

LONG ISLAND BIOLOGICAL ASSOCIATION

ANNUAL REPORT
OF
THE BIOLOGICAL LABORATORY

COLD SPRING HARBOR
LONG ISLAND, NEW YORK
1926

LONG ISLAND BIOLOGICAL ASSOCIATION

INCORPORATED 1924

**ANNUAL REPORT
OF
THE BIOLOGICAL LABORATORY**

FOUNDED 1890

THIRTY-SEVENTH YEAR

1926



PHOTO BY
SUNDEN

General view of part of the Laboratory grounds and buildings and of Cold Spring Harbor, taken from Cannon Hill, a portion of the land recently acquired by the Long Island Biological Association

BOARD OF DIRECTORS

To serve until 1930:

George Draper	Presbyterian Hospital
W. B. James	Cold Spring Harbor, N. Y. <i>President*</i>
H. S. Jennings	Johns Hopkins University
Mortimer L. Schiff	New York City
W. W. Swingle	University of Iowa
Willis D. Wood	Huntington, N. Y.

To serve until 1929:

C. B. Davenport.....	Carnegie Institution of Washington. <i>Secretary</i>
Childs Frick	Roslyn, N. Y.
Henry Hicks	Westbury, N. Y.
H. M. Parshley.....	Smith College
Henry L. Stimson.....	Cold Spring Harbor, N. Y.
Henry C. Taylor.....	Cold Spring Harbor, N. Y.

To serve until 1928:

Oliver B. James	Cold Spring Harbor, N. Y.
Walter Jennings	Cold Spring Harbor, N. Y.
R. C. Leffingwell	Oyster Bay, N. Y.
T. H. Morgan.....	Columbia University
Charles R. Stockard	Cornell Medical College
T. S. Williams	Huntington, N. Y. <i>President†</i>

To serve until 1927:

Charles M. Bleecker	Cold Spring Harbor, N. Y.
Marshall Field	Huntington, N. Y. <i>Vice President</i>
Ross G. Harrison	Yale University
Arthur W. Page	Cold Spring Harbor, N. Y. <i>Treasurer</i>
William K. Vanderbilt	Centerport, N. Y.
H. E. Walter	Brown University

R. G. HARRIS, *Laboratory Director*

* Subsequent to December 14, 1926.

† To December 14, 1926.

Members of the Long Island Biological Association

Founders:

Mrs. Eugene Blackford
Marshall Field
Dr. Walter B. James
Walter Jennings

Mortimer L. Schiff
William K. Vanderbilt
†Robert B. Woodward
William J. Matheson

Patrons:

Frank L. Babbott
Mrs. Charles B. Davenport
Henry W. DeForest
Cleveland H. Dodge
Mrs. Leonard Elmhirst
W. E. Erhart
Edward Floyd-Jones
Childs Frick
Mrs. E. H. Harriman
†A. Augustus Healy
August Heckscher
Mrs. Walter Jennings
Mrs. Otto H. Kahn
R. C. Leffingwell

Mr. and Mrs. W. Lloyd-Smith
J. P. Morgan
Wm. H. Nichols, Jr.
†Henry F. Noyes
Arthur W. Page
George D. Pratt
†Cornelia Prime
Oran W. Rice
Howard C. Smith
Louis C. Tiffany
Wawepex Society
Walter J. Whipple
Timothy S. Williams
Mrs. Timothy S. Williams

Sustaining Members:

Helen T. Albro
Eleanor Allen
Grace Allen
Justin M. Andrews
Mary Auten
Frank L. Babbott
Max S. Bart
Mary Beard
Frederick Bernheim
George R. Biecher
Ernest W. Blanchard
Charles M. Bleecker
Mrs. T. Bache Bleecker, Jr.
Edward C. Blum
Helen Blust
Rosina C. Boardman
R. Hattie Bolton
Mrs. Rudyerd Boulton
Floyd C. Bratt
Henry Brody
Leland A. Brown
Lucile C. Brown
John T. Buchholz

† Deceased.

L. Dudley Bumpus
Vincent G. Burns
Esther F. Byrnes
Dorothy W. Caldwell
J. Lincoln Cartledge
Edward L. Caum
Mary Chantler
Helen A. Choate
J. Loomis Christian
Edward D. Churchill
Henry S. Conrad
Paul D. Cravath
Charles B. Davenport
Frances G. Davenport
Pierrepont Davenport
F. Trubee Davison
Maude Dawson
Henry W. DeForest
Johnston DeForest
Robert W. DeForest
Fairman R. Dick
Abigail C. Dimon
Russell A. Dixon

Harper B. Dodd
 Agnes Doetsch
 Henry P. Dorman
 Frank N. Doubleday
 Edith M. Douglas
 Mrs. George T. Douglas
 Marin S. Dunn
 S. A. Everett
 Calvin F. Fencil
 Lydia M. Fletcher
 Rolfe Floyd
 George S. Franklin
 Florence M. Frost
 Henry J. Fry
 Wendell Gingrich
 Arcadia Giura
 Robert A. Goodell
 Myron Gordon
 R. H. Gray
 Susan A. Green
 N. M. Grier
 T. Hale Ham
 Benjamin R. Harris
 D. S. Hartline
 H. Keffer Hartline
 Mrs. Glenn G. Hayes
 O. M. Helff
 Saul Heller
 †Annie P. Henchman
 Myra Herman
 Pierre Hernandez
 Henry Hicks
 M. Catherine Hinchey
 Anton G. Hodenpyl
 Gail H. Holliday
 Grace L. Holmes
 Davenport Hooker
 Mrs. S. C. W. Hoppin
 Perry S. Horenstein
 Clarence A. Horn
 Marian E. Hubbard
 Harrison R. Hunt
 Robert C. Hutchinson
 Everett C. Jessup
 Opalrae Johnson
 Florence L. Jones
 Richard H. Jones
 Sarah Elizabeth Jones
 Celia Kaufman
 E. Corinne Keaty
 Clyde E. Keeler
 Emma L. Kemp

† Deceased.

Margaret Kesler
 Clara Ketcham
 Mrs. C. D. Kirkpatrick
 Beatrice Klingensmith
 Marie B. Knauz
 Martin J. Knorr
 Sidney I. Kornhauser
 Eleanor Kress
 Anna Lansing
 D. W. LaRue
 R. C. Leffingwell
 Milton I. Levine
 Gerald M. Livingston
 Christina B. Locke
 Elizabeth M. Lord
 William S. Lord
 Carolyn E. MacDonald
 E. Carleton MacDowell
 Josephine C. Marshall
 Marion I. Martin
 Ralph E. Martin
 H. S. Mayerson
 E. Lenore Meid
 Marie C. Menefee
 Valy Menkin
 Charles W. Metz
 Florence Middleton
 Frances H. Miller
 Ogden L. Mills
 George D. Morgan
 Mattie Beth Morgan
 †Daniel P. Morse
 Everett C. Myers
 Louise A. Nelson
 Graham Netting
 J. S. Nicholas
 Acosta Nichols
 Mrs. George Nichols
 Isaac Oeland
 C. Mervin Palmer
 Quentin Pan
 H. M. Parshley
 William H. Parsons
 James E. Peabody
 Mrs. Wm. Pfeiffer
 Hugh L. Porter
 Eugene L. Power
 H. S. Pratt
 Frank L. Rainey
 John E. Ranken
 Walter M. Rankin
 Helen Reed

Ida L. Reveley
 †Dorothy F. Rice
 Edward L. Rice
 Kenneth S. Rice
 Aute Richards
 John K. Roosevelt
 W. Emlen Roosevelt
 Walter J. Salmon
 Sophie Satin
 Asa A. Schaeffer
 Mary-Light Schaeffer
 E. L. Schaffer
 Fanny J. Schwartz
 Donald Scott
 Ida Sitler
 William Smith
 Margaret A. Spencer
 Phyllis Stanley
 Joseph H. Stickler
 Helen Stobbe
 Harley L. Stowell
 Stella G. Streeter
 F. H. Sweet
 W. W. Swingle
 Eugene Swope
 George F. Sykes
 Masaharu Tange

Mrs. F. C. Thomas
 E. N. Transeau
 Daniel V. Troppoli
 Isabel H. Tuthill
 Victor C. Twitty
 Gertrude R. Twomey
 Emilia Vicari
 Nelle E. Waggener
 Roy A. Waggener
 H. E. Walter
 Myrtle H. Waterfall
 Betty P. Watt
 Helen M. Wells
 David D. Whitney
 Alice W. Wilcox
 Mrs. Joseph H. Willetts
 C. D. Williams
 Mrs. T. S. Williams
 J. Walter Wilson
 Mrs. O. K. Wing
 Henrietta M. Wood
 Willis D. Wood
 Louise Wright
 Sewall Wright
 Myrtle E. Wylie
 Paul B. Yates
 Raymond L. Zwemer

The following, though not members of the Long Island Biological Association, have contributed to the Land and Endowment Fund:

E. LeGrand Beers
 John Chase
 Albert De Silver
 J. G. Dettmer
 William G. Low
 John Hill Morgan

Acosta Nichols, Jr.
 George Nichols
 C. J. Peabody
 James H. Post
 †W. A. Putnam
 Mrs. W. E. Roosevelt

Herman Stutzer

Members of the Women's Auxiliary Board

President, Mrs. Walter Jennings
 Vice-President, Mrs. Childs Frick
 Secretary, Mrs. Archibald B. Roosevelt
 Treasurer, Mrs. George Nichols
 Chairman House Committee, Mrs. Hamilton Hadden

Mrs. Arthur Ballantine	Mrs. Johnston de Forest
Mrs. A. F. Blakeslee	Mrs. Richard Derby
Miss Rosina C. Boardman	Mrs. A. H. Diebold
Mrs. C. B. Davenport	Mrs. George Draper
Mrs. Henry de Forest	Mrs. Marshall Field

† Deceased.

Mrs. Sidney Fiske	Mrs. Acosta Nichols
Mrs. Childs Frick	Mrs. George Nichols
Mrs. Rodman Gilder	Mrs. J. W. T. Nichols
Mrs. Hamilton Hadden	Mrs. Arthur W. Page
Mrs. W. Averell Harriman	Mrs. Gurdon S. Parker
Mrs. Reginald G. Harris	Mrs. H. M. Parshley
Mrs. John D. Hewlett	Mrs. Lee J. Perrin
Mrs. Henry Hicks	Mrs. J. S. Phipps
Mrs. Geo. S. Hornblower	Mrs. John Ranken
Mrs. Clyde Huntington	Mrs. Archibald B. Roosevelt
Mrs. O. B. James	Mrs. George Roosevelt
Mrs. Walter B. James	Mrs. John E. Rousmaniere
Miss C. Jennings	Mrs. C. C. Rumsey
Mrs. H. S. Jennings	Mrs. Mortimer L. Schiff
Mrs. Walter Jennings	Mrs. J. H. J. Stewart
Miss Abbie E. Jones	Mrs. Charles R. Stockard
Miss Florence Jones	Mrs. W. W. Swingle
Miss S. Elizabeth Jones	Mrs. Edwin P. Taylor
Mrs. Otto H. Kahn	Mrs. H. C. Taylor
Mrs. R. C. Leffingwell	Mrs. F. C. Thomas
Mrs. Wilton Lloyd-Smith	Mrs. H. E. Walter
Mrs. Graham Lusk	Mrs. Payne Whitney
Mrs. E. Carleton MacDowell	Mrs. T. S. Williams
Mrs. Van Santvoord Merlesmith	Mrs. Keyes Winter
	Mrs. Willis D. Wood

Honorary Members:

Mrs. Andrew Carnegie

Mrs. E. H. Harriman

Mrs. Leonard Elmhirst

LABORATORY DIRECTOR'S REPORT

The Biological Laboratory has enjoyed, in the year just completed, the greatest physical growth of its history. Part of this growth permits of expansion for years to come. Part of it meets certain immediate needs of the Laboratory.

The first part is the completion of the purchase of the land in which the Association has been interested for several years. With the passing of the title in April of this year the Biological Laboratory became the owner of land sufficient to receive its expansion for years to come. In the words of the father of the project, Dr. C. B. Davenport, Secretary of the Association, "without the land the growth and usefulness of the Biological Laboratory are severely limited; with it the future of the Laboratory is insured."

For the first time in its history the Biological Laboratory finds itself unhampered by lack of space and the many restrictions which accompany it.

Since acquiring the property the Association has had a topographical survey made. In addition to this, a landscape architect, Mr. Harold A. Caparn, after careful study and consultation, has drawn plans for the use of the property in the most pleasing and practicable way. These plans and suggestions are based upon the utilization of the land for laboratory buildings, dormitories and residences. Their adoption should insure the unity and beauty of future physical development. The accompanying map shows the results of the surveys and demonstrates the admirable location and topography of the property.*

But the new land was not only essential for future development, it was also needed for immediate use. No sooner was the title passed than plans were presented to erect a laboratory building on a portion of the property. The carrying out of the project was authorized by the Executive Committee. No action could be more indicative of the seriousness of purpose of the officers of the Association. The Association had just expended a sum of money of considerable size for so young an organization. Approval of the project meant the expenditure of several thousand dollars in addition to the current expenditures covered by the budget. But the building was essential.

It is now in use by workers at the Laboratory. It is not yet completed in all details but it stands a monument to the faith and courage of those in whose hands lie the destiny of the Laboratory.

This building was designed to meet certain immediate needs. It is forty-two by twenty-six feet, of well-planned and executed frame construction. It has two stories, designed by the architect, Mr. Henry Saylor, each

* The surveyor's topographical survey and the landscape architect's plans were made without cost to the Association, being the gifts of Col. T. S. Williams and Dr. W. B. James, respectively.

to contain a laboratory for the use of a class, and offices for members of the staff. There is also a well lighted and ventilated basement in which private laboratories, a dark room and a machinists' room will be constructed. The building is particularly well located, and is equipped with electricity and running water.

Other immediate needs have been met very modestly but with encouraging results. The old lecture hall has been completely renovated for use as a research laboratory. An additional floor was built in, and eleven private laboratory rooms constructed. The renovation of the basement of the building has been completed, providing an operating room, an animal room and a technical room.

That these improvements were warranted is evidenced by the fact that this year the building has been occupied to its full capacity by some twenty-four investigators and advanced students.

The animal room has been equipped with metal supporting racks, and cages for small mammals. The most essential general equipment has been provided for the operating room. The supply of chemicals and glassware has been increased.

These improvements, together with the admirable administration by Dr. Andrews of the storeroom for chemicals and glassware, have been invaluable to the progress of investigation.

Indeed probably at no time in its history has the Biological Laboratory enjoyed greater activity in biological research.

Instruction

Instruction has received a new impetus. Additional and improved equipment, notably the new building and the new launch, have made possible better working conditions, and the utilization of more distant and varied collecting grounds.

The enrollment has been very encouraging. The addition of the course in Experimental Surgery has brought a small group of unusually advanced and serious students. The increased number of advanced workers and the highly satisfactory type of the students in general predict an era of accomplishment and dignity for the Laboratory.

Changes in the Staff

Prof. H. E. Walter, of Brown University, has resigned from the teaching staff. The following resolution was adopted at a recent meeting of the Board of Directors in appreciation of Dr. Walter's long service as a member of the staff of the Laboratory:

Whereas, Professor Herbert Eugene Walter has found it necessary to retire from active summer teaching after having trained a generation of

students at the Biological Laboratory, and having long served as its Assistant Director.

Voted, that the Board of Directors of the Long Island Biological Association expresses its appreciation of his invaluable services to the Laboratory and to the training of biologists. In regretting the loss of Dr. Walter as teacher, the Board finds consolation in being able to profit, through his membership on the Board, by his long experience.

Dr. Justin M. Andrews, Dr. John S. Nicholas and Dr. Wilbur W. Swingle were appointed to the staff in Experimental Surgery. All were previously on the staff of the Laboratory.

Dr. Asa A. Schaeffer, Professor of Zoology at the University of Kansas, was appointed to the staff of the Laboratory in research:

Mr. Roy K. Waggener, Instructor of Biology in Brown University, was appointed Assistant in Field Zoology.

Mr. Frederick K. Sparrow, of Harvard University, was appointed Assistant in Field Botany.

Dr. Henry S. Pratt has recently resigned. The following resolution in recognition of Dr. Pratt's services was voted at a recent meeting of the Board of Directors:

Whereas, Professor Henry Sherring Pratt has found it necessary to retire from active summer teaching, after having put his vast knowledge of animals and their structure at the disposal of students at the Laboratory for almost 30 years,

Voted, that the Board of Directors of the Long Island Biological Association gratefully acknowledges the indebtedness of the Laboratory and of zoological science in general to these services; and offers him henceforth free use of the Laboratory for the furtherance of his researches and scientific writings.

Evening Lectures

The following public evening lectures have been given this year:

Dr. A. M. Banta—Inheritance in Parthenogenesis and in Sexual Reproduction in *Daphnia*.

Dr. William Crocker—Organization and Equipment for Plant Research as Illustrated by Boyce Thompson Institute.

Dr. W. J. Crozier—Physiology of Certain Tropisms.

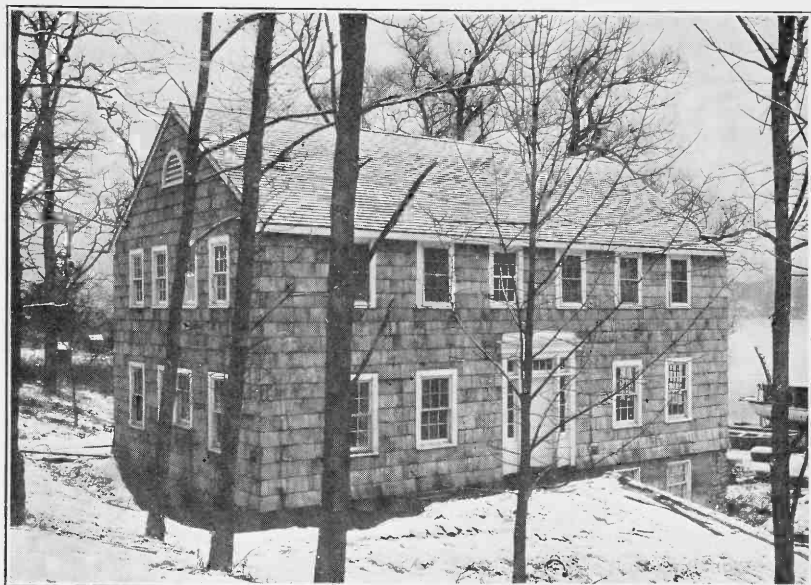
Dr. C. B. Davenport—Human Growth.

Dr. G. Clyde Fisher—With John Burroughs in His Favorite Haunts.

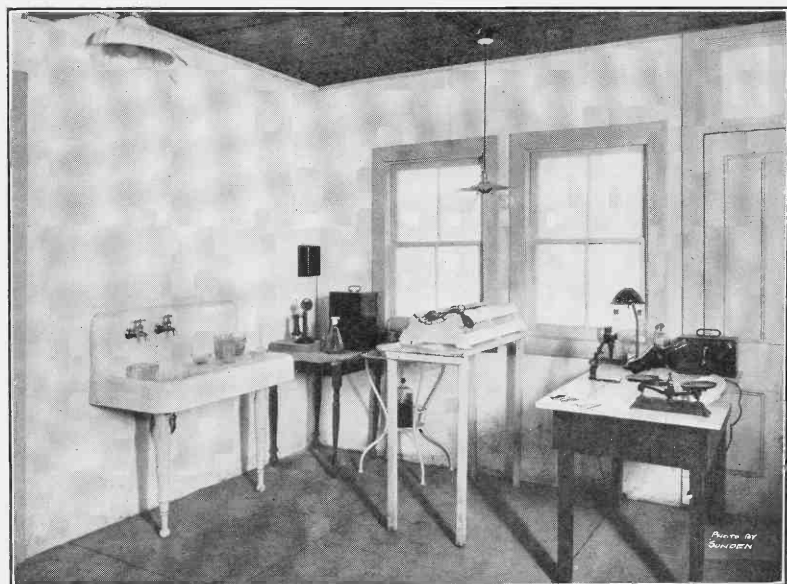
Dr. R. G. Harrison—Heteroplastic Grafting in Animals.

Dr. K. S. Lashley—Experimental Studies on Cerebral Functions in Learning.

Dr. H. H. Laughlin—Genetics of the Thoroughbred Horse.



THE RECENTLY CONSTRUCTED BOTANICAL AND PHYSIOLOGICAL LABORATORY



A CORNER OF THE OPERATING ROOM IN THE BASEMENT OF THE RESEARCH LABORATORY

Dr. Oscar Riddle—Metabolism and the Newer Aspect of the Sex Problem.

Dr. A. A. Schaeffer—Spiral Movements in Protozoa and Other Animals Including Man.

Dr. W. W. Swingle—The Adrenal Gland.

New Members

The following persons have been voted into membership in the classes named: Patrons: Mr. Henry W. de Forest, Mr. Arthur W. Page and Mr. Oran W. Rice. Sustaining Members: Messrs. and Mesdames Mary Chantler, Pierrepont Davenport, Rolfe Floyd, Wendell Gingrich, Myron Gordon, Grace L. Holmes, Mrs. S. C. W. Hoppin, William S. Lord, Graham Netting, Phyllis Stanley.

The Wawepex Society, Inc.

The Wawepex Society of Cold Spring Harbor has drawn up and signed a lease of the three acres of land, occupied by the Laboratory, the John D. Jones Laboratory, and three other buildings for the fifty years following the expiration of the present lease in 1929. In addition to providing the Association with the lands and buildings mentioned, the Society contributes fifteen hundred dollars annually to its support. The officers of the Wawepex Society are: Charles M. Bleecker, Governor; Jesse Knight, scribe; Walter J. Whipple, custodian.

The following resolution was passed upon the death of John H. J. Stewart, former governor of the Wawepex Society and member of the Board of Directors of the Laboratory:

Resolved, that the Board of Directors of the Long Island Biological Association has suffered a grievous loss in the death, on February 4th, 1926, of J. H. J. Stewart, Governor of the Wawepex Society. He was constant in attendance at the meetings of the Executive Committee and of the Board of Directors and showed a marked devotion to the interests of the Association. He represented on the Board the interests of the founder both of the Biological Laboratory and the Wawepex Society, John D. Jones, his kinsman. Mr. Stewart was a man of few words. His judgment on business matters was highly esteemed. His appreciation of nature and country life was keen. We shall miss his genial personality at our meetings and in the community.

Gifts Received During the Year

In addition to the funds given for the purchase of land and totalling over \$50,000 for the fiscal year just completed, the amount received from endowment and contributions increased from \$5,000 to \$10,000.

The bequest of the late Mrs. Eugene Blackford of \$5,000, the income

to be used for the upkeep of Blackford Memorial Hall, has been turned over to the Brooklyn Institute of Arts and Sciences to be held in trust for the Laboratory.

Mr. Oran W. Rice has given the Association the sum of \$2,000, a part of the income to be used in establishing a new scholarship, the Dorothy Frances Rice Scholarship, in memory of Mr. Rice's daughter, a former student at the Biological Laboratory.

Other gifts, in addition to annual contributions to current expenses, include various equipment, materials, and the landscape architect's survey, by Dr. W. B. James; the surveyor's survey of the new property, Col. T. S. Williams; scientific journals and magazines, donated by Mr. Arthur W. Page; and scientific books and journals from the estate of Miss Annie P. Henchman, a former student at the Laboratory and member of the Association.

The Biological Laboratory

The foundation of biology is research. Without scientific observation and inquiry there would be no zoology, or botany, no rational medicine, agriculture or animal husbandry. Continued advance in the knowledge of life, its continuity, diversity, development, differentiation and pathology, is directly dependent upon continued research.

Without research there can be no instruction in biology, for there can be no facts or sound theories to teach.

On the other hand, suitable instruction in the known facts and accepted theories of biology is of inestimable value to the prospective biological investigator.

The Biological Laboratory of the Long Island Biological Association exists for the advancement of biology. Its interest, its *raison d'être*, lies in biological research. Its instruction is available to persons who intend to become investigators, or who intend to teach biology, and so pass on its fundamentals to future generations of biologists.

The administration of the Biological Laboratory has no desire for it to be a summer school, in the sense in which the phrase is often used. Though the Laboratory is most active, primarily in the summer, and though instruction is given during that season only, it is done to permit serious students to obtain training that they cannot procure at other seasons in other laboratories. The Laboratory is not interested in university credits *per se*. While it is willing to give certificates of accomplishment to students who have successfully completed the courses of instruction it offers, it demands that the students be interested primarily in biology.

There was a time when biological investigation and the training of investigators were rather simple procedures. The biological laboratory had only to be well situated, and to provide modest living and working accommoda-

tions for its members. This was true because biology was, at that time, a descriptive science. The biologist observed various living organisms in their natural environments, studied their life histories, described their associations, brought them to the workroom where they were studied and described in detail.

But biology has passed the purely descriptive stage. It has become analytical. The investigator now demands intricate apparatus, and chemical equipment. Buildings and collecting grounds are still necessary, but suitable apparatus is also essential.

It is our firm belief that the degree of dignity achieved by the laboratory in the community and at large, the utilization of its facilities by biologists of the first rank, indeed the value of the laboratory to science, the role it shall play in the development of biology, is directly dependent upon the equipment and funds which the Laboratory has at its disposal.

Numerous indications, including the results obtained by modest expenditures during the last few years, warrant the assumption that the Biological Laboratory is worthy of greater support. It seriously needs a substantially constructed research laboratory. Its equipment for the carrying on of biological investigation should be greatly increased before next summer. The men's dormitory should be completely refinished, and modern equipment should be installed in Blackford Hall.

Some of these needs can be met with modest outlays. Others will require the expenditure of considerable sums of money. All are essential to the welfare and productivity of the institution.

REPORT OF THE SECRETARY

(a) *Sixth meeting of the Board of Directors, August 1, 1925.* Officers of the Board elected as follows: President, T. S. Williams; Vice-President, Marshall Field; Secretary, Chas. B. Davenport; Treasurer, A. W. Page. Voted to expend \$1,200 to make improvements on old Lecture Hall.

(b) *Fifth Meeting of Executive Committee, Nov. 3, 1925.* Definite offer received from agent to sell land on west side of Harbor for \$80,000; and voted to offer \$500 to secure an option on this land.

(c) *Seventh Meeting of Board of Directors at New York City, Dec. 15th.* After the reading of a letter by Dr. James expressing his warm approval of the effort to acquire land, and the statement of Mr. Schiff that he favored exercising the option and that he would contribute further and would help raise the remaining money necessary to complete the purchase of the land, it was *Voted*, that the officers be instructed to accept the option to buy the Townsend Jones property and to do all necessary acts to carry into effect the purpose of this resolution. The Treasurer was directed to ask for payments of subscriptions. Col. H. L. Stimson of the Board, was asked to advise in legal matters regarding the purchase. Appointment of a committee was authorized to divide the land between the Long Island Biological Association and the Carnegie Institution of Washington. The Laboratory Director was instructed to investigate the cost of dredge and salt water apparatus and report to the Board. The Laboratory Director presented his Budget for 1926, totalling \$21,565, and this was approved. Dr. James' gift of a motor boat was accepted. The estate of Mary E. Jones was thanked for the use of their warehouse, long used as Research Laboratory. The treasurer's report was read, as published in the annual report of the Association.

On March 29, 1926, the title to 32.5 acres of land adjacent to the Laboratory was passed to the Long Island Biological Association. This was made possible by gifts of the following: Marshall Field, Wm. J. Matheson, Mortimer Schiff, and W. K. Vanderbilt, each \$10,000, total, \$40,000; Dr. James, \$5,000; Walter Jennings, \$4,250. All the preceding are Founders. Mrs. Otto H. Kahn, \$2,500; J. P. Morgan, \$2,000; Mrs. Willard Straight, \$1,100; Childs Frick, Mrs. T. S. Williams, and George D. Pratt, each \$1,000; Mr. and Mrs. Wilton Lloyd-Smith, \$550; and the following \$500 each: R. C. Leffingwell, Frank L. Babbott, Edward H. Floyd-Jones, Walter J. Whipple, William H. Nichols, Jr., Mrs. Walter Jennings, Mr. W. H. Erhart, Mrs. C. B. Davenport. All the preceding are Patrons; also 35 others contributed smaller amounts.

(d) *The Sixth Meeting of the Executive Committee* was held at the laboratory April 3, 1926. Upon announcement of the death of Mr. John H. J. Stewart, member of the Board, Dr. W. B. James was elected to fill vacancy thus made in the Executive Committee. Sundry payments by the Treasurer on account of the purchase of land were authorized.

(e) *The Seventh Meeting of the Executive Committee* was held in New York City, April 12th. It was announced that the Brooklyn Institute had repeated its gift of the income of \$5,000 from the Robert B. Woodward bequest. A resolution on the death of Mr. Stewart was passed. It was voted to put the matters of clearing the new land and making a topographic survey into the hands of a committee. Also a committee on buildings and grounds was appointed, Dr. James, Chairman. The building of a new laboratory was authorized, and the purchase of a salt water supply outfit ordered.

(f) *The Eighth Meeting of the Board of Directors* was held on June 25th. The Board gratefully accepted the offer of Dr. James to supply paint for parts of the interior of Blackford Hall; and of Mr. Arthur Page to donate subscriptions to 14 scientific periodicals and 8 semi-scientific and popular magazines; also minor gifts were reported and the donors thanked. The treasurer reported a balance on hand of \$1,097.88. A topographic survey of the land was ordered and the employment of Mr. Harold A. Caparn, landscape architect, to make a landscape plan of the new ground was authorized. Mr. Chas. M. Bleecker was elected a member of the Board to fill the vacancy caused by the death of Mr. Stewart. The receipt of \$5,000 from the bequest of Mrs. Eugene G. Blackford for the maintenance of Blackford Memorial was announced.

A gift of Mr. O. W. Rice of \$2,000 to establish the Dorothy Frances Rice scholarship in memory of a former student at the Laboratory has been received. This scholarship is to be applied, primarily, to a woman receiving instruction in botany.

C. B. DAVENPORT, *Secretary.*

At the meeting of the Board of Directors of Dec. 16, 1926, the resignation of Col. T. S. Williams, President of the Association, was presented. Dr. W. B. James was elected to succeed him. The following resolution was voted in recognition of Mr. Williams' services. That on the retirement of Mr. Timothy S. Williams from the Presidency of the Association, made necessary by the condition of his health, the Board of Directors of the Long Island Biological Association desires to express its hope for his early complete recovery, and its appreciation of the inestimable value of his

service in connection with the foundation and early growth of the Association. His initiative, legal insight, critical examination of all proposals, valuable suggestions, sound judgment, generous gifts at critical times have placed the Association, already under lasting obligations to him.

The membership of the Board of Directors was increased to twenty-four persons. The following were elected to the vacancies thus caused: Prof. Ross G. Harrison, Mr. Oliver B. James, Mr. Henry C. Taylor, and Mr. Willis D. Wood.

A budget for 1927 calling for expenditures of \$28,224, was voted.

TREASURER'S REPORT

EXHIBIT A

ASSETS

<i>I.—Endowment Fund Assets:</i>		
Securities in hands of Trustees*	\$22,500.00	
Woodward Memorial Fund*		
(Apportioned by Annual Grant)	5,000.00	
Mrs. Eugene Blackford Bequest*	5,000.00	
Temple Prime Scholarship Fund*	2,500.00	
Dorothy Rice Scholarship Fund	2,000.00	
		\$37,000.00
<i>II.—Plant Assets:</i>		
Land	\$66,000.00	
Land**	7,500.00	
Buildings	36,500.00	
Buildings**	32,500.00	
Equipment	9,050.00	
		\$151,550.00
<i>III.—Current Assets:</i>		
Cash Bankers Trust Co.	\$2,048.75	
Bank of Huntington	12.64	
Petty Cash	9.92	
		2,071.31
Accounts Receivable	1,407.84	1,407.84
		\$192,029.15

* Brooklyn Institute of Arts and Sciences.

** Waweplex Society

I and II of Exhibit A are partly made up of informal estimates.

EXHIBIT A

LIABILITIES

<i>I.—Endowment Funds:</i>		
Brooklyn Institute of Arts and Sciences	\$35,000.00	
Dorothy Rice Fund	2,000.00	
		\$37,000.00
<i>II.—Plant:</i>		
Long Island Biological Association	\$85,550.00	
Waweplex Society	40,000.00	
Brooklyn Institute of Arts and Sciences	22,000.00	
Building Fund Loan	4,000.00	
		\$151,000.00
<i>III.—Accounts Payable</i>		
		173.30
Balance of Income for year—Exhibit B	\$2,071.31	
Balance Accounts Receivable over		
Accounts Payable	1,234.54	
		\$3,305.85
		\$192,029.15

EXHIBIT B
CURRENT EXPENDITURE ACCOUNT

Collections:

Balance Dec. 1, 1925.....		\$4,308.61
Endowment Interest.....	\$1,636.26	
Bank Interest.....	213.53	
Contributions—Wawepex	1,500.00	
Others	7,592.00	
Tuition Fees.....	4,180.00	
Rentals	2,336.78	
Dining Hall.....	5,949.69	
Storeroom	301.68	
Woman's Auxiliary.....	5.00	
Miscellaneous	365.00	
		\$24,079.94
Loan—Bank of Huntington.....		4,000.00
		32,388.55

Disbursements:

Salaries	\$10,338.95*	
Salaries of Instructors.....	3,485.00	
Equipment	5,445.97	
Dining Hall.....	5,943.42	
Repairs, Supplies, Expenses.....	2,618.75	
Storeroom	273.19	
Biological Supplies.....	137.03	
Special	684.72	
Interest on Loan.....	121.33	
Insurance, Surveyors' and Architects' Fees..	1,476.75	
		\$30,525.11
Balance Current Expenditure Account		1,863.44
		\$32,388.55

Current Expenditure Account Balance.....	\$1,863.44	
Temple Prime Account Balance Cash.....	56.73	
Dorothy Frances Rice Fund, Balance Cash.....	60.00	
Land Fund.....	91.14	
Balance	\$2,071.31	

* Including wages of workmen on new building.

EXHIBIT C.
TEMPLE PRIME ACCOUNT

Balance 1925.....	\$69.25	
Interest on Fund.....	137.48	
	206.73	
Disbursements	150.00	
Balance		\$56.73

DOROTHY FRANCES RICE FUND

Interest on Fund (6 mos.)	\$60.00	
Balance		\$60.00

FUND FOR THE PURCHASE OF LAND

Balance 1925	\$5,469.00	
Contributions	50,204.34	
Disbursements	\$55,673.34	
	55,582.20	
Balance		\$91.14

ARTHUR W. PAGE, *Treasurer,*

FRED CURRAN, *Accountant.*

THE LABORATORY STAFF

- REGINALD G. HARRIS.....Director, Biological Laboratory
Experimental Zoology
- H. E. WALTER,* Assistant Director, Professor Biology, Brown University
Field Zoology
- HENRY SHERRING PRATT.....Professor of Biology, Haverford College
Comparative Anatomy
- HOWARD M. PARSHLEY.....Professor of Zoology, Smith College
Field Zoology
- WILBUR W. SWINGLE, Assistant Professor of Zoology, Yale University
Endocrine Biology, Experimental Surgery
- NORMAN M. GRIER, Assistant Professor of Evolution, Dartmouth College
Systematic and Field Botany
- ASA A. SCHAEFFER.....Professor of Zoology, University of Kansas
Experimental Protozoology
- GEORGE F. SYKES, Assistant Professor of Anatomy, Tufts Medical College
Associate in Field Zoology
- J. S. NICHOLAS, Assistant Professor of Anatomy, University of Pittsburgh
Assistant in Comparative Anatomy and Experimental Surgery
- J. M. ANDREWS, Instructor in Protozoology, Johns Hopkins University
Chemical Supplies, Assistant in Experimental Surgery
- ROY A. WAGGENER.....Instructor in Biology, Brown University
Assistant in Field Zoology
- EVERETT C. MYERS.....Instructor in Zoology, Johns Hopkins University
Assistant in Field Zoology
- MYRON GORDON.....Heckscher Research Assistant, Cornell University
Assistant in Field Zoology
- F. K. SPARROW.....Harvard University
Assistant in Systematic and Field Botany
- CHARLES B. DAVENPORT, Director Department of Genetics, Carnegie Inst'n
Lecturer
- CATHARINE R. BROWNLibrarian
- DOROTHY NEWMAN.....Technical Assistant
- THOMAS WHEELERCollector and Caretaker

The Staff of the Department of Genetics, Carnegie Institution of Washington, contributes to the scientific life of the Biological Laboratory by occasional lectures and demonstrations and by voluntary co-operation with investigators.

* Resigned.

Persons Matriculated at the Laboratory in 1926

Name	Registration	Institution	Graduate or Undergraduate
Charles E. Abromavich	E. S.	Johns Hopkins	Undergraduate
Fred W. Allen	R.	Kansas	Graduate
P. L. Bailey, Jr.	F. Z.	Brown	Graduate
A. Dorothy Bergner	R.	Goucher and Columbia	Graduate
Charles M. Boucek	R.	University of Pittsburgh	Graduate
G. W. Bradt	F. Z.	Michigan State	Graduate
Arthur H. Bulbulian	E. S.	Middlebury	Graduate-Instr.
J. Jefferson Carlin	F. Z.	Washington and Jefferson	Undergraduate
Marion Collins	E. & F. Z.	Mount Holyoke	Undergraduate
Eleanor G. Connell	F. B.	Smith	Undergraduate
John G. Cook	F. Z.	Dartmouth	Undergraduate
Frances M. DeBone	R.	University of Pittsburgh	Graduate
Clara Dettmer	F. Z.	Elmira	Graduate
Charlotte Dill	E. & F. Z.	Adelphi	Undergraduate
F. E. Dugdale	C. A.	Dartmouth	Undergraduate
Inez Dunkleberger	E. & R.	Kansas	Graduate
Henry C. Evans	F. Z.	Haverford	Graduate
Margaret Fairbairn	F. Z.	Wellesley	Undergraduate
Dolores J. Fay	F. B.	Mount Holyoke	Graduate
Wendell Gingrich	E. S.	North-Western	Graduate
Sally Hamilton	F. Z.	Elmira	Undergraduate
Christine N. Hardy	F. Z.	Bucknell	Graduate
LeRoy K. Henry	F. Z.	University of Pittsburgh	Undergraduate
Grace L. Holmes	F. Z.	Adelphi	Graduate
W. S. Hsu	R.	Harvard	Graduate
Madeleine Jouard	E. & F. Z.		
Anna Kaufman	F. B.	Hunter	Graduate
Vera Kenney	E. & F. Z.	Wellesley	Graduate
Clara L. Ketcham	F. Z.	Hunter & New York Univ.	Graduate
Martha Lachman	E. & F. Z.	University of Pittsburgh	Undergraduate
Eleanor Leach	F. Z.	Wellesley	Undergraduate
V. Earl Light	E. F. Z.	Lebanon Valley	Graduate-Instr.
William S. Lord	F. Z.	Dartmouth	Undergraduate
Richard J. Lougee	F. Z.	Dartmouth	Undergraduate
Mary Elinor McKelvey			
	E. & F. Z.	University of Pittsburgh	Undergraduate
Jessie L. Metcalf	E. & F. Z.	University of Michigan	Graduate
Eleanor Millikin	F. Z.	Wellesley	Undergraduate
Elizabeth Morse	E. S.	Brown	Graduate
Arthur Nash	F. Z.	University of Minnesota	Graduate
Evelyn Oberlin	F. B.	University of Pittsburgh	Graduate
Esther G. Perham	F. Z.	Brown	Undergraduate
Lillian A. Phelps	R.	Kansas University; Cornell	Graduate
E. Munroe Raymond	F. B.	Dartmouth	Undergraduate
Dorothy Richardson	E. & E. S.	Mount Holyoke	Graduate
Clara Rozenzweig	F. B.	Maxwell Training	Graduate
Elizabeth Sanders	R.	Goucher, Johns Hopkins	Graduate

Name	Registration	Institution	Graduate or Undergraduate
Victor Schecter	E. & F. Z.	City College of New York	Undergraduate
Eunice Sharp	E. & R.	Brown	Graduate
Mary Shirley	R.	University of Minnesota	Graduate
Harold S. Simonds	F. Z.	Dartmouth	Undergraduate
Christiana Smith	E. & R.	Mount Holyoke	Professor
Phyllis Stanley	E. & E. S.	Brown	Graduate
William F. Storms	F. Z.	Brown	Graduate
H. P. Sturdivant, Jr.	F. Z.	Emory	Instructor
Aubrey B. Taylor	F. Z.	Brown	Undergraduate
Lurana C. Van Doren	F. Z.	George Washington	Graduate
Marie Wallfield	F. Z.	Barnard	Graduate
William F. Wenner	R.	Yale	Graduate
E. Grace White	E. & E. S.	Mt. Holyoke, Columbia	Professor
Clay E. Wilt	F. Z.	Michigan State	Graduate
Raymond L. Zwemer	R.	Yale, Harvard	National Research Council Fellow

