transcribed, the data organized, and the findings summarized and arranged in either a descriptive or tabular format, as appropriate.
- Revenues from the sales of laboratory products markets were analyzed according to relevant product and end-user segments. LPA member interviews and secondary sources (10-K's, annual reports, etc.) were used to calculate market size and growth.

Market Size and Forecast Assumptions

- Frost & Sullivan's consulting team analyzed the quantitative and qualitative data collected to provide LPA with qualitative trends, end-user trends, market size (revenue), and market growth projections by the various segments analyzed.
- Frost & Sullivan conducted a number of validation interviews with LPA members in order to ensure that the report content met expectations. Validation interviews allowed the consulting team to present preliminary market figures and trends to LPA members in order to "sanity check" data and the market outlook.

Global Market for Laboratory Products: Overview

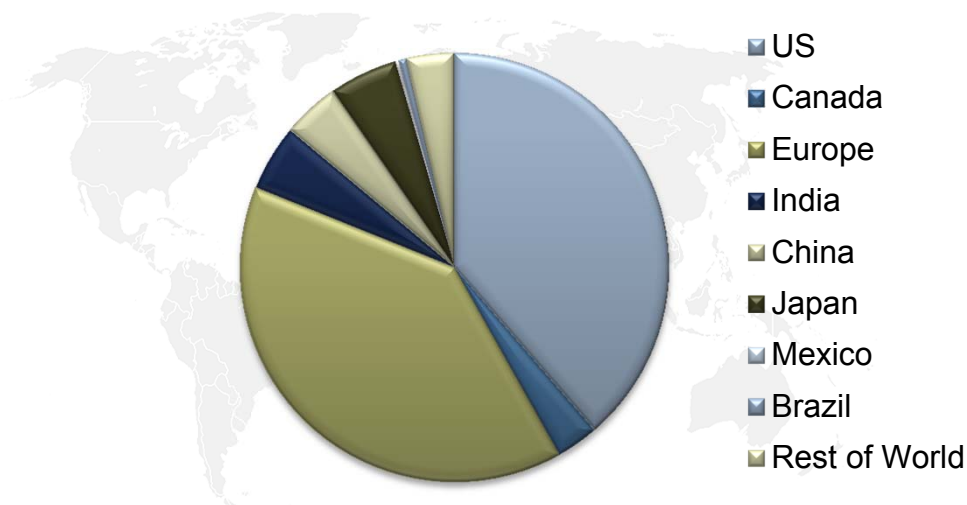
Global Market Overview

- The global laboratory products market totaled \$38.6 billion in 2013, with the 2014 market forecast to reach \$39.6 billion. The spring 2014 mid-year forecast projected cautious improvement through full-year 2014 for the total market after winter weather closings affected Q1 growth. Suppliers have reported even greater improvement through Q3 2014 with expectations of continued momentum into Q4. Subsequently, the growth forecast for full-year 2014 has improved to 2.6% over the spring forecast of 2.1% growth.
- In 2014, the US market continues its recovery from economic uncertainty and sequestration, setback initially in Q1 from the effects of winter weather closings. The market has continued to pick up over the course of 2014 in the US and suppliers expect momentum to continue into 2015. The European market has also continued its recovery from macroeconomic restraints, with the largest markets, UK and Germany, and to a lesser extent France, leading the pack.
- The two-fastest markets analyzed are again India and China. However, India has been particularly challenged in the academic/government sector in 2014, and China continues to soften as it matures.

Source: Frost & Sullivan

Global Market for Laboratory Products: Revenue Percentage Trend by Region/Country

Laboratory Products Revenue Percentage Trend by Region/Country, Global, 2016



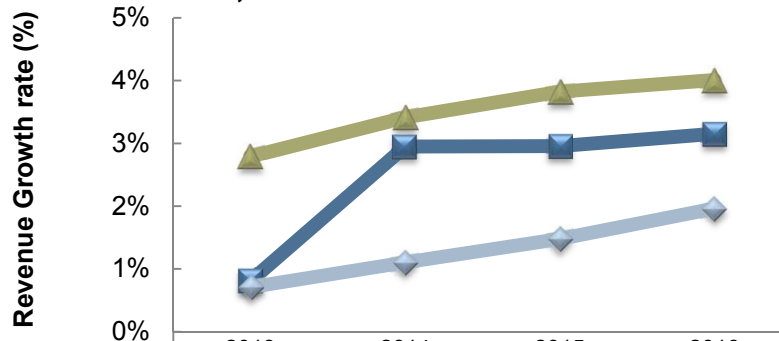
	2016 Revenue (\$B)	Percentage of Market 2016 (%)	Percentage Change from 2013 (%)
US	\$16.3	38.7%	▼ -0.2%
Canada	\$1.3	3.2%	▼ -0.2%
Europe	\$16.5	39.2%	▼ -1.0%
India	\$2.1	5.0%	▲ 0.8%
China	\$1.8	4.3%	▲ 0.6%
Japan	\$2.2	5.1%	▼ -0.3%
Mexico	\$0.1	0.3%	● 0.0%
Brazil	\$0.3	0.6%	● 0.0%
Rest of World	\$1.5	3.6%	▲ 0.2%
Global	\$42.0	100.0%	—

Trend Key	Decreasing	Stable	Increasing
	▼	●	▲

Note: All figures are rounded. Due to rounding, figures may not sum. Base year is 2013. Source: Frost & Sullivan

Global Market for Laboratory Products: Revenue Forecast by Product Segment

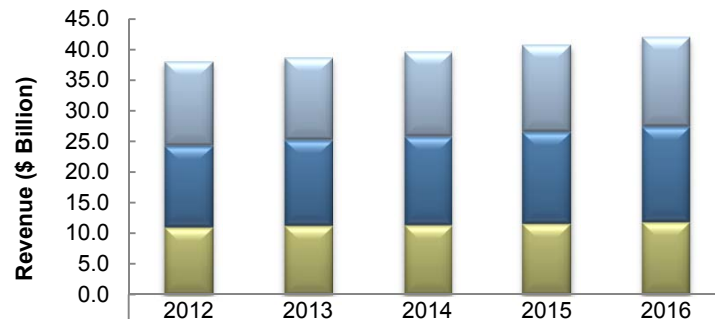
**Laboratory Product Market Revenue Forecast,
Global, 2012–2016**



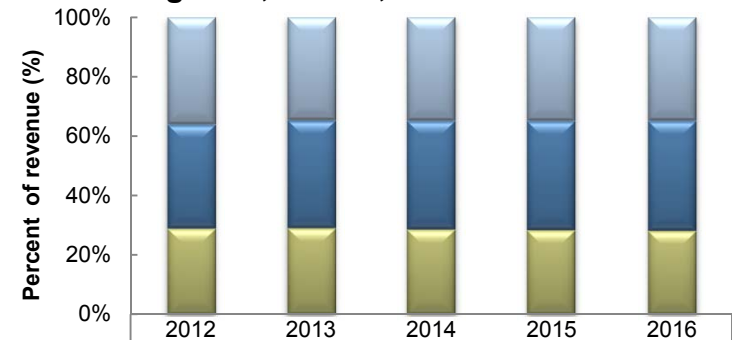
Global Market Size (2013): \$38.6 billion
Global CAGR (2013–2016): 2.9%

- The instruments/equipment market has picked up pace in 2014, due in part to some pent-up demand for equipment in the US after a challenging 2013.
- Consumables have not increased in response to overall market gains. Lingering effects of Q1 winter weather closings, or a prioritization towards capital equipment may be causes.

**Laboratory Product Market Revenue Forecast
by Product Segment, Global, 2012–2016**



**Percent of Laboratory Product Market by
Product Segment, Global, 2012–2016**



Instruments & Equipment	36.1%	34.7%	34.9%	34.9%	34.8%
Chemicals, Reagents & Kits	34.9%	36.2%	36.5%	36.7%	36.9%
Consumables	29.0%	29.1%	28.7%	28.5%	28.2%

Note: All figures are rounded. Base year is 2013. Source: Frost & Sullivan

US Market for Laboratory Products: Revenue Forecast

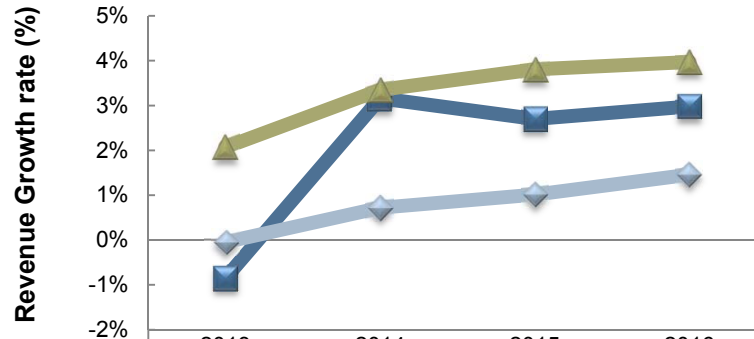
Laboratory Product Market Revenue Forecast, US, 2012–2016
CAGR (2013–2016): 2.7%



Note: All figures are rounded. Base year is 2013. Source: Frost & Sullivan

US Market for Laboratory Products: Market Revenue Forecast by Product Segment

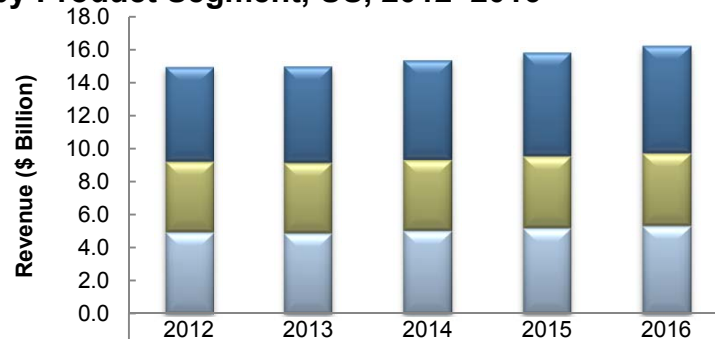
Laboratory Product Market Revenue Forecast,
US, 2012–2016



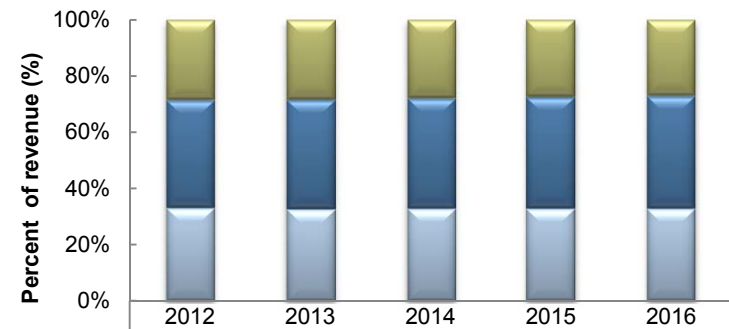
US Market Size (2013): \$15.0 billion
US CAGR (2013–2016): 2.7%

- After a disappointing 2013 due primarily to sequester effects, the US is returning to modest slow single-digit growth in 2014 and will continue to pick up pace.
- The instruments/equipment market is experiencing the largest gains from 2013 rates as some pent-up demand comes through in the academic/government sector.

Laboratory Product Market Revenue Forecast
by Product Segment, US, 2012–2016



Percent of Laboratory Product Market by
Product Segment, US, 2012–2016



Consumables	28.6%	28.4%	27.9%	27.4%	27.0%
Chemicals, Reagents & Kits	38.3%	38.9%	39.2%	39.7%	40.1%
Instruments & Equipment	33.1%	32.7%	32.9%	32.9%	32.9%

Note: All figures are rounded. Base year is 2013. Source: Frost & Sullivan