EMPOWERING MEDICINE

2020 ANNUAL REPORT

THE JACKSON LABORATORY

The Jackson Laboratory's purposes are scientific, medical and educational. Our mission is to discover precise genomic solutions for disease and empower the global biomedical community in our shared quest to improve human health.

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JAX FACTS

A GROWING FOOTPRINT

The Jackson Laboratory employs more than 2,400 staff worldwide.

Researchers at the headquarters and mammalian genetics campus in Bar Harbor, Maine study the fundamental genetics underlying cancer, diabetes, Alzheimer's and many other diseases. Additionally, JAX's extensive and unique mouse models, database resources, educational programs and clinical research services empower and enable the work of scientists all across the globe.

Elsewhere in Maine, JAX staff members in Augusta manage the activities of the Maine Cancer Genomics Initiative, a special alliance of cancer experts, clinicians and researchers who are focused on improving outcomes for cancer patients. The Charles E. Hewett Center in Ellsworth is a state-of-the-art mouse vivarium that enables wider access to vital JAX® Mice resources for the worldwide biomedical research community.

Researchers at The Jackson Laboratory for Genomic Medicine in Farmington, Conn. seek human genomic solutions to disease through a variety of areas, including computational biology, immunology, the microbiome and cancer research. This work provides the human complement to our mammalian studies in Maine.

The team in Sacramento, Calif. provides genetically unique mouse models, scientific testing and data analysis services to pharmaceutical, life sciences and medical research communities.

The JAX team in China empowers the Chinese research community by improving access to mouse models that better represent the genetic and biological complexity of the human condition, and by delivering local support and services that further their understanding of the use of model systems to uncover cures for disease.

CONTRIBUTIONS TO MEDICAL SCIENCE

George Snell won the Nobel Prize in Physiology or Medicine in 1980 for providing an in-depth understanding of the immune system's major histocompatibility complex, making organ transplants possible.

Douglas Coleman discovered the hormone leptin, central to obesity and diabetes research.

C.C. Little, who founded JAX, led the effort to establish cancer as a genetic disorder.

Elizabeth Russell performed the first bone marrow transplants in a mammal, leading to new treatments for blood and immunological diseases.

Leroy Stevens first investigated the mechanisms in cells that allow them to develop into different tissues, leading to modern stem cell research.

JAX has been committed to helping address the coronavirus pandemic as rapidly as possible, in line with our mission to improve human health.

When COVID-19 hit in early 2020, JAX moved quickly to provide fast, accurate testing for doctors, nurses, first responders, critical care workers, academic institutions and others on the front lines of the pandemic.

The Laboratory also began generating essential mouse models that researchers around the world have been using to develop COVID-19 vaccines and treatments.

Additionally, JAX researchers are studying the immune response to the virus, determining disease susceptibility and progression in patients, and investigating the specific mechanisms of coronavirus infection to build a solid foundation for drug and vaccine development.

"We felt it was our responsibility to help," says JAX President and CEO Edison T. Liu, M.D. "Our teams quickly assembled to focus their expertise in human genomics and mammalian genetics to support this public health crisis."

THE FIRST MOUSE MODEL

JAX is a pioneer in genetics and mouse model research, and scientists depend on animal models for developing safe, effective vaccines and other therapeutics. For more than 90 years, JAX has played a vital role in maintaining and distributing genetically defined mouse models to the worldwide scientific community.

As the pandemic unfolded, it became clear early on that JAX needed to act fast in order to meet the strong, immediate demand for a specialized mouse model to support COVID-19 research. JAX mobilized its research team and engaged its state-of-the-art breeding program to quickly make available a new K18-hACE2 transgenic mouse colony. Introduced in February 2020, it was the first mouse model to become widely available to researchers around the world.

SAVING SCIENCE

As labs worldwide halted their research in response to shelter-in-place orders, JAX reached out to help. JAX engaged in efforts to help scientists facing shutdowns preserve their valuable strains of laboratory mice. Trucks were dispatched to areas throughout the country as the pandemic spread, and JAX rushed cryopreservation kits to labs around the world so that researchers could freeze and send specimens for safekeeping, all the while keeping the cost of providing these emergency services as low as possible.

It's estimated that at one point, about half of the world's biomedical research labs closed, and another 39% were operating at reduced capacity. As the restrictions lifted and laboratories prepared to reopen, JAX worked with these researchers to reduce the long-term impact of the closings. By helping to rebuild their mouse colonies, JAX is helping scientists everywhere get back to the important work of finding cures and treatments to improve human health.

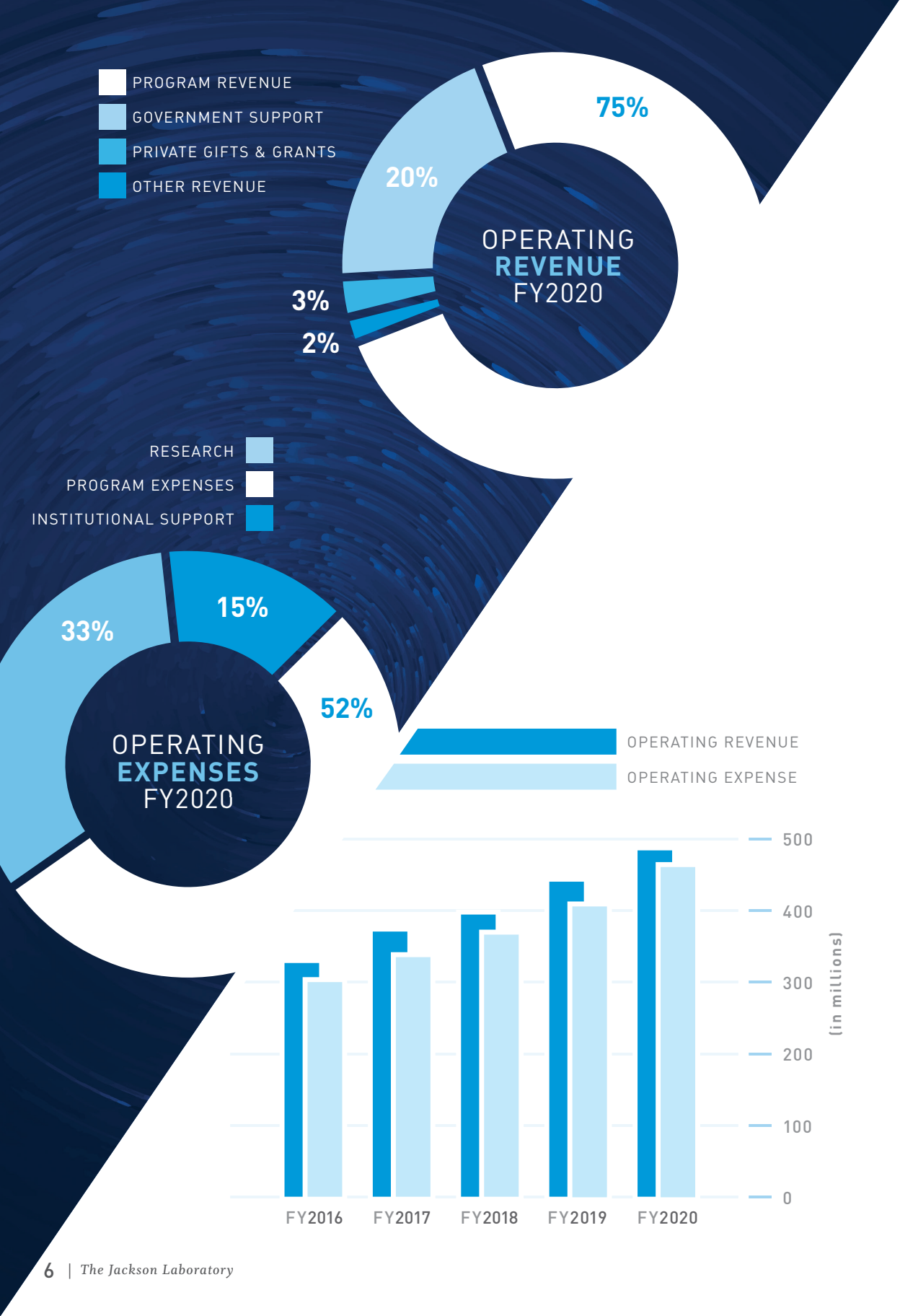
TESTING & SURVEILLANCE

Coronavirus testing was essential in helping officials track and prevent transmission of COVID-19. In March 2020, JAX activated its Connecticut-licensed Clinical Laboratory Improvement Amendments and College of American Pathologists-accredited laboratory in order to provide additional testing capacity for first responders, hospitals, health care facilities, nursing homes and a variety of educational institutions located primarily in Connecticut and Maine. As of May 2021, JAX had tested more than 1.5 million samples, with the largest number of samples sent from the state of Connecticut.

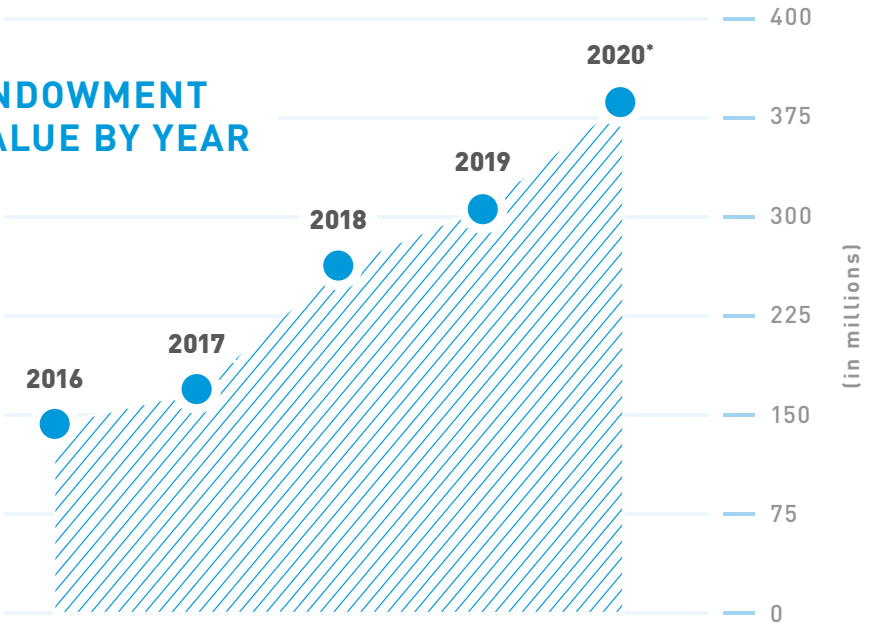
The JAX CLIA lab is also contributing to the COVID-19 genomic surveillance effort, which will be a key component of bringing the pandemic under control. Mutations in SARS-CoV-2 are generating viral variants that change the properties of the virus and affect the response to the COVID-19 pandemic. For several months and at no cost, JAX sequenced positive test samples in order to identify the variants that were impacting Connecticut residents. JAX now has a contract with the state of Connecticut as part of the government's surveillance efforts.

EMPLOYEE SUPPORT

JAX has been a leader in taking care of its own team during the pandemic. From sending "smart" thermometers to each employee for temperature tracking to shipping high-quality, reusable face masks to every employee's home before they were widely available; providing 80 hours of paid time off to employees that could be used for school and camp closures or to help care for loved ones and ease the burden of the pandemic, to regular employee COVID testing; establishing a COVID-19 crisis fund for JAX families in need; and so much more. JAX has made the well-being of its employees a top priority.


PROGRAM REVENUE
GOVERNMENT SUPPORT
PRIVATE GIFTS & GRANTS
OTHER REVENUE
75%
20%
3%
2%
OPERATING
REVENUE
FY2020
RESEARCH
PROGRAM EXPENSES
INSTITUTIONAL SUPPORT
33%
15%
52%
OPERATING
EXPENSES
FY2020
OPERATING REVENUE
OPERATING EXPENSE
500
400
300
200
100
0
(in millions)
FY2016
FY2017
FY2018
FY2019
FY2020

ENDOWMENT VALUE BY YEAR



*2020 endowment investment return of 18.0%

STATEMENT OF FINANCIAL POSITION
(IN MILLIONS)

	2020	2019
ASSETS		
Cash and Equivalents	175.8	199.6
Net Receivables	67.8	48.5
Other Assets	36.6	29.9
Endowment Investments	386.9	306.5
Land, Buildings and Equipment	544.9	527.1
Total Assets	**1,212.0**	**1,111.6**
LIABILITIES AND FUND BALANCES		
Current Liabilities	93.7	69.6
Bonds Payable, Net	199.7	206.7
Net Assets	918.6	835.3
Total Liabilities and Net Assets	**1,212.0**	**1,111.6**

STATEMENT OF ACTIVITY
(IN MILLIONS)

	2020	2019
OPERATING REVENUE		
Government Support	96.8	95.3
Foundation and Other Grants	10.1	12.3
Philanthropic Gifts	4.0	2.6
Program Revenue	361.7	317.8
Investment Return	11.0	10.4
Other Revenue	1.0	2.4
Operating Revenue	**484.6**	**440.8**
OPERATING EXPENSES		
Research	152.4	141.1
Program Expenses	241.8	206.7
Institutional Support	67.8	59.1
Operating Expenses	**462.0**	**406.9**
Increase in Net Assets From Operating Activities	**22.6**	**33.9**
NON-OPERATION FINANCIAL SUPPORT		
Construction Grants	11.1	19.4
Contributions for Plant and Endowment	0.9	1.5
Long-Term Investment Return, Net of Amount Used	47.9	40.7
Other	0.8	(0.1)
Increase in Net Assets From Non-Operating Activities	**60.7**	**61.5**
Increase in Net Assets	**83.3**	**95.4**

The Jackson Laboratory is an independent, nonprofit biomedical research institution. Its mission is to discover precise genomic solutions for disease and empower the global biomedical community in the shared quest to improve human health.

To learn more, visit our website at *www.jax.org* and subscribe to our e-publication at *www.jax.org/subscribe*.

The Jackson Laboratory

Leading the search for tomorrow's cures