Life Sciences in Maine

State of the Industry

2022

BIOME
Bioscience Association of Maine

About Us

The Bioscience Association of Maine (BioME) is a trade organization which promotes the industry's steady growth, interprets its benefits to the public, and influences pertinent public policy.

BioME's mission is to advance economic growth and opportunities within the life sciences community in Maine by allocating equal involvement in life sciences advocacy, education, economic development, workforce development, and attracting out-of-state business.

biomaine.org

A Note on the Coronavirus Pandemic

The ongoing coronavirus pandemic (COVID-19) has had major impacts not only on public health but from an economic perspective as well. Employment levels for the broader economy remain unstable compared to pre-pandemic levels, while supply chain disruptions, high inflation, and other macroeconomic headwinds persist.

Yet, Maine's life science sector organizations were key responders to the public health crisis, and, as a result, employment has jumped dramatically since the early days of COVID-19. It remains to be seen whether recent employment levels persist and this will likely depend on the ongoing prevalence of coronavirus variants and public health response measures.

Some caution is warranted in interpreting the key findings in this State of the Industry report due to the uncertain nature of the ongoing pandemic. However, the strong response of the life sciences industry at the onset of the pandemic has established competitive advantages that bode well for the industry moving forward, particularly as the disease continues to evolve and pose public health risks to society, which Maine's life science sector plays an important role in addressing.

Economic Impact

9,540
Jobs

$108K
Average Annual Income

$2.2 Billion
of Maine's Total GRP

4.2%
of Maine's Total Exports

Industry Overview

Jobs
Employers
Job Growth
Jobs Multiplier
Earnings
Sectors
Subindustries
Occupations

Jobs

*Source: Economic Modeling Specialists Inc. (EMSI); US Bureau of Labor Statistics (BLS) Quarterly Census of Employment & Wages (QCEW). *Note: Data does not capture life science related employment at Maine's higher education institutions.*
See the Higher Education section for additional information on the impact of these institutions to Maine's life science industry.
Additional information on the industries included in this analysis can be found in the attachments.

Job Growth

Life science **jobs in Maine grew by 42%** over the last 5 years, far outpacing total job growth in Maine

Source: EMSI; BLS QCEW

Job Growth

Job growth was driven by **In-Vitro Diagnostic Substance Manufacturing and Surgical Appliance and Supplies Manufacturing**, both adding significant jobs before and during the pandemic. **Research and Development** industries were also key contributors over the last 5 years

Source: BKS, QCEW; EMSI.

Job Growth

Life science jobs in Maine grew **at the fastest pace** of all New England States during the last 5 years

LIFE SCIENCE JOBS

Year	CT	ME	MA	NH	RI	VT	New England	U.S.
2011	30,131	6,456	98,251	8,633	6,545	2,522	152,538	2,009,478
2012	28,623	6,219	96,789	8,558	6,624	2,822	149,635	2,021,195
2013	27,900	6,522	97,893	8,787	6,518	2,863	150,483	2,025,775
2014	27,832	6,605	100,553	8,791	6,594	2,782	153,157	2,043,716
2015	27,418	6,641	103,730	8,832	6,566	2,789	155,976	2,082,329
2016	26,552	6,703	109,292	9,001	6,431	2,791	160,770	2,124,954
2017	25,779	7,066	114,117	9,266	6,465	2,575	165,268	2,124,639
2018	26,749	7,433	123,538	9,848	6,386	2,637	176,591	2,231,087
2019	27,976	7,994	132,324	10,541	6,924	2,810	188,570	2,324,193
2020	27,922	7,918	136,116	10,822	7,348	3,050	193,178	2,361,320
2021	27,583	9,540	140,358	10,774	7,664	2,995	198,914	2,258,064
2016-2021 % Change	4%	42%	28%	20%	19%	7%	24%	6%
2011-2021 % Change	-8%	48%	43%	25%	17%	19%	30%	12%

Source: EMSI; BLS QCEW

Employers

Some of Maine's largest life science employers include:

- IDEXX (4,200+)
- Jackson Laboratory (1,600+)
- Puritan Medical Products (750+)
- Abbott (500+)
- Corning Inc. (400+)*
- Covetrus (300+)
- University of Maine (300+)*
- Maine Health Institute for Research (250+)
- The Baker Company (150+)
- Elanco (120+)
- EnviroLogix (120+)

*Source: BioME Survey, 2019 & 2022*Corning Incorporated and University of Maine's employees are not included in the overall number of Maine life science jobs.*

Jobs Multiplier

Maine's life science industry has a job multiplier of 2.71. This means that for every job created by the life sciences, **1.71 jobs are created** in other industries in Maine

Source: EMSI

LIFE SCIENCE JOBS MULTIPLIER

A jobs multiplier is used to indicate how important an industry is in regional job creation. The higher the multiplier, the bigger the impact on the economy.

Earnings

Between 2001 and 2021, average earnings of Maine's Life Science **jobs increased by 128% to $108,741**, far outpacing earnings growth across all of Maine's industries and the New England region

Percent Change in Average Annual Earnings, 2001-2021

Source: EMSI; BLS QCEW

Earnings

Median hourly **earnings are higher** for Maine's life science occupations than for all occupations

Source: EMSI

Earnings

Average Annual Earnings of Life Science Sector (2021)

Average annual earnings of **$108,741** rank Maine's life science industry fourth in New England

Source: EMSI; BLS QCEW

Top Occupations

Maine's life science occupations offer **competitive career pathways**, with 15 of the top 20 occupations offering **higher wages** than the state median

LIFE SCIENCE OCCUPATIONS

Occupation	Employed 2016	Employed 2021	Median Hourly Earnings	Typical Entry Level Education
Packaging and Filling Machine Operators and Tenders	213	387	$19.77	High school diploma or equivalent
Clinical Laboratory Technologists and Technicians	278	351	$27.12	Bachelor's degree
General and Operations Managers	167	235	$42.91	Bachelor's degree
First-Line Supervisors of Production and Operating Workers	129	233	$32.21	High school diploma or equivalent
Biological Technicians	171	215	$26.19	Bachelor's degree
Inspectors, Testers, Sorters, Samplers, and Weighers	105	214	$21.63	High school diploma or equivalent
Chemists	117	208	$32.55	Bachelor's degree
Miscellaneous Assemblers and Fabricators	131	205	$17.38	High school diploma or equivalent
Natural Sciences Managers	94	203	$55.36	Bachelor's degree
Biochemists and Biophysicists	158	203	$35.09	Doctoral or professional degree
Customer Service Representatives	125	187	$16.86	High school diploma or equivalent
Project Management and Business Operations Specialists, All Other	85	177	$32.17	Bachelor's degree
Phlebotomists	217	172	$15.26	Postsecondary nondegree award
Industrial Engineers	94	163	$41.20	Bachelor's degree
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	44	162	$37.24	Bachelor's degree
Software Developers and Software Quality Assurance Analysts and Testers	107	136	$43.69	Bachelor's degree
Office Clerks, General	97	127	$17.07	High school diploma or equivalent
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	45	116	$28.83	Bachelor's degree
Industrial Production Managers	60	109	$46.56	High school diploma or equivalent
Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	71	107	$31.96	High school diploma or equivalent

Source: EMSI

Top Sectors

Almost two-thirds of Maine's life science jobs are in the **Pharmaceutical and Medicine Manufacturing and Scientific Research and Development Services** sectors

	Pharmaceutical and Medicine Manufacturing	Scientific Research and Development Services	Medical and Diagnostics Laboratories	Medical Equipment and Supplies Manufacturing	All other
Percent	37%	26%	13%	14%	9%
Number Jobs	3,528	2,493	1,272	1,359	887

Source: EMSI; BLS QCEW

Top Subindustries

Maine's top three life science subindustries are **In-Vitro Diagnostic Substance Manufacturing, R&D in Biotechnology**, and **Pharmaceutical Preparation and Manufacturing**

Source: EMSI; BLS QCEW

Industry Comparison

LIFE SCIENCE INDUSTRY COMPARISON 2021

	Establishments	Jobs	Total jobs	% Total Jobs	2016-2021 % Job Change	Average Earnings per Job
Connecticut	1,714	27,583	1,590,866	2%	4%	$137,039
Maine	501	9,540	609,907	2%	42%	$108,741
Massachusetts	4,878	140,358	3,457,484	4%	28%	$194,598
New Hampshire	800	10,774	649,112	2%	20%	$109,235
Rhode Island	681	7,664	463,763	2%	19%	$89,464
Vermont	324	2,995	291,485	1%	7%	$97,972
New England	8,898	198,914	7,062,617	3%	24%	$171,150
United States	120,349	2,258,064	122,692,752	2%	6%	$123,836

Source: EMSI

Industry Investment

National Science Foundation

National Institute of Health

SBIR/STTR

Maine Technology Institute

Venture Capital

NSF Awards

Between 2017and 2021 Maine has received over **$14.1 million** in NSF biological sciences awards

Source: Source: NSF (National Science Foundation) Budget Internet Information System, Award Summary by State/Institution; https:/dellweb.bfa.nsf.gov/starth.asp
Note: Data includes NSF Biological Sciences Awards

NSF Awards

NSF awards support higher education and nonprofit research institutions

NSF BIOLOGICAL SCIENCES AWARDS, 2017-2021

Institution	Award Amount ($)	% of Total	Number of Awards	% of Total
University of Maine	$4,894,000	35%	14	29%
Bowdoin College	$3,123,000	23%	12	25%
Bigelow Laboratory for Ocean Sciences	$1,787,000	13%	3	6%
Jackson Laboratory	$1,276,000	9%	3	6%
Colby College	$1,214,000	9%	5	10%
University of New England	$653,000	5%	3	6%
Bates College	$605,000	4%	5	10%
Individual Award(s)	$138,000	1%	1	2%
Gulf of Maine Research Institute	$96,000	0.7%	1	2%
Hurricane Island Foundation	$25,000	0.2%	1	2%
Total	$13,811,000	100%	48	100%

*Source: Source: NSF (National Science Foundation) Budget Internet Information System, Award Summary by State/Institution; https:/dellweb.bfa.nsf.gov/starth.asp *Includes NSF Biological Sciences Awards*

NIH Awards

Maine received over **$515 million** in NIH awards between 2017 and 2021

Source: NIH (National Institute of Health) Research Portfolio Online Reporting Tools, https:/report.nih.gov/award/index.cfm

NIH Awards

Top award recipients include: **The Jackson Laboratory**, **MaineHealth**, and **Mount Desert Island Biological Laboratory**

TOP NIH FUNDING RECIPIENTS, 2017-2021

Institution	Award Amount ($)	% of Total	Number of Awards	% of Total
JACKSON LABORATORY	$360,844,144	70%	531	67%
MAINEHEALTH	$69,239,029	13%	104	13%
MOUNT DESERT ISLAND BIOLOGICAL LAB	$38,614,803	7%	55	7%
UNIVERSITY OF NEW ENGLAND	$16,415,545	3%	23	3%
NATIONAL PARTNERSHIP/ENVIRONMNTL/TECH/ED	$10,221,888	2%	16	2%
UNIVERSITY OF MAINE ORONO	$8,762,676	2%	28	4%
Total NIH Awards	$515,021,537	98%	757	96%

Source: NIH (National Institute of Health) Research Portfolio Online Reporting Tools, https:/report.nih.gov/award/index.cfm

SBIR/STTR Awards

Award Obligations to Life Science Companies in Maine

Between 2018 and2021 Maine's life science companies received over **$3.8 million** in SBIR/STTR awards

SBIR/STTR

The Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs are competitive programs that expand R&D funding opportunities for small businesses. These are intended to promote entrepreneurial R&D and the commercialization of resulting innovations. Life science related awards are those from the following agencies: National Institute of Health, Department of Health and Human Services, Office for Chemical and Biological Defense, and Defense Health Program.

Source: SBIR/STTR Awards Database, https:/www.sbir.gov/analytics-dashboard? and Maine Technology Institute, 2019

SBIR/STTR Awards

Life science SBIR/STTR award obligations represent **nearly one-third** of all of Maine's SBIR/STTR award obligations (2018-2021)

Life Science Obligations, 2018 - 2021

*Source: SBIR/STTR Awards Database, https:/www.sbir.gov/analytics-dashboard?*Life science awards are those from the following agencies: National Institute of Health, Department of Health and Human Services, Office for Chemical and Biological Defense, and Defense Health Program*

MTI Awards

The Jackson Laboratory received 70% of the total amount awarded and **The University of Maine Orono** received the largest number of awards

Top Award Recipients, 2017-2021

Institution	Award Amount ($)	% of Total
The Jackson Laboratory	$12,500,000	65%
ImmuCell Corporation	$900,000	5%
Northeastern University	$750,000	4%
University of Maine	$475,215	2%
Standard Biocarbon Corporation	$400,000	2%
Amplify, Inc.	$310,000	2%
Total Top 6	$15,335,215	79%
Total All	$19,340,891	100%

Institution	Number of Awards	% of Total
University of Maine	12	9%
Bioscience Association of Maine	5	4%
KinoTek Inc	4	3%
MedRhythms, Inc.	4	3%
Activas Diagnostics, LLC	3	2%
The Mount Desert Island Biological Laboratory	3	2%
Total Top 6	31	24%
Total All	127	100%

Source: MTI

Venture Capital

Maine's life science companies have shown a capacity to attract VC for the life sciences, raising nearly **$267 million** between 2017 and 2021

VC Capital Raised by Maine's Life Science Companies

Source: Crunchbase.com

Venture Capital

Top VC recipients include Covetrus, Rarebreed Veterinary Partners, RxAnte, and Rockstep Solutions.

TOP VC RECIPIENTS, 2014-2018

Institution	Capital Raised	% of Total	# of Deals	% of Total
Covetrus	$223,000,000	73%	3	13%
Rarebreed Veterinary Partners	$40,000,000	13%	3	13%
RxAnte	$25,600,000	8%	3	13%
RockStep Solutions	$6,584,295	2%	6	25%
Total Top 4	$295,184,295	96%	15	63%
Total	$306,661,795	100%	24	100%

Source: Crunchbase.com

Higher Education

Research & Development

Degrees Issued

Research & Development

Higher education institutions utilized over **$260 million** for life and physical science related R&D between 2016 and 202

Source: NSF, National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, https:/www.nsf.gov/statistics/srvyherd/ . 2020 is the most recent year of data availability.

Research & Development

R&D is being led by the **University of Maine Orono**, which accounts for 81% of 2020 expenditures

Source: NSF, National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, https:/www.nsf.gov/statistics/srvyherd/ . 2020 is the most recent year of data availability.

Research & Development

Maine's higher education R&D expenditures are **less than one fourth** that of the other New England states*

R&D Expenditures per $10 Billion in GDP

Year	CT	ME	MA	NH	RI	VT
2017	$38,504	$8,266	$37,672	$30,668	$26,133	$31,257
2018	$38,495	$8,178	$35,112	$30,106	$29,453	$34,129
2019	$40,563	$8,449	$36,010	$30,730	$29,416	$34,280
2020	$42,925	$8,221	$37,303	$28,571	$30,943	$44,635
TOTAL	$160,486	$33,115	$146,096	$120,076	$115,944	$144,301

Source: NSF, National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, https:/www.nsf.gov/statistics/srvyherd/ . 2020 is the most year of data availability.

**Note: The abnormally low levels for Maine can be explained in part by Maine's unique industry mix in which tourism plays a significant role. Tourism is a low R&D intensive sector but a significant contributor to state GDP. Though Maine is still well below other states in this metric.*

Degrees

Life Science Degrees Awarded in Maine

Between 2012 and 2020, **6,506** life science degrees were awarded at Maine's higher education institutions

Source: National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS).

Degrees

Life science degrees were awarded at **18 institutions,** led by the University of Maine Orono, the University of New England, and Bowdoin College

LIFE SCIENCE DEGREES/CERTIFICATES AWARDED, 2020

Institution	Degrees
University of Maine Orono	180
University of New England	144
Bowdoin College	106
Colby College	85
Bates College	78
University of Southern Maine	57
Saint Joseph's College of Maine	29
Unity College	27
University of Maine at Farmington	15
Central Maine Community College	11
Husson University	11
Kennebec Valley Community College	10
Southern Maine Community College	10
University of Maine at Augusta	6
University of Maine at Fort Kent	6
Maine Maritime Academy	5
University of Maine at Machias	5
University of Maine at Presque Isle	4
Total	789

Source: National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS).

Patents

Patents

Life science patents represent 13% of Maine's total patents during 2014-2020 (investor-weighted)

# of Life Science Patents in Maine (Inventor-Weighted Counts)

Life Science Patents, 2014-2020

Source: U.S. Patent and Trademark Office, Patenting by Geographic Region (State and County), Breakout by Technology Class; https:/www.uspto.gov/web/offices/ac/ido/oeip/taf/stctec/mestcl_gd.htm Patent counts are weighted by number of Maine inventors per patent. Patents typically take up to 5 years from application to assignment, hence a lag in recent years for patent assignments.

Patents

LIFE SCIENCE PATENTS

Year	CT	ME	MA	NH	RI	VT
2014	635	32	2,302	188	102	26
2015	578	29	2,296	187	71	36
2016	625	35	2,374	173	95	37
2017	592	29	2,397	178	79	31
2018	536	20	2,066	140	82	25
2019	412	20	1,393	96	69	23
2020	155	11	632	51	15	4
Total	3,534	177	13,460	1,012	512	181

Maine ranks last in New England for life science patents, receiving 177 from 2014 to 2020

Source: U.S. Patent and Trademark Office, Patenting by Geographic Region (State and County), Breakout by Technology Class; https:/www.uspto.gov/web/offices/ac/ido/oeip/taf/stctec/mestcl_gd.htm Patent counts are weighted by number of Maine inventors per patent. Patents typically take up to 5 years from application to assignment, hence a lag in recent years for patent assignments.

Patents

Maine ranks low among US states by number of patents, but **among the top 20% of states** for out-of-state inventor collaboration, suggesting strong networks to leverage with other regions

Average Patent Rankings per 100K Workers and Out-of-State Collaborator Networks, 2016-2020

	Life Science Patents per 100K	50 State Ranking	% Out-of-State Collaborators	50 State Ranking
RI	12.0	21	63.2	4
NH	16.7	7	60.2	5
ME	3.3	44	51.6	9
VT	6.8	12	51.2	10
CT	24.2	7	44.5	14
MA	47.5	3	44.4	16

Source: U.S. Patent and Trademark Office, Patenting by Geographic Region (State and County), Breakout by Technology Class; https:/www.uspto.gov/web/offices/ac/ido/oeip/ taf/stctec/mestcl_gd.htm Patent counts are weighted by number of Maine inventors per patent. Patents typically take up to 5 years from application to assignment, hence a lag in recent years for patent assignments.

Patents

Maine Life Science Patents: Top 10 Patent Assignees, 2001-2021	% of Total
IDEXX LABORATORIES INC, Westbrook, ME	6.8
JACKSON LABORATORY, Bar Harbor, ME	3.5
MAINEHEALTH INSTITUTE FOR RESEARCH, Scarborough, ME	2.2
PHOENIX BIOTECHNOLOGY INC, San Antonio, TX	2.2
BANNER LIFE SCIENCES LLC, High Point, NC	2.0
MARICAL INC, Portland, ME	2.0
MEDTRONIC ADVANCED ENERGY LLC, Portsmouth, NH	1.9
CORNING LIFE SCIENCES INC, Kennebunk, ME	1.6
FMC CORPORATION, Philadelphia, PA	1.6
MERIDIAN MEDICAL SYSTEMS LLC, Woolwich, ME	1.5

Primary assignee organizations of life science patents with Maine inventors are led by **IDEXX, Jackson Laboratory, and MaineHealth Institute for Research**

Source: U.S. Patent and Trademark Office, Patenting by Geographic Region (State and County), Breakout by Technology Class; https:/www.uspto.gov/web/offices/ac/ido/oeip/ taf/stctec/mestcl_gd.htm Patent counts are weighted by number of Maine inventors per patent. Patents typically take up to 5 years from application to assignment, hence a lag in recent years for patent assignments.

Exports

Exports

Maine Life Science Exports 2021

Maine's exports are diverse and span a variety of life science related fields.

Maine Life Science Exports 2021

Export Type	Annual 2021 $	% Life Science Exports
Composite Diagnostic/Lab Reagents, excluding Pharmaceutical	$56,313,332	43.7%
Instruments etc. Using Optical Radiations	$18,933,988	14.7%
Immunological Products, In Measured Dose/Retail Sale	$15,578,226	12.1%
Parts of Instruments for Physical or Chemical Analysis	$9,952,352	7.7%
Vaccines for Veterinary Medicine	$8,656,366	6.7%
Physical and Chemical Instruments or Apparatus to measure Viscosity and Heat	$4,315,689	3.3%
X-Ray and Hi Tension Apparatus and Parts	$3,749,673	2.9%
Industrial and Appliances for Medical, Surgical, Dental and Veterinary Sciences	$2,974,537	2.3%
Measurement and Checking Instruments, Appliances and Machinery	$2,640,922	2.0%
Sanitary Towels and Tampons, Diapers for Babies etc.	$2,592,101	2.0%
Total Top 10	$125,707,186	97.5%
Total Life Science	$128,875,819	100%

Source: Maine International Trade Center, WISER database

Attachments

A. Selected Life Science Industries: 6-digit NAICS industries used to define the Life Science sector

B. Selected Life Science Patent Classes: Patent classes included in this report

C. Selected Life Science Export Commodities: Commodities used to define Life Science exports

A. Selected Life Science Industries

NAICS Industries	
Pharmaceutical and Medicine Manufacturing (NAICS 32541)	Medical Equipment and Supplies Manufacturing (NAICS 33911)
Medicinal and Botanical Manufacturing (NAICS 325411)	Surgical and Medical Instrument Manufacturing (NAICS 339112)
Pharmaceutical Preparation Manufacturing (NAICS 325412)	Surgical Appliance and Supplies Manufacturing (NAICS 339113)
In-Vitro Diagnostic Substance Manufacturing (NAICS 325413)	Dental Equipment and Supplies Manufacturing (NAICS 339114)
Biological Product (except Diagnostic) manufacturing (NAICS 325414)	Opthalmic Goods Manufacturing (NAICS 339115)
Other Pressed and Blown Glass and Glassware Manufacturing (NAICS 327212)	Dental Laboratories (NAICS 339116)
Optical Instrument and Lens Manufacturing (NAICS 333314)	Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers (NAICS 42345)
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing (NAICS 33451)	Opthalmic Goods Merchant Wholesalers (NAICS 42346)
Electromedical and Electrotherapeutic Apparatus Manufacturing (NAICS 334510)	Testing Laboratories (NAICS 54138)
Analytical Laboratory Instrument Manufacturing (NAICS 334516)	Research and Development in the Physical, Engineering, and Life Sciences (NAICS 54171)
Irradiation Apparatus Manufacturing (NAICS 334517)	Research and Development in Nanotechnology (NAICS 541713)
Medical and Diagnostic Laboratories (NAICS 62151)	Research and Development in Biotechnology (except Nanobiotechnology) (NAICS 541714)
Medical Laboratories (NAICS 621511)	Research and Development in Biotechnology (except Nanobiotechnology) (NAICS 541714)
Diagnostic Imaging Centers (NAICS 621512)	Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology
Blood and Organ Banks (NAICS 621991)	

B. Selected Life Science Patent Classes

Patent Classes	
Drug, Bio-Affecting and Body Treating Compositions	Optics: Measuring and Testing
Chemistry: Molecular Biology and Microbiology	Measuring and Testing
Multicellular Living Organisms and Unmodified Parts Thereof	Chemistry: Analytical and Immunological Testing
Surgery	Fluid Handling
Surgery (instruments)	Organic Compounds
Surgery: Light, Thermal, and Electrical Application	Optics: Eye Examining, Vision Testing and Correcting
Surgery: Splint, Brace, or Bandage	Image Analysis
Surgery (Medicators and Receptors)	Liquid Purification or Separation
Prosthesis (i.e. Artificial Body Members), Parts Thereof, or Aids and Accessories Therefor	Chemistry: Natural Resins or Derivatives; Peptides or Proteins; Lignins or Reaction Products Thereof
Chemical Apparatus and Process Disinfecting, Deodorizing, Preserving, or Sterilizing	Radiation Imagery Chemistry: Process, Composition, or Product Thereof
Sugar, Starch, and Carbohydrates	Optical: Systems and Elements

C. Selected Life Science Export Commodities

Export Commodities		
Composite Diagnostic/Lab Reagents, Exc Pharmaceut	Med Needles. Nesoi, Catheters Etc And Parts Etc	Invalid Carriages, Not Mechanically Propelled
Instruments Etc Using Optical Radiations Nesoi	Artificial Joints & Parts & Accessories Therof, Nes	Extracts Of Glands Or Other Orgs Or Secretions
Vaccines For Vetrinary Medicine	Antibiotics, Nesoi	Antisera And Blood Fractions, Immun Products
Immunological Products, In Measured Doses/Rtl Sale	Oth Artifical Pts Of The Body & Pts & Accessories	Tetracyclines And Their Derivatives; Salts Thereof
X-Ray/Hi Tnsn Genr Cntr Pnl & Dsk Exm/Trtmnt Tb Pt	Dentists, Barbers Or Similar Chairs And Parts	Vitamins, Natural Or Synthetic, Dosage Etc Form
Wadding, Gauze, and Similar Articles Etc Nesoi	Elec Mach and App, Having Indiv Functions, Nesoi	Gloves, Except Surgical Etc. Vulcan Rubber, Nesoi
Instr & Applu F Medical Surgical Dental Vet, Nesoi	Parts For Machinery Plant Or Lab Equipment Etc	Electrocardiographs, And Parts And Accessories
Mech-Thrpy Appl; Mssg Appr; Psych Apt-Test; Appr; Pts	Tubular Metal Needles & Needls For Sutures & Parts	Thermometers/Pyro Nt Combind W Oth Instrum, Nesoi
Prepared Culture Media for Devel of Microorganisms	Malaria Diagnostic Test Kits	Ozone, Oxygen, Etc Therapy, Respiration Apparatus, Pt
Human Blood; Animal Blood Prep, Toxins, Cultrs Etc	Dental Fittings And Parts And Accessories	Invalid Carriages, mechanically Propelled
Apparatus Base on X-Ray For Oth Use, Ex Medical, Etc	Adhesive Dressings And Other Artcl Having Adh Lay	Blood Fractions, Nesoi, Obtained by Biotech
Syringes, With Or Without Needles; Pts & Access	Vitamins And Their Derivatives, Unmixed, Nesoi	Medical, Surgical or Laboratory Sterilizers
Orthopedic Or Fractre Appliances, Parts & Accessor	Other Opthalmic Instruments & Appliances & Parts	Heparin And Its Salts; Other Human Or Animal Subst
Medicaments Nesoi, Measured Doses, Retail Pk Nesoi	Immunological Products, Unmixed, Not in Msre Doses	Amino-Alcohol-Phenols, Amino-Acid-Phenols, Etc.
Inst & Appln For dental Science, & Pts & Acc, Nesoi	Dental Cements And Other Dental Fillings Etc	Antisera And Other Blood Fractions
Made-Up Textile Articles, Nesoi	Life Jackets And Life Belts, Of Textile Material	Antibiotics Nesoi, In Dosage Form
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Learn how to get involved at www.biomaine.org/me-bioscience-day/

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