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I. TRUSTEES

EX OFFICIO

FRANK R. LILLIE, President Emeritus of the Corporation, The University of Chicago
LAWRASON RIGGS, President of the Corporation, 120 Broadway, New York City
E. NEWTON HARVEY, Vice President of the Corporation, Princeton University
CHARLES PACKARD, Director, Marine Biological Laboratory
OTTO C. GLASER, Clerk of the Corporation, Amherst College
DONALD M. BRODIE, Treasurer, 522 Fifth Avenue, New York City

EMERITUS

E. G. CONKLIN, Princeton University
B. M. DUGGAR, University of Wisconsin
W. E. GARREY, Vanderbilt University
CASWELL GRAVE, Washington University
R. A. HARPER, Columbia University
ROSS G. HARRISON, Yale University
H. S. JENNINGS, University of California
C. E. McClung, University of Pennsylvania
S. O. Mast, Johns Hopkins University
A. F. Mathews, University of Cincinnati
T. H. Morgan, California Institute of Technology
W. J. V. Osterhout, Rockefeller Institute
G. H. Parker, Harvard University
W. B. Scott, Princeton University

TO SERVE UNTIL 1947

W. C. Allee, The University of Chicago
G. H. A. Clowes, Lilly Research Laboratory
P. S. Galtsoff, U. S. Fish and Wild Life Service
L. V. Heilbrunn, University of Pennsylvania
Laurence Irving, Swarthmore College
J. H. Northrop, Rockefeller Institute
A. H. Sturtevant, California Institute of Technology
Lorande L. Woodruff, Yale University

DUGALD E. S. BROWN, New York University
E. R. Clark, University of Pennsylvania
Otto C. Glaser, Amherst College
E. N. Harvey, Princeton University
M. H. Jacobs, University of Pennsylvania
F. P. Knowlton, Syracuse University
Franz Schrader, Columbia University
B. H. Willier, Johns Hopkins University

TO SERVE UNTIL 1946

W. R. Amberston, University of Maryland School of Medicine
S. C. Brooks, University of California
W. C. Curtis, University of Missouri
H. B. Goodrich, Wesleyan University
I. F. Lewis, University of Virginia
R. S. Lillie, The University of Chicago
A. C. Redfield, Harvard University
C. C. Speidel, University of Virginia

TO SERVE UNTIL 1945

Eric G. Ball, Harvard University Medical School
R. Chambers, Washington Square College, New York University
Eugene F. DuBois, Cornell University Medical College
Columbus Iselin, Woods Hole Oceanographic Institution
C. W. Metz, University of Pennsylvania
H. H. Plough, Amherst College
E. W. Sinnott, Yale University
W. R. Taylor, University of Michigan

EXECUTIVE COMMITTEE OF THE BOARD OF TRUSTEES

Lawrason Riggs, Ex officio, Chairman
E. N. Harvey, Ex officio
ACT OF INCORPORATION

D. M. Brodie, Ex officio
Charles Packard, Ex officio
E. G. Ball, to serve until 1945
Robert Chambers, to serve until 1945
C. W. Metz, to serve until 1944
Otto C. Glaser, to serve until 1944

THE LIBRARY COMMITTEE
A. C. Redfield, Chairman
E. G. Ball
S. C. Brooks
M. E. KrahI
J. W. Mayor

THE APPARATUS COMMITTEE
D. E. S. Brown, Chairman
C. L. Claff
G. Failla
S. E. Hill
A. K. Parpart

THE SUPPLY DEPARTMENT COMMITTEE
L. G. Barth, Chairman
E. G. Ball
P. S. Galtsoff
R. T. Kempton
D. A. Marsland

THE EVENING LECTURE COMMITTEE
B. H. Willier, Chairman
M. H. Jacobs
Charles Packard

THE INSTRUCTION COMMITTEE
H. B. Goodrich, Chairman
W. C. Allee
S. C. Brooks
Viktor Hamburger
Charles Packard

II. ACT OF INCORPORATION

No. 3170

COMMONWEALTH OF MASSACHUSETTS

Be It Known, That whereas Alpheus Hyatt, William Sanford Stevens, William T. Sedgwick, Edward G. Gardiner, Susan Minns, Charles Sedgwick Minot, Samuel Wells, William G. Farlow, Anna D. Phillips and B. H. Van Vleck have associated themselves with the intention of forming a Corporation under the name of the Marine Biological Laboratory, for the purpose of establishing and maintaining a laboratory or station for scientific study and investigation, and a school for instruction in biology and natural history, and have complied with the provisions of the statutes of this Commonwealth in such case made and provided, as appears from the certificate of the President, Treasurer, and Trustees of said Corporation, duly approved by the Commissioner of Corporations, and recorded in this office;
Now, therefore, I, HENRY B. PIERCE, Secretary of the Commonwealth of Massachusetts, do hereby certify that said A. Hyatt, W. S. Stevens, W. T. Sedgwick, E. G. Gardiner, S. Minns, C. S. Minot, S. Wells, W. G. Farlow, A. D. Phillips, and B. H. Van Vleck, their associates and successors, are legally organized and established as, and are hereby made, an existing Corporation, under the name of the MARINE BIOLOGICAL LABORATORY, with the powers, rights, and privileges, and subject to the limitations, duties, and restrictions, which by law appertain thereto.

Witness my official signature hereunto subscribed, and the seal of the Commonwealth of Massachusetts hereunto affixed, this twentieth day of March, in the year of our Lord One Thousand Eight Hundred and Eighty-Eight.

HENRY B. PIERCE,
Secretary of the Commonwealth.

III. BY-LAWS OF THE CORPORATION OF THE MARINE BIOLOGICAL LABORATORY

I. The members of the Corporation shall consist of persons elected by the Board of Trustees.

II. The officers of the Corporation shall consist of a President, Vice President, Director, Treasurer, and Clerk.

III. The Annual Meeting of the members shall be held on the second Tuesday in August in each year, at the Laboratory in Woods Hole, Massachusetts, at 11:30 A.M., and at such meeting the members shall choose by ballot a Treasurer and a Clerk to serve one year, and eight Trustees to serve four years, and shall transact such other business as may properly come before the meeting. Special meetings of the members may be called by the Trustees to be held at such time and place as may be designated.

IV. Twenty-five members shall constitute a quorum at any meeting.

V. Any member in good standing may vote at any meeting, either in person or by proxy duly executed.

VI. Inasmuch as the time and place of the Annual Meeting of members are fixed by these By-laws, no notice of the Annual Meeting need be given. Notice of any special meeting of members, however, shall be given by the Clerk by mailing notice of the time and place and purpose of such meeting, at least fifteen (15) days before such meeting, to each member at his or her address as shown on the records of the Corporation.

VII. The Annual Meeting of the Trustees shall be held on the second Tuesday in August in each year, at the Laboratory in Woods Hole, Mass., at 10 A.M. Special meetings of the Trustees shall be called by the President, or by any seven Trustees, to be held at such time and place as may be designated, and the Secretary shall give notice thereof by written or printed notice, mailed to each Trustee at his address as shown on the records of the Corporation, at least one (1) week before the meeting. At such special meeting only matters stated in the notice shall be considered. Seven Trustees of those eligible to vote shall constitute a quorum for the transaction of business at any meeting.

VIII. There shall be three groups of Trustees:

(A) Thirty-two Trustees chosen by the Corporation, divided into four classes, each to serve four years; and in addition there shall be two groups of Trustees as follows:

(B) Trustees ex officio, who shall be the President and Vice President of the Corporation, the Director of the Laboratory, the Associate Director, the Treasurer, and the Clerk;

(C) Trustees Emeritus, who shall be elected from the Trustees by the Corporation.

Any regular Trustee who has attained the age of seventy years shall continue to serve as Trustee until the next Annual Meeting of the Corporation, whereupon his office as
regular Trustee shall become vacant and be filled by election by the Corporation and he shall become eligible for election as Trustee Emeritus for life. The Trustees ex officio and Emeritus shall have all the rights of the Trustees except that Trustees Emeritus shall not have the right to vote.

The Trustees and officers shall hold their respective offices until their successors are chosen and have qualified in their stead.

IX. The Trustees shall have the control and management of the affairs of the Corporation; they shall elect a President of the Corporation who shall also be Chairman of the Board of Trustees; and shall also elect a Vice President of the Corporation who shall also be the Vice Chairman of the Board of Trustees; they shall appoint a Director of the Laboratory; and they may choose such other officers and agents as they may think best; they may fix the compensation and define the duties of all the officers and agents; and may remove them, or any of them, except those chosen by the members, at any time; they may fill vacancies occurring in any manner in their own number or in any of the offices. The Board of Trustees shall have the power to choose an Executive Committee from their own number, and to delegate to such Committee such of their own powers as they may deem expedient. They shall from time to time elect members to the Corporation upon such terms and conditions as they may think best.

X. The consent of every Trustee shall be necessary to dissolution of the Marine Biological Laboratory. In case of dissolution, the property shall be disposed of in such manner and upon such terms as shall be determined by the affirmative vote of two-thirds of the Board of Trustees.

XI. The accounts of the Treasurer shall be audited annually by a certified public accountant.

XII. These By-laws may be altered at any meeting of the Trustees, provided that the notice of such meeting shall state that an alteration of the By-laws will be acted upon.

IV. THE REPORT OF THE TREASURER

To THE TRUSTEES OF THE MARINE BIOLOGICAL LABORATORY:

Gentlemen:

Herewith is my report as Treasurer of the Marine Biological Laboratory for the year 1943.

The accounts have been audited by Messrs. Seamans, Stetson and Tuttle, certified public accountants. A copy of their report is on file at the Laboratory and inspection of it by members of the Corporation will be welcomed.

The principal summaries of their report—The Balance Sheet, Statement of Income and Expense, and Current Surplus Account—are appended hereto as Exhibits A, B and C.

The following are some general statements and observations based on the detailed reports:

I. Assets

1. Endowment Assets

As of December 31, 1943, the total of all the Endowment Assets was $1,003,708.63, a loss of $68,282.27 from the total for the preceding year. This substantial loss was due almost entirely to the sales of three New York City real estate holdings on which the Laboratory Trust Funds with the Central Hanover Bank and Trust Company had first mortgage participations. The three properties sold were a 15-story office building at 89 Madison Avenue, a 7-story loft building at 25 Spruce...
Street, and an apartment house at 127 West 79th Street. The Laboratory's total investment in the three mortgages was $98,315.24; from the foreclosures and sales the Laboratory received $16,827.70 cash and new mortgages for $16,251.81; the total capital loss was thus $65,235.73.

During 1943 the market values of the Laboratory's securities, except for the mortgage and real estate participations, made a substantial gain. As of December 31, the totals of government and corporate bonds, common and preferred stock holdings were $754,904.23 book or cost value, with a market value of $750,286.38.

The total of mortgage and real estate participations was $219,719.95 book value, approximately 22 per cent of the total. There are no market quotations for these securities, but in view of the loss of over 60 per cent of the cost of the three real estate holdings sold last year, the generally deteriorating position of New York City property, and the difficulties now besetting some of the other 16 mortgages in which the Laboratory has participations (one of them has already been foreclosed) it would be unwise to estimate their actual value at much more than 50 per cent of cost, or about $110,000. The actual value of the Endowment Funds including uninvested cash of $29,084.45, would thus be approximately $889,370.83.

2. Plant Assets

The total of Plant Assets (excluding the Gansett and Devil's Lane Tracts) was $1,341,425.88 after deduction of $633,901.42 accumulated Depreciation Reserve, a decrease of $16,336.11. During the year, depreciation charges deducted amounted to $26,969.11. The Reserve Fund was increased by $8,998.71 cash transferred from current income, representing profits on sale of Gansett lots, and a portion of the dividends received on the General Biological Supply House and Crane Company stocks.

3. Current Assets

Current Assets including cash, inventories and investments not in the Endowment Funds, amounted to $194,111.69, an increase of $29,442.67. Current Liabilities were only $3,251.25. After the setting up of a special reserve of $2,358.34 for repairs and replacements on the properties leased by the Navy, the total of Current Surplus was $188,502.10, an increase of $28,829.33 over 1942.

II. Income and Expenditures.

Total Income was $159,296.94, an increase of $13,227.18 over the preceding year. Total Expenses, including the $26,969.11 added to Depreciation Reserves, were only $139,973.27 compared with $159,296.94, so that for 1943 there was an actual net operating surplus of $19,323.67 in gratifying contrast with the deficit of $17,211.93 for 1942.

This excess of income over expenditures is due to a number of factors. One was the $20,150.00 received or accrued as rentals from the United States Navy. Not all of this total was a clear increase, of course, as normal income from the leased properties was eliminated, but at least a portion of it represented increased income which will not again be available. Income from the General and Library Endowment Funds reversed the recent downward trend and rose slightly to $36,610.98. More substantial gains over 1942 were shown in the income from the Supply Department which gave a profit of $14,436.21 compared with the 1942 deficit of $1,699.08 on only a slightly increased volume of sales, and in the dividends
from the General Biological Supply House stock which were $18,796.00 as against $10,922.00.

Even more important than the increases in income were the careful reductions in expenditures made by the Laboratory Administration. Maintenance expenses were still further cut in nearly every department, and purchases and improvements were kept at a minimum to an extent that would be impossible under normal operating conditions.

Both income and expense totals must therefore be regarded as abnormal because of the special circumstances prevailing in the year 1943.

EXHIBIT A

MARINE BIOLOGICAL LABORATORY BALANCE SHEET, DECEMBER 31, 1943

*Assets*

<table>
<thead>
<tr>
<th>Endowment Assets and Equities:</th>
<th>$1,003,708.63</th>
</tr>
</thead>
<tbody>
<tr>
<td>Securities and Cash in Hands of Central Hanover Bank and Trust Company, New York, Trustee</td>
<td>$993,773.34</td>
</tr>
<tr>
<td>Securities and Cash in Minor Funds</td>
<td>9,935.29</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Plant Assets:</th>
<th>$1,341,425.88</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>$111,425.38</td>
</tr>
<tr>
<td>Buildings</td>
<td>1,322,348.21</td>
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<tr>
<td>Equipment</td>
<td>185,890.98</td>
</tr>
<tr>
<td>Library</td>
<td>321,626.42</td>
</tr>
</tbody>
</table>

Less Reserve for Depreciation | $1,307,389.57 |

<table>
<thead>
<tr>
<th>Current Assets:</th>
<th>$194,111.69</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$23,312.61</td>
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<tr>
<td>Accounts Receivable</td>
<td>12,217.19</td>
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<tr>
<td>Inventories:</td>
<td></td>
</tr>
<tr>
<td>Supply Department</td>
<td>$42,826.62</td>
</tr>
<tr>
<td>Biological Bulletin</td>
<td>17,971.16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Investments:</th>
<th>$92,374.63</th>
</tr>
</thead>
<tbody>
<tr>
<td>Devil's Lane Property</td>
<td>$45,967.76</td>
</tr>
<tr>
<td>Gansett Property</td>
<td>2,694.70</td>
</tr>
<tr>
<td>Stock in General Biological Supply House, Inc.</td>
<td>12,700.00</td>
</tr>
<tr>
<td>Other Investment Stocks</td>
<td>17,770.00</td>
</tr>
<tr>
<td>Retirement Fund</td>
<td>13,242.17</td>
</tr>
</tbody>
</table>

| Prepaid Insurance | 4,928.83 |
| Items in Suspense | 480.65 |

Total Assets | $2,539,246.20 |
### EXHIBIT B

**MARINE BIOLOGICAL LABORATORY INCOME AND EXPENSE,**
**YEAR ENDED DECEMBER 31, 1943**

<table>
<thead>
<tr>
<th>Income:</th>
<th>Total Net Income</th>
<th>Expense</th>
<th>Income</th>
<th>Expense</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Endowment Fund</td>
<td>$29,310.84</td>
<td>$29,310.84</td>
<td>$29,310.84</td>
<td>$29,310.84</td>
<td></td>
</tr>
<tr>
<td>Library Fund</td>
<td>7,300.14</td>
<td>7,300.14</td>
<td>7,300.14</td>
<td>7,300.14</td>
<td></td>
</tr>
<tr>
<td>Instruction</td>
<td>$6,598.09</td>
<td>5,085.00</td>
<td>$1,513.09</td>
<td>$1,513.09</td>
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</tr>
<tr>
<td>Research</td>
<td>4,488.30</td>
<td>8,662.50</td>
<td>4,174.20</td>
<td>4,174.20</td>
<td></td>
</tr>
<tr>
<td>Evening Lectures</td>
<td>25.00</td>
<td>25.00</td>
<td>25.00</td>
<td>25.00</td>
<td></td>
</tr>
<tr>
<td>Biological Bulletin and Membership Dues</td>
<td>5,292.02</td>
<td>6,859.33</td>
<td>1,567.31</td>
<td>1,567.31</td>
<td></td>
</tr>
<tr>
<td>Supply Department</td>
<td>27,215.89</td>
<td>41,652.10</td>
<td>14,436.21</td>
<td>14,436.21</td>
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</tr>
<tr>
<td>Mess</td>
<td>17,237.17</td>
<td>19,093.67</td>
<td>1,856.50</td>
<td>1,856.50</td>
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<tr>
<td>Dormitories</td>
<td>22,605.46</td>
<td>15,439.65</td>
<td>7,165.81</td>
<td>7,165.81</td>
<td></td>
</tr>
<tr>
<td>(Interest and Depreciation charged to above 3 Department)</td>
<td>24,866.25</td>
<td>24,866.25</td>
<td>24,866.25</td>
<td>24,866.25</td>
<td></td>
</tr>
<tr>
<td>Dividends, General Biological Supply House, Inc.</td>
<td>18,796.00</td>
<td>18,796.00</td>
<td>18,796.00</td>
<td>18,796.00</td>
<td></td>
</tr>
<tr>
<td>Dividends, Crane Company</td>
<td>500.00</td>
<td>500.00</td>
<td>500.00</td>
<td>500.00</td>
<td></td>
</tr>
<tr>
<td>Rents:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bar Neck Property</td>
<td>717.77</td>
<td>3,600.00</td>
<td>2,882.23</td>
<td>2,882.23</td>
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<tr>
<td>Janitor House</td>
<td>29.17</td>
<td>360.00</td>
<td>330.83</td>
<td>330.83</td>
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</tr>
<tr>
<td>Danchakoff Cottages</td>
<td>267.47</td>
<td>300.00</td>
<td>32.53</td>
<td>32.53</td>
<td></td>
</tr>
<tr>
<td>Lecture Hall and Botany building</td>
<td>999.96</td>
<td>999.96</td>
<td>999.96</td>
<td>999.96</td>
<td></td>
</tr>
<tr>
<td>Rooms in Laboratory, Special</td>
<td>245.00</td>
<td>245.00</td>
<td>245.00</td>
<td>245.00</td>
<td></td>
</tr>
<tr>
<td>Sale of Library Duplicates and Micro Films</td>
<td>446.14</td>
<td>446.14</td>
<td>446.14</td>
<td>446.14</td>
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</tr>
<tr>
<td>Microscope and Apparatus Rental</td>
<td>613.55</td>
<td>613.55</td>
<td>613.55</td>
<td>613.55</td>
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</tr>
<tr>
<td>Sundry Income</td>
<td>33.06</td>
<td>33.06</td>
<td>33.06</td>
<td>33.06</td>
<td></td>
</tr>
<tr>
<td>Maintenance of Plant:</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buildings and Grounds</td>
<td>19,529.79</td>
<td>19,529.79</td>
<td>19,529.79</td>
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</tr>
<tr>
<td>Apparatus Department</td>
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<td>4,683.32</td>
<td>4,683.32</td>
<td>4,683.32</td>
<td></td>
</tr>
<tr>
<td>Chemical Department</td>
<td>1,588.86</td>
<td>1,588.86</td>
<td>1,588.86</td>
<td>1,588.86</td>
<td></td>
</tr>
<tr>
<td>Library Expense</td>
<td>6,463.00</td>
<td>6,463.00</td>
<td>6,463.00</td>
<td>6,463.00</td>
<td></td>
</tr>
<tr>
<td>Workmen's Compensation Insurance</td>
<td>429.53</td>
<td>429.53</td>
<td>429.53</td>
<td>429.53</td>
<td></td>
</tr>
<tr>
<td>Truck Expense</td>
<td>152.22</td>
<td>152.22</td>
<td>152.22</td>
<td>152.22</td>
<td></td>
</tr>
<tr>
<td>Bay Shore Property</td>
<td>86.84</td>
<td>86.84</td>
<td>86.84</td>
<td>86.84</td>
<td></td>
</tr>
<tr>
<td>Great Cedar Swamp</td>
<td>17.10</td>
<td>17.10</td>
<td>17.10</td>
<td>17.10</td>
<td></td>
</tr>
</tbody>
</table>
### REPORT OF THE TREASURER

General Expenses:
- Administration Expense: $14,386.77
- Endowment Fund Trustee and Safe-keeping: $1,014.45
- Bad Debts: $720.29
- Special Repairs, Supply Dept. Stone Building: $1,963.56
- Reserve for Repairs and Replacements, Buildings occupied by Navy: $2,358.34
- Reserve for Depreciation: $26,969.11

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration Expense</td>
<td>$14,386.77</td>
</tr>
<tr>
<td>Endowment Fund Trustee and Safe-keeping</td>
<td>$1,014.45</td>
</tr>
<tr>
<td>Bad Debts</td>
<td>$720.29</td>
</tr>
<tr>
<td>Special Repairs, Supply Dept. Stone Building</td>
<td>$1,963.56</td>
</tr>
<tr>
<td>Reserve for Repairs and Replacements</td>
<td>$2,358.34</td>
</tr>
<tr>
<td>Reserve for Depreciation</td>
<td>$26,969.11</td>
</tr>
</tbody>
</table>

Excess of Income over Expense carried to Current Surplus: $19,323.67

**Total General Expenses:** $139,973.27
**Excess of Income over Expense:** $19,323.67
**Current Surplus:** $159,296.94

**Respectfully submitted,**

Donald M. Brodie,  
Treasurer

### EXHIBIT C

**MARINE BIOLOGICAL LABORATORY, CURRENT SURPLUS ACCOUNT, YEAR ENDED DECEMBER 31, 1943**

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance, January 1, 1943</td>
<td>$159,672.77</td>
</tr>
<tr>
<td>Add:</td>
<td></td>
</tr>
<tr>
<td>Excess of Income over Expense</td>
<td>$19,323.67</td>
</tr>
<tr>
<td>Gain on Gansett Lots Sold</td>
<td>279.41</td>
</tr>
<tr>
<td>Bad Debt Recovered</td>
<td>.90</td>
</tr>
<tr>
<td>Transfer of Biological Bulletins, held at Lancaster Press for Uncompleted Serial Exchanges, 1940, 1941, and 1942 from Plant Account, Library to Biological Bulletin Inventory</td>
<td>2,552.50</td>
</tr>
<tr>
<td>Reserve for Depreciation charged to Plant Funds</td>
<td>26,969.11</td>
</tr>
</tbody>
</table>

**Total Additions:** 49,125.59
**Balance, December 31, 1943:** $188,502.10

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td>Deduct:</td>
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</tr>
<tr>
<td>Payments from Current Funds during Year for Plant Assets:</td>
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</tr>
<tr>
<td>Buildings</td>
<td>$2,460.20</td>
</tr>
<tr>
<td>Equipment</td>
<td>984.64</td>
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<tr>
<td>Library</td>
<td>4,583.95</td>
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<tr>
<td></td>
<td>$8,028.79</td>
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<tr>
<td>Less Received for Plant Assets Sold</td>
<td>140.00</td>
</tr>
<tr>
<td>Pensions Paid</td>
<td>3,460.00</td>
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<tr>
<td>Loss on Retirement Fund Securities</td>
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<td>$3,641.48</td>
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<tr>
<td>Less Retirement Fund Income</td>
<td>232.72</td>
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<tr>
<td>Transfers to Reserve Fund, Portion of Dividends of Prior Years from General Biological Supply House, Inc. and Crane Company</td>
<td>8,500.00</td>
</tr>
<tr>
<td>Profit on Gansett Lots for 1941 and 1942</td>
<td>498.71</td>
</tr>
<tr>
<td></td>
<td>8,998.71</td>
</tr>
<tr>
<td></td>
<td>20,296.26</td>
</tr>
</tbody>
</table>

**Total Deductions:** $208,798.36

**Balance, December 31, 1943:** $188,502.10

Respectfully submitted,

Donald M. Brodie,  
Treasurer
V. REPORT OF THE LIBRARIAN

The librarian's report for 1942 gave a detailed account of the readjustments that the library has gradually made to changes of the past few years in the budget, in the receipt of European and Asiatic current journals and in the available market for purchases of "back sets." It is not necessary this year to comment on these adjustments except to state that definite effort has been made to renew exchange relationship with Russia, China and India and with the limited success that was anticipated. There should be some results to report for this in 1944-45, depending, of course, on the circumstances of the war.

The budget of $12,200 for 1943 was expended as follows: books, $314.33; serials, $1871.51; binding, $645.41; express, $64.29; supplies, $202.91; salaries, $7200.00; back sets, $815.77; sundries, $3.07; and insurance, $45.00; total, $11,162.29. The sale of duplicates brought in this year $214.03; and the income from the microfilm service amounted to $221.33, 99 orders having been filled.

From the "Carnegie Fund" $1745.92 was expended on two completed and 14 partially completed "back sets" and three books that are designated as "classics."

The Woods Hole Oceanographic Institution appropriated $1850.00 for 1943 and a balance of $70.11 remained from the 1942 budget. An expended sum of $1657.03 has been reported to the Director. A balance of $263.08 was carried on to the year 1944.

During 1943 the library received 645 current journals: 232 (10 new) by subscriptions to the Marine Biological Laboratory; 15 (none new) to the Woods Hole Oceanographic Institution; exchanges, 191 (two new) with the "Biological Bulletin" and 22 (six new) with the Woods Hole Oceanographic Institution publications; 181 as gifts to the former and four to the latter. The Marine Biological Laboratory acquired 113 books: 47 by purchase of the Marine Biological Laboratory (three "classics"); 11 by purchase of the Woods Hole Oceanographic Institution; 12 gifts from the authors, 19 from the publishers, 10 from Mr. John Crane, three standard medical books from Lt. F. G. Hirsch which came from his father's library, and 11 as miscellaneous gifts. There were 20 back sets of serial publications completed: five, purchased by the Marine Biological Laboratory (two with "Carnegie Fund"); three, by the Woods Hole Oceanographic Institution; one secured by exchange with the "Biological Bulletin"; five by exchange with the Woods Hole Oceanographic publications; one as a gift from Lt. F. G. Hirsch; and five secured by duplicate material exchange and by gift. Partially completed sets were 50: purchased by the Marine Biological Laboratory, 23 (14 with "Carnegie Fund"); three by the Woods Hole Oceanographic Institution; by exchange of the "Biological Bulletin," none; by exchange of the Woods Hole Oceanographic Institution publications, three; by gift and by exchange of duplicate material, 21.

The reprint additions to the library number 7927: current of 1941, 933; current of 1942, 1471; current of 1943, 381; and of previous dates, 5142. A total of 981 reprints, 296 not duplicates of our holdings, were presented to the library: 396 by Dr. H. E. Crampton; 63 by Dr. H. S. Hopkins; and 522 by Dr. Libbie H. Hyman.

At the end of the year 1943 the library contained 51,945 bound volumes and 130,650 reprints.
REPORT OF THE DIRECTOR

VI. THE REPORT OF THE DIRECTOR

To THE TRUSTEES OF THE MARINE BIOLOGICAL LABORATORY:

Gentlemen:

I beg to submit herewith a report of the fifty-sixth session of the Marine Biological Laboratory for the year 1943.

1. Research

During the past year research and instruction have gone on as usual, but the exigencies of war teaching and war research, and the draft have cut deeply into our attendance. There were 108 investigators as compared with an average of 366 in the five years preceding the war. The number of Library readers was somewhat larger than before. In most cases, the length of stay at the Laboratory was shorter than in normal years. The Friday Evening Lectures were continued as usual, but no seminars were held, nor was there a general scientific meeting at the end of the season. Research directly connected with the war was directed by Drs. D. E. S. Brown, Clowes, Heilbrunn, and Jacobs. Other projects were sponsored by the Oceanographic Institution, the Massachusetts General Hospital, and by the Bell Telephone Laboratories. During the Spring of 1944, a number of investigators from the Oceanographic Institution, engaged in war research, have occupied some of our Laboratory rooms.

2. Instruction

The Laboratory has been able to continue its courses of instruction with able teaching staffs and with a reasonable number of students. Of a total of 68 students in all of the courses, 11 were men and 57 were women. In peace times the total has been about 125, somewhat less than half being men. The Invertebrate course, under Dr. Buck and an almost entirely new corps of instructors, was successfully given to a class of almost maximum size. Dr. Hamburger and Dr. Costello, with the occasional help of Drs. Barth, Metz, and Rose, carried on the Embryology course with excellent results. Pressure of war work prevented most of the instructors in Physiology from remaining in residence during the entire period of the course, but in spite of this, Dr. Parpart and his associates were able to conduct the course satisfactorily. It was a great disappointment that the course in Algae had to be omitted because of a lack of students. This is the first time since the course first began in 1889 that instruction in Botany has not been given at this Laboratory.

3. Buildings and Grounds

With the abatement of danger from enemy attacks in this region, the Navy closed its Base at Woods Hole and gave back to us, on January 1, 1944, our buildings which they had occupied since May 1942. During their tenancy they made a number of alterations, many of which are of permanent value. The Lecture Hall and the Botany Building were given new roofs and shingles and solid shorings to support the floors. In the Homestead new sills and other timbers, and floors, all greatly needed, were installed. The Mess was improved by a new roof and insulated walls, a completely rebuilt ice box and store room, and by the addition of two new insulated store rooms. At the Penzance Garage a new concrete floor was laid where the old one was imperfect. In addition, the water front which had been
weakened by the hurricane and only partially repaired, was thoroughly rebuilt. These improvements, which we should have had to make sooner or later, are conservatively valued at $12,000.

On the other hand, the Navy made other alterations which rendered the buildings unsuitable for our use. In the lease, the Navy agreed to restore the property to its original condition. But it was obvious that the necessary repairs and replacements could be made more satisfactorily by our own staff than by an outside contractor. Consequently, after a period of bargaining, it was agreed that the Navy should leave in place some valuable equipment, useful to the Laboratory, in lieu of actual payment for the cost of the repairs. Among the items transferred to us may be mentioned a series of gas cooking ranges equipped with a ventilating hood, and an oven. These take the place of our old coal range which was outworn. Also a water cooler, a refrigerating unit in the icebox, a hot water heating system, extensive plumbing installations in the Homestead, and 12 tons of hard coal in the Apartment House. This equipment is valued at more than $6000, an amount well above the cost of repairs and replacements made by our staff. The Lecture Hall and the Botany Building have not been completely restored since they will not be needed in 1944. The Apartment House, which was returned to use in fairly good condition, has been redecorated for the first time since it was built in 1927. The Penzance Garage is now leased to the Oceanographic Institution for the duration.

Although a number of our buildings are now in better condition than heretofore, some need further attention. Specifically, the walls of the Apartment House should be waterproofed, at least on those sides exposed to storms. Unless this is done soon much of the new decoration will be marred. The Brick Building also should be similarly treated.

4. Financial

The Treasurer's report shows that our finances are in some respects in excellent condition. The cash balance is larger than usual, due in part to the large dividend of the General Biological Supply House and increased sales by our own Supply Department, but especially to the rental paid by the Navy. At the same time our expenditures have been low for the same reasons that were noted last year, namely, that we have been unable to purchase new equipment and to pay for current foreign journals. Because of this favorable cash balance we have felt justified in adding a substantial amount to the Reserve Fund, and in making the extensive improvements in the Apartment House.

On the other hand, our income for 1944 will be reduced by reason of the withdrawal of the Navy and the relatively small return from fees of investigators and students. We cannot expect any considerable increase in our regular sources of income. Our present prosperity is therefore transient. During the next few years we must provide funds, in addition to the regular budget, to pay for foreign journals held in store for the duration, for the development of the Apparatus Department, including the services of a full-time mechanic, and especially for the building up of the Retirement Fund which is now far too small. The Executive Committee is considering the last item. The Committee on Additional Funds finds that the present time is not favorable for obtaining money, but it has laid plans for the future.
5. Losses by Death

In the death of Dr. Caswell Grave the Laboratory loses one of its most loyal members, whose important services, willingly given during a period of more than 30 years, are gratefully remembered.

Prof. A. D. Morrill, Emeritus Professor of Biology at Hamilton College, active in the early days of the Laboratory, died June 8, 1943.

Prof. John M. McFarlane, Emeritus Professor of Botany at the University of Pennsylvania, Trustee of the Corporation from 1897 to 1902, died September 16, 1943.

6. Gifts

The Laboratory is indebted to Mr. John Crane, for a letter written by his father, Charles R. Crane, to Mr. John D. Rockefeller, Jr., on the occasion of the setting up of the Endowment Fund to which both men had generously contributed. In the letter he refers in the following words to the unusual character of the Laboratory when he first become acquainted with it. "These scientists were struggling and accomplishing marvelous things with most meagre equipment, making many sacrifices. It seemed to me that the precious thing to preserve was the spirit of the organization, a spirit everywhere recognized although hard to seize or to imitate. So we have been most careful not in any way to jeopardize this spirit: and processes of organization and management have continued as I found them. It is a valuable expression of a democracy of educated, high minded men."

7. Election of Trustees

At the meeting of the Corporation held August 10, 1943, the following Trustees were elected Trustees Emeritus:

B. M. Duggar, The University of Wisconsin
W. E. Garrey, Vanderbilt University Medical School

The new Trustees elected at that meeting are:

Paul S. Galtsoff, U. S. Fish and Wild Life Service
E. W. Sinnott, Professor of Botany, Yale University

8. There are appended as parts of this report:

1. Appreciation of the Services of Professor Frank R. Lillie.
2. Memorials to deceased Trustees.
3. The Staff.
4. Investigators and Students, 1943.
7. Evening Lectures.
8. Members of the Corporation.

Respectfully submitted,

Charles Packard,  
Director
1. APPRECIATION OF THE SERVICES OF PROFESSOR FRANK R. LILLIE TO THE MARINE BIOLOGICAL LABORATORY

Read at the Meeting of the Corporation, August 10, 1943

In the history of the Marine Biological Laboratory the names of two men are pre-eminent: Dr. Whitman, who with prophetic insight, envisioned this institution as a national center of research in every department of Biology; and Dr. Lillie, who transformed that vision into reality. Coming to Woods Hole first in 1891 as an investigator receiving instruction, Dr. Lillie, with Dr. Whitman, organized the course in Embryology in 1893. He was appointed Assistant Director in 1900 at a time when the fortunes of the Laboratory were at a low ebb; Director in 1908; and President of the Corporation in 1926, after the successful conclusion of the campaign to obtain new buildings and an endowment. During the period from 1900 to 1942, when he resigned from the Presidency, the Marine Biological Laboratory developed from a struggling organization to its present position as the leading cooperative laboratory of the world.

It is of course true that only by the devoted work of the members of the Corporation, and the active interest of its many friends, could such an end be reached; but it is equally true that without wise guidance this effort would have failed. From the beginning, when Whitman, against every force and discouragement, fought for the principles of co-operation and independence, this Laboratory has pursued its steady course, adapting itself wisely to new conditions as they arose, but always holding to those basic ideals. During his fruitful years as Director, Dr. Lillie frequently stressed these principles. "Our purpose," he wrote, "is essentially ideal, and its pursuit demands our best efforts and our loyalty." And again, "We have laid the principle of co-operation at our foundation, and we have attempted to build it into every one of our activities." In this course he has always quietly led. There has never been any thought of division since he has been in charge. Here lies his strength, and here lies the secret of the continued success of the Laboratory.

In accepting his resignation from the Presidency, the Corporation and the Trustees are rejoiced that he will continue his connection with the Laboratory as President Emeritus. We extend to him and to Mrs. Lillie, who has so ably assisted him in the development of the Marine Biological Laboratory, our grateful thanks, and we pledge to him our best efforts to continue the work which he has so long and so wisely guided.

C. E. McClung
E. G. Conklin
Charles Packard

2. MEMORIALS TO DECEASED TRUSTEES

I. MEMORIAL TO DR. HERMON CAREY BUMPUS

Read by Dr. A. P. Mathews

Hermon Carey Bumpus, Trustee Emeritus of the Marine Biological Laboratory, died June 21, 1943, at the age of eighty-one years. The Laboratory thus loses a
member who played an active part in its development for more than forty years. Coming first to Woods Hole in 1889 when a graduate student of Whitman at Clark University, he worked here on his thesis, "The Embryology of the American Lobster." In 1890 he returned to Brown University, his Alma Mater, where he taught Comparative Anatomy for eleven years. It was during this period that he served at this Laboratory as head of the Invertebrate Zoology course; as Assistant Director from 1893 to 1895; and as Clerk of the Corporation from 1897 to 1899. He was a Trustee from 1897 to 1932 when he became Trustee Emeritus.

From 1898 to 1901 he was the Director of the Laboratory of the Fish Commission at Woods Hole, during which time he made a careful survey of the fauna of his region. At this time also he made one of the first studies of variation and its bearing on Natural Selection.

Many of his students from Brown came to us with him, among whom were George M. Gray, A. D. Mead, H. W. Walter, and F. P. Gorham.

Dr. Bumpus was remarkably efficient in the work of organization in all the positions which he held. At this Laboratory he greatly improved the equipment for work and for collecting living material; and due to his efforts the number of students at the Laboratory greatly increased, 85 being registered one year in the Invertebrate Course.

To bring Biology to the people was his chief interest. Accordingly he left Brown in 1901 to become Director of the American Museum of Natural History in New York, where he remained ten years and carried out his long cherished plans for taking the resources of the museum to the school children in New York City, an educational project which has since grown to great proportions throughout the country. Subsequently, while in the National Park Service, he developed many museums in the State and National Parks. In recognition of this work he received the Pugsley Medal for his service to education.

For three years he was Business Manager of the University of Wisconsin, and for five years, President of Tufts College. He was a Trustee also of several charitable institutions.

These are only a few of the many accomplishments of this tireless worker. He was, in the words of his student and life-long friend, Dr. H. E. Walter, "A natural teacher, and enthusiastic scientist, a remarkable executive, and a genial gentleman."

II. MEMORIAL TO DR. G. N. CALKINS

By Dr. L. L. Woodruff

The distinguished incumbent of the first Professorship of Protozoology in America, Gary Nathan Calkins, died at his home in Scarsdale, New York, on January 4, 1943, after a considerable period of ill health which was endured with characteristic cheerfulness and fortitude.

Calkins was born at Valparaiso, Indiana, on January 18, 1869, but spent nearly all of his life on the Eastern seaboard. His scientific training began at the Massachusetts Institute of Technology where, under the influence of Professor William T. Sedgwick, an interest was aroused in biology as a profession. After receiving the B.S. degree in 1890 he served until 1893 as lecturer at the Institute and also as Assistant Biologist to the Massachusetts State Board of Health. Then he trans-
ferred to Columbia University to study under Professor Edmund D. Wilson and received the Ph.D. degree in 1898. While a graduate student he was appointed to the teaching staff and thus began the life-long membership in the Department of Zoology at Columbia, which in 1907 culminated as Professor of Protozoology. Calkins was for some years the Executive Officer of the Department, and retired in 1940 as Professor Emeritus in residence. Columbia University conferred on him the honorary degree of Sc.D. in 1929.

Calkins' devotion of his life to the study of the Protozoa was inspired both by an inherent interest in the "little animals," and the well-founded belief that they afford highly favorable material for the approach to many general biological problems. This is best exemplified by his most important treatise, *The Biology of the Protozoa* (1926, 2nd edition 1933), and his long-continued studies on the physiology and cytology of free-living Ciliates, with particular reference to the significance of fertilization and other factors influencing longevity. In this classic work he devised more exact methods of pedigreed culture, involving daily isolation of the animals, that laid the foundations for present-day technique in the field, and he also developed what may be referred to as his philosophy of the Protozoan individual. Both phases stimulated many investigators to enter similar fields.

The extensive series of important studies from Calkins' laboratory is but one of his many contributions to science. A brilliant lecturer and teacher at Columbia and at The Marine Biological Laboratory, his courses revealed a comprehensive grasp of protozoology from both its theoretical and practical aspects that inspired many students; and his versatility was shown by numerous other activities. Thus, for example, he was Consulting Biologist to the New York State Cancer Laboratory at Buffalo from 1902 to 1908, Lecturer before the Lowell Institute in 1907, President of the Association for Cancer Research in 1916, President of the Society for Experimental Biology and Medicine from 1919 to 1921, and Director of the University Union in Paris in 1926 and 1927. He was elected in 1919 to the National Academy of Sciences.

Calkins' association with The Marine Biological Laboratory began just over a half century ago, and for about forty years he was in regular attendance as an investigator. He was a member of the Corporation for 39 years and its Clerk for 17 years, member of the Board of Trustees for 30 years and its Secretary for 12 years, member of the Research Staff for 31 years, and head of the Protozoology course, which he founded, for 22 years.

Zoology in general and Columbia University and The Marine Biological Laboratory in particular owe to Calkins more than can be readily expressed for his scientific contributions, teaching, and administrative service. All this, as well as his personal charm, unfailing enthusiasm, and hearty good fellowship, was attested by his former students and associates who presented to him after retirement a volume of nearly two hundred letters of esteem and appreciation inscribed:

*Gary Nathan Calkins*

*Philosopher in Little Things*

*and Friend.*
3. THE STAFF, 1943

Charles Packard, Director, Marine Biological Laboratory, Woods Hole, Massachusetts.

Senior Staff of Investigation

E. G. Conklin, Professor of Zoology, Emeritus, Princeton University.
Caswell Grave, Professor of Zoology, Emeritus, Washington University.
Frank R. Lillie, Professor of Embryology, Emeritus, The University of Chicago.
Ralph S. Lillie, Professor of General Physiology, Emeritus, The University of Chicago.
C. E. McClung, Professor of Zoology, Emeritus, University of Pennsylvania.
S. O. Mast, Professor of Zoology, Emeritus, Johns Hopkins University.
A. P. Mathews, Professor of Biochemistry, Emeritus, University of Cincinnati.
T. H. Morgan, Director of the Biological Laboratory, California Institute of Technology.
G. H. Parker, Professor of Zoology, Emeritus, Harvard University.

Zoology

I. Consultants

T. H. Bissonnette, Professor of Biology, Trinity College.
L. L. Woodruff, Professor of Protozoology, Yale University.

II. Instructors

J. B. Buck, Assistant Professor of Zoology, University of Rochester, in charge of course.
W. D. Burbank, Associate Professor of Biology, Drury College.
M. D. Burkenroad, Assistant Curator, Bingham Oceanographic Foundation, Yale University.
C. G. Goodchild, Associate Professor of Biology, Southwest Missouri State Teachers College.
Ronald Grant, Lecturer in Physiology, McGill University.
John H. Lochhead, Instructor in Zoology, University of Vermont.
Madeleine E. Pierce, Assistant Professor of Zoology, Vassar College.
Mary D. Rogick, Professor of Biology, College of New Rochelle.

III. Laboratory Assistant

Margaret L. Keister, Instructor in Biology, Wheaton College.

Embryology

I. Consultants

L. G. Barth, Assistant Professor of Zoology, Columbia University.
H. B. Goodrich, Professor of Biology, Wesleyan University.

II. Instructors

Viktor Hamburger, Professor of Zoology, Washington University, in charge of course.
Donald P. Costello, Assistant Professor of Zoology, University of North Carolina.
Charles B. Metz, Instructor, Wesleyan University.

Physiology

I. Consultants

William R. Amberson, Professor of Physiology, University of Maryland, School of Medicine.
MARINE BIOLOGICAL LABORATORY

HAROLD C. BRADLEY, Professor of Physiological Chemistry, University of Wisconsin.
WALTER E. GARREY, Professor of Physiology, Vanderbilt University Medical School.
MERKEL H. JACOBS, Professor of Physiology, University of Pennsylvania.

II. INSTRUCTORS

ARTHUR K. PARPART, Associate Professor of Biology, Princeton University, in charge of course.
ROBERT BALLENTINE, Lecturer in Zoology, Columbia University (absent in 1943).
KENNETH C. FISHER, Assistant Professor of Experimental Biology, University of Toronto.
ARTHUR C. GIESE, Associate Professor of Biology, Stanford University (absent in 1943).
RUDOLF T. KEMPTON, Professor of Zoology, Vassar College.
F. J. M. SICHEL, Assistant Professor of Physiology, University of Vermont, College of Medicine.

BOTANY

I. CONSULTANTS

S. C. BROOKS, Professor of Zoology, University of California.
B. M. DUGGAR, Professor of Plant Physiology, University of Wisconsin.

II. INSTRUCTORS

WM. RANDOLPH TAYLOR, Professor of Botany, University of Michigan, in charge of course.
HANNAH CROASDALE, Technical Assistant, Dartmouth College.

EXPERIMENTAL RADIOLOGY

G. FAILLA, Memorial Hospital, New York City.
L. ROBINSON HYDE, Phillips Exeter Academy, Exeter, N. H.

LIBRARY

PRISCILLA B. MONTGOMERY (MRS. THOMAS H. MONTGOMERY, JR.), Librarian
DEBORAH LAWRENCE
MARY A. ROHAN
S. MABELL THOMBS

APPARATUS DEPARTMENT

E. P. LITTLE, Phillips Exeter Academy, Exeter, N. H., Manager
J. D. GRAHAM
R. S. LILJESTRAND

CHEMICAL DEPARTMENT

E. P. LITTLE, Phillips Exeter Academy, Exeter, N. H., Manager

SUPPLY DEPARTMENT

JAMES McINNIS, Manager

RUTH CROWELL
M. B. GRAY
A. M. HILTON

W. E. KAHLER
A. W. LEATHERS

G. LEHY
F. N. WHITMAN

GENERAL OFFICE

F. M. MACNAUGHT, Business Manager

POLLY L. CROWELL
ANITA GIBSON
REPORT OF THE DIRECTOR

GENERAL MAINTENANCE

T. E. Larkin, Superintendent

W. C. Hemenway
R. W. Kahler
T. E. Tawell
J. Wynne
A. J. Pierce

THE GEORGE M. GRAY MUSEUM

George M. Gray, Curator Emeritus

4. INVESTIGATORS AND STUDENTS

Independent Investigators, 1943

Addison, William H. F., Professor of Normal Histology and Embryology, University of Pennsylvania, School of Medicine.

Ball, Eric G., Associate Professor of Biological Chemistry, Harvard Medical School.

Barth, L. G., Assistant Professor of Zoology, Columbia University.

Berger, Charles A., Director, Biological Laboratory, Fordham University.

Brooks, Matilda M., Research Associate in Biology, University of California.

Brown, Dugald E. S., Professor of Physiology, New York University, College of Dentistry.

Buck, John B., Assistant Professor of Zoology, University of Rochester.

Budington, Robert A., Professor of Zoology, Emeritus, Oberlin College.

Bugs, Charles W., Professor of Biology and Head of Division of the Sciences, Dillard University.

Burbanck, William D., Associate Professor and Chairman of Department of Biology, Drury College.

Burkenroad, Martin D., Assistant Curator, Bingham Oceanographic Foundation, Yale University.

Chambers, Robert, Research Professor of Biology, Washington Square College, New York University.

Clark, Eleanor L., Voluntary Investigator, University of Pennsylvania, School of Medicine.

Clark, E. R., Professor and Head of Department of Anatomy, University of Pennsylvania, School of Medicine.

Clement, Anthony C., Associate Professor of Biology, College of Charleston.

Clowes, G. H. A., Director of Research, Eli Lilly and Company.

Conklin, Edwin G., Professor of Biology, Emeritus, Princeton University.

Costello, Donald F., Associate Professor of Zoology, University of North Carolina.

Duggar, Benjamin M., Professor of Plant Physiology, University of Wisconsin.

Evans, Titus C., Assistant Professor of Radiology, College of Physicians and Surgeons, Columbia University.

Failla, G., Professor of Radiology, College of Physicians and Surgeons, Columbia University.

Fisher, Kenneth C., Assistant Professor of Physiological Zoology, University of Toronto.

Gabriel, Mordecai L., Department of Zoology, Columbia University.

Galtsoff, Paul S., Senior Biologist, U. S. Fish and Wildlife Service.

Garrey, W. E., Professor of Physiology, Vanderbilt University, School of Medicine.

Glaser, Otto C., Professor of Biology, Amherst College.

Goodchild, Chauncey G., Associate Professor of Biology, State Teachers College, Springfield, Missouri.


Granick, Sam, Assistant, Rockefeller Institute.

Grant, Ronald, Lecturer in Zoology and Physiology, McGill University.

Grave, Caswell, Professor of Zoology, Emeritus, Washington University.
HAMBURGER, VIKTOR, Professor of Zoology, Washington University.
HARRLY, MORRIS H., Associate Professor of Biology, Washington Square College, New York University.
HARRIS, DANIEL L., Research Associate, University of Pennsylvania.
HARTMAN, FRANK A., Professor and Chairman of Department of Physiology, Ohio State University.
HARVY, ETHEL B., Independent Investigator in Biology, Princeton University.
HARVY, E. NEWTON, Professor of Physiology, Princeton University.
HEILBRUNN, L. V., Associate Professor of Zoology, University of Pennsylvania.
HIATT, EDWIN P., Assistant Professor, New York University, College of Dentistry.
HOPKINS, HOYT S., Associate Professor of Physiology, New York University, College of Dentistry.
JACOBS, M. H., Professor of General Physiology, University of Pennsylvania, School of Medicine.
KEMP, RUDOLP T., Professor of Zoology, Vassar College.
KRAFEL, M. E., Chemist, Eli Lilly and Company.
LAVIN, GEORGE, Rockefeller Institute for Medical Research.
LEE, RICHARD E., Research Associate, Washington Square College, New York University.
LILLIE, FRANK R., Professor of Zoology, Emeritus, The University of Chicago.
LILLIE, RALPH S., Professor of Physiology, Emeritus, The University of Chicago.
LOCHHEAD, JOHN H., Instructor in Zoology, University of Vermont.
MCCLUNG, C. E., Professor of Zoology, Emeritus, University of Pennsylvania.
MCNABB, WILLIAM D., Research Associate, Princeton University.
MARSLAND, DOUGLAS A., Associate Professor of Biology, Washington Square College, New York University.
MAST, S. O., Professor of Zoology, Emeritus, Johns Hopkins University.
MATHews, ALBERT P., Professor of Biochemistry, Emeritus, University of Cincinnati.
MEGLITSCH, PAUL, Head of Department of Zoology, Heral Junior College.
MEMHARD, ALLEN R., Crescent Road, Riverside, Connecticut.
METZ, CHARLES B., Instructor in Biology, Wesleyan University.
MICHAELS, LEONOR, Rockefeller Institute for Medical Research.
MORGAN, LILLIAN V., California Institute of Technology.
MORGAN, T. H., Professor of Biology, California Institute of Technology.
NELSON, LEONARD, Medical Student, University of Pennsylvania.
OSTERHOOT, W. J. V., Member Emeritus, Rockefeller Institute for Medical Research.
PACKARD, CHARLES, Director, Marine Biological Laboratory.
PARKER, GEORGE H., Professor of Zoology, Emeritus, Harvard University.
PARMEN, CHARLES L., Professor of Zoology, University of Pennsylvania.
PARPERT, A. R., Associate Professor of Biology, Princeton University.
Pierce, Madeleine E., Assistant Professor of Zoology, Vassar College.
POLLISTER, ARThUR W., Associate Professor of Zoology, Columbia University.
REINHARD, EDWARD G., Head, Department of Biology, Catholic University of America.
ROICK, MARY D., Professor of Biology, College of New Rochelle.
ROSE, MERYL, Instructor in Zoology, Smith College.
RUSSELL, ALICE M., Instructor in Zoology, Fordham University.
SCHAEFER, A. A., Professor of Biology, Temple University.
SCHALIEK, WILLIAM B., Fellow, Woods Hole Oceanographic Institution.
SCOTT, SISTER FLORANCE M., Professor of Biology, Seton Hill College.
SICHEL, ElsA K., Head of Science Department, Vermont State Normal School.
SICHEL, F. J. M., Assistant Professor of Physiology, University of Vermont College of Medicine.
SLOPER, ELENA H., Assistant Professor of Zoology, State University of Iowa.
SOTO, JULIO M., Professor of Histology and Embryology, College of Medicine, Montevideo, Uruguay.
STEINBACH, H. BURL, Associate Professor of Zoology, Washington University.
STOKEY, ALMA G., Professor of Botany, Emeritus, Mount Holyoke College.
REPORT OF THE DIRECTOR

STUNKARD, Horace W., Professor of Biology, New York University.
TAYLOR, William R., Professor of Botany, University of Michigan.
WERNICH, D. H., Professor of Zoology, University of Pennsylvania.
WHITING, Anna R., Guest Investigator, University of Pennsylvania.
WHITING, P. W., Associate Professor of Zoology, University of Pennsylvania.
WIECINSKI, Floyd J., Instructor in Biology, Catholic University of America.
WINCH, Dorothy, Research Associate in Physics, Smith College.
ZWEIPACH, Benjamin W., Research Associate in Biology, Washington Square College, New York University.

Research Assistants, 1943
ABRAMSKY, Tessie, Technician, Rockefeller Institute for Medical Research.
BENJAMIN, Anne, Research Assistant, Columbia University.
GIDGE, Natalie, Smith College.
HIDENTHAL, Gertrude, Research Assistant, University of Pennsylvania.
HORNEGER, Carol, Research Assistant, Temple University.
HUTCHINSON, Dorothya, Cazenovia Junior College.
JOHN, Hedda Maria, Research Assistant in Neurology, Columbia University.
KAWATA, Nobuyuki, Research Assistant, Washington University.
LAWLER, Helen Claire, Research Assistant, New York University.
LOWENHAUPT, Marian, Graduate Student, Washington University.
MINE, Karyl R., New York University.
ODLUG, T. O., Research Biologist, Fish and Wildlife Service.
QUINN, Gertrude Patricia, Research Assistant, New York University, College of Dentistry.
Stern, Joseph R., University of Toronto.
WOODWARD, Arthur A., Jr., Research Assistant, University of Pennsylvania.
YARNALL, Margaret, Student, University of Pennsylvania.

Library Readers, 1943
AMBROSE, William R., Professor of Physiology, University of Maryland Medical School.
ANDERSON, Thomas F., Associate, Johnson Foundation, University of Pennsylvania.
BECK, Lyle V., Instructor in Physiology, Hahnemann Medical College.
BOCHET, Robert D., Instructor in Zoology, University of Pennsylvania.
BOTSOR, E. Frances, Associate Professor of Zoology, Connecticut College.
BROOKS, Bernard B., Research Associate in Biochemistry, New York University.
BROWNE, Katherine A., Research Associate in Physiology, Ohio State University.
CAHEN, Raymond L., Research Assistant in Pharmacology, Yale University Medical School.
CAHN, T., New York University.
CAHN, Hans J., Research Associate, Mt. Sinai Hospital.
CASSIDY, Harold G., Instructor in Organic Chemistry, Yale University.
CROASDALE, Hannah T., Technical Assistant, Dartmouth College.
FRANKLIN, Roger G., Professor of Biology, St. Joseph's Seminary.
FURTH, Jacob, Associate Professor of Pathology, Cornell University Medical College.
GATES, R. Ruggles, Professor of Botany, Emeritus, University of London.
GUREVICH, Vladimir, Clinical Assistant and Attending Physician, Cornell Division of the Bellevue Hospital.
HAYWOOD, Charlotte, Professor of Physiology, Mount Holyoke College.
HIBBARD, Hope, Professor of Zoology, Oberlin College.
KRASNOW, Frances, Head, Department of Biochemistry, Guggenheim Dental Clinic.
LILLY, John C., Fellow in Biophysics, University of Pennsylvania.
LOWENSTEIN, Otto, Clinical Professor of Neurology, New York University.
LOEWI, Otto, Research Professor, New York University, College of Medicine.
MARSHALL, Helen A., Massachusetts State College.
MAYOR, James W., Professor of Biology, Union College.
MENKIN, VALY, Assistant Professor of Pathology, Harvard Medical School.
MAYERHOF, OTTO, Research Professor of Biochemistry, University of Pennsylvania.
MOLDAVER, JOSEPH, Research Assistant in Neurology, Columbia University.
NACHMANSOHN, DAVID, Research Associate in Neurology, Columbia University.
SCHMITT, FRANCIS O., Head, Department of Biology and Biological Engineering, Massachusetts Institute of Technology.
SLOW, RONALD A., Geneticist, Cotton Research Station, Trinidad.
STAHMANN, MARK A., Research Assistant in Chemistry, Rockefeller Institute for Medical Research.
STERN, KURT G., Chief Chemist, Overly Biochemical Research Foundation.
WOLF, OPAL M., Associate Professor, Goucher College.
WOODWARD, ALVALYN E., Assistant Professor of Zoology, University of Michigan.

Beginning Investigators, 1943

BURREN, RHODA L., Fellow in Biology, Tufts College.
GRELLE, SISTER MARY, Graduate Student, Fordham University.
HINCHLEY, M. CATHERINE, Instructor in Biology, Temple University.
HOPKINS, ALICE, Student, University of Rochester.
JACOBS, ATHLEEN R., Teaching Fellow in Biology, Radcliffe College.
JAEGER, LUCENA, Graduate Student, Columbia University.
JENKINS, JANET, Student, Wheaton College.
KEISTER, MARGARET L., Instructor in Zoology, Wheaton College.
LAWNEEZAK, SISTER MARY J., Student, Fordham University.
LEFEBRE, PAUL G., Research Assistant, University of Pennsylvania.
LEHMANN, GENE, Graduate Teaching Fellow, University of North Carolina.
LITZRELL, JAE L., Teaching Assistant, University of Illinois.
MARKS, MILDRED H., Research Assistant, University of Pennsylvania.
MORITZSEN, EDITH, Assistant Professor of Zoology, George Washington University.
PHILBRICK, MADELINE G., Student, Russell Sage College.
PRICE, WINSTON H., Student, University of Pennsylvania.
SATAKE, JACQ., Graduate Student, Washington University.
WILSON, WALTER L., Graduate Student, University of Pennsylvania.
WITKUS, ELEANOR R., Research Associate, Fordham University.

Students, 1943

EMBRYOLOGY

BANKS, MARY E., Undergraduate Assistant, Washington University.
COLE, ELSIE L., Graduate Teaching Assistant, University of Wisconsin.
HOPKINS, ALICE, Student, University of Rochester.
JENKINS, JANET R., Undergraduate Assistant, Wheaton College.
LEHMANN, GENE, Teaching Fellow, University of North Carolina.
LOVE, MARIAN, Graduate Assistant in Biology, Goucher College.
LOWENHAUPT, MARIAN, Student, Washington University.
MEIKEL, AMY G., Cornell University.
SATAKE, JACQ., Graduate Student, Washington University.
TRAVIS, DOROTHY F., George Washington University.
WAHLERT, MARY R., Washington University.
WILDE, BERTIE L., Laboratory Technician, Rockefeller Institute for Medical Research.
WOLF, THIEMA M., Washington University.

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BURREN, RHODA L., Graduate Assistant, Tufts College.
FRANCE, HORACE O., Research Fellow in Biology, Colorado University.
PHILBRICK, MADELINE G., Russell Sage College.
REPORT OF THE DIRECTOR

REILLY, SISTER SARA L., Seton Hill College.
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SIEGEL, BLOSSOM, Student, Brooklyn College.
TASHIRO, MITSUKO, Graduate Assistant, Vassar College.
WOOD, MARCIA, Russell Sage College.

ZOOGY

ANDRUS, MARY, Student, Wellesley College.
BACA, ANTOINETTE, Duke University.
BAKER, LAURA J., Graduate Student, University of Rochester.
BOURQUIN, PHYLLIS J., Student, Oberlin College.
BROOKS, BARBARA, Radcliffe College.
BROOKS, EDITH H., Student, Swarthmore College.
CHAPMAN, MARY P., Student, Vassar College.
CHEW, ROBERT M., Student, Washington and Jefferson College.
CRANE, LOIS H., Vassar College.
DEHNER, EUGENE W., Instructor in Biology, St. Benedict's College.
ELY, CHARLES A., Graduate Assistant, Washington and Jefferson College.
Graham, K. Merle, Assistant in Zoology, University of Illinois.
GRELL, SISTER MARY, Student, Fordham University.
HARNISCHFEGGER, ELEANOR, Student, Washington College.
HEGEMANN, IDOLINE, Student, Bennington College.
HIGNUTT, CHARLOTTE R., Student, Washington College.
HOLLOWAY, RITA H., Student, Oberlin College.
HOLMES, THELMA M., Seton Hill College.
HONGGGER, CAROL M., Student, Temple University.
JAN TAUSCH, ANNE M., Student, New Jersey College for Women.
JENSEN, DOROTHY, Mount Holyoke College.
KATSAPANAS, GEORGIA, Student, Seton Hill College.
KELLEY, ELLEN M., Student, New Jersey College for Women.
JUSTITIA, SISTER MARY, Student, Fordham University.
LIER, MARGARET, Student, Smith College.
MAH, MARY G., Vassar College.
MURRAY, HELEN E., Student, Emmanuel College.
PAISLEY, ANNE, Student, DePauw University.
POPE, EDITH, Student, Smith College.
POPE, LOUISE S., Instructor in Biology, Whitman College.
POPE, PHILIP H., Professor of Biology, Whitman College.
RANSOM, GLADYS VIRGINIA, Biology Laboratory Assistant, Wilson College.
REICH, EVA, Student, Barnard College.
RICK, SIMON, Student, Groton School.
RIGAUMONT, JEAN A., Student, Pennsylvania College for Women.
ROATHRECK, SUZANNE, DePauw University.
RUBRIGHT, ELEANOR, Student, Ohio Wesleyan University.
SOMERS, ELIZABETH F., Goucher College.
TAYLOR, RUTH M., Student, Oberlin College.
UPHOF, DELTA E., Student, Russell Sage College.
WEBB, KATHLEEN K., Student, University of Richmond.
WILLIAMS, PATRICIA A., Student, Seton Hill College.
WITKUS, ELEANOR R., Research Associate, Fordham University.
YAMAMOTO, KEKABUNA H., DePauw University.
ZARUHNA, KATERINA I., Graduate Assistant, Johns Hopkins University.
5. TABULAR VIEW OF ATTENDANCE

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<th>1939</th>
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<td>INVESTIGATORS—Total</td>
<td>352</td>
<td>386</td>
<td>337</td>
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<td>Independent</td>
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<td>253</td>
<td>197</td>
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<td>Under instruction</td>
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<td>Research assistants</td>
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<td>Library readers</td>
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<td>STUDENTS—Total</td>
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<td>Protozoology (not given after 1940)</td>
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<td>Embryology</td>
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<td>6</td>
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<tr>
<td>Botany</td>
<td>9</td>
<td>10</td>
<td>15</td>
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<td>Total Attendance</td>
<td>485</td>
<td>514</td>
<td>468</td>
<td>275</td>
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<td>Less persons registered as both students and investigators</td>
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<td>INSTITUTIONS REPRESENTED—Total</td>
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<td>By investigators</td>
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<td>By students</td>
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<td>72</td>
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<td>FOREIGN INSTITUTIONS REPRESENTED</td>
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<tr>
<td>By students</td>
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6. SUBSCRIBING AND COOPERATING INSTITUTIONS

1943

Amherst College
Atlanta University
Bell Telephone Laboratories, Inc.
Biological Institute, Philadelphia, Pennsylvania
Bowdoin College
Brooklyn College
Bryn Mawr College
Catholic University of America
College of Physicians and Surgeons
Columbia University
Commonwealth Fund
Cornell University
Cornell University Medical College
Duke University
Fish and Wildlife Service, U. S. Dept. of the Interior
Fordham University
Goucher College
Harvard University
Harvard University Medical School
Industrial and Engineering Chemistry, of the American Chemical Society
Johns Hopkins University
Eli Lilly & Co.
Massachusetts General Hospital
Mount Holyoke College
New York University
New York University College of Medicine
New York University Washington Square College
Oberlin College
Ohio State University
Pennsylvania College for Women
Princeton University
Radcliffe College
Rockefeller Institute for Medical Research
Rutgers University
Seton Hill College
Smith College
State University of Iowa
Tufts College
University of Chicago
University of Cincinnati
University of Illinois
University of Maryland Medical School
University of Pennsylvania
University of Pennsylvania School of Medicine
REPORT OF THE DIRECTOR

University of Pennsylvania Johnson Foundation
University of Rochester
Vassar College
Villanova College
Washington University
Wellesley College
Wheaton College
Woods Hole Oceanographic Institution
Yale University

7. EVENING LECTURES, 1943

Friday, July 9
Dr. W. R. Taylor ......................"Utilization of Marine Plants."
Friday, July 16
Dr. D. P. Costello ..................."Experiments on the Localization of Developmental Factors in the Egg of Nereis."

Friday, July 23
Dr. Paul S. Galtsoff ................"Physiology of Sex and Sex Change in the Genus Ostrea."

Friday, July 30
Dr. Rudolf T. Kempton .............."Renal Secretion."
Friday, August 6
Dr. L. V. Heilbrunn ................"The Calcium-Release Theory of Stimulation."

Friday, August 13
Dr. Kurt G. Stern .................."Studies on Iron Proteins."
Friday, August 20
Dr. B. M. Duggar .................."Studies in the Irradiation of Certain Microorganisms."

Friday, August 27
Mr. A. H. Woodcock ................."Wind-induced Motion of the Physalia."

8. MEMBERS OF THE CORPORATION, 1943

1. LIFE MEMBERS

Allis, Mr. E. P., Jr., Palais Carnoles, Menton, France.
Andrews, Mrs. Gwendolen Foulke, Baltimore, Maryland.
Beckwith, Dr. Cora J., Vassar College, Poughkeepsie, New York.
Billings, Mr. R. C., 66 Franklin Street, Boston, Massachusetts.
Calvert, Dr. Philip P., University of Pennsylvania, Philadelphia, Pennsylvania.
Cole, Dr. Leon J., College of Agriculture, Madison, Wisconsin.
Conklin, Prof. Edwin G., Princeton University, Princeton, New Jersey.
Cowdry, Dr. E. V., Washington University, St. Louis, Missouri.
Evans, Mrs. Glendower, 12 Otis Place, Boston, Massachusetts.
Foot, Miss Katherine, Care of Morgan Harjes Cie, Paris, France.
Gardiner, Mrs. E. G., Woods Hole, Massachusetts.
Jackson, Mr. Chas. C., 24 Congress Street, Boston, Massachusetts.
Jackson, Miss M. C., 88 Marlboro Street, Boston, Massachusetts.
King, Mr. Chas. A.
Kingsbury, Prof. B. F., Cornell University, Ithaca, New York.
Lewis, Prof. W. H., Johns Hopkins University, Baltimore, Maryland.
Means, Dr. J. H., 15 Chestnut Street, Boston, Massachusetts.
MOORE, Dr. GEORGE T., Missouri Botanical Gardens, St. Louis, Missouri.
MOORE, Dr. J. PERCY, University of Pennsylvania, Philadelphia, Pa.
MORGAN, Mrs. T. H., Pasadena, California.
MORGAN, Prof. T. H., Director of Biological Laboratory, California Institute of Technology, Pasadena, California.
NOYES, Miss EVA J.
PORTER, Dr. H. C., University of Pennsylvania, Philadelphia, Pennsylvania.
SCOTT, Dr. ERNEST L., Columbia University, New York City, New York.
SEARS, Dr. HENRY F., 86 Beacon Street, Boston, Massachusetts.
SHEDD, Mr. E. A.
THORNDIKE, Dr. EDWARD L., Teachers College, Columbia University, New York City, New York.
TREADWELL, Prof. A. L., Vassar College, Poughkeepsie, New York.
TRELFASE, Prof. WILLIAM, University of Illinois, Urbana, Illinois.
WAITE, Prof. F. C., 144 Locust Street, Dover, New Hampshire.
WALLACE, LOUISE B., 359 Lytton Avenue, Palo Alto, California.

2. Regular Members

ADAMS, Dr. A. ELIZABETH, Mount Holyoke College, South Hadley, Massachusetts.
ADISON, Dr. W. H. F., University of Pennsylvania Medical School, Philadelphia, Pennsylvania.
ADOLPH, Dr. EDWARD F., University of Rochester Medical School, Rochester, New York.
ALBAUM, Dr. Harry G., 3115 Avenue I, Brooklyn, New York.
ALBERT, Dr. ALEXANDER, Biological Laboratories, Harvard University, Cambridge, Massachusetts.
ALLEE, Dr. W. C., The University of Chicago, Chicago, Illinois.
AMBERSON, Dr. WILLIAM R., Department of Physiology, University of Maryland, School of Medicine, Lombard and Greene Streets, Baltimore, Maryland.
ANDERSON, Dr. RUBERT S., University of Maryland School of Medicine, Department of Physiology, Baltimore, Maryland.
ANGERER, Dr. CLIFFORD A., Department of Physiology, Ohio State University, Columbus, Ohio.
ARMSTRONG, Dr. PHILIP B., College of Medicine, Syracuse University, Syracuse, New York.
AUSTIN, Dr. MARY L., Wellesley College, Wellesley, Massachusetts.
BAITSELL, Dr. GEORGE A., Yale University, New Haven, Connecticut.
BAKER, Dr. H. B., Zoological Laboratory, University of Pennsylvania, Philadelphia, Pennsylvania.
BALLARD, Dr. WILLIAM W., Dartmouth College, Hanover, New Hampshire.
BALLENTINE, Dr. ROBERT, Columbia University, Department of Zoology, New York City, New York.
BALL, Dr. ERIC G., Department of Biological Chemistry, Harvard University Medical School, Boston, Massachusetts.
BARD, Prof. PHILIP, Johns Hopkins Medical School, Baltimore, Maryland.
BARRON, Dr. E. S. GUZMAN, Department of Medicine, The University of Chicago, Chicago, Illinois.
BARTH, DR. L. G., Department of Zoology, Columbia University, New York City, New York.

BEADLE, DR. G. W., School of Biological Sciences, Stanford University, California.

BEAMS, DR. HAROLD W., Department of Zoology, State University of Iowa, Iowa City, Iowa.

BECK, DR. L. V., Hallamann Medical College, Philadelphia, Pennsylvania.

BEHRE, DR. ELINOR H., Louisiana State University, Baton Rouge, Louisiana.


BEGELOW, PROF. R. P., Massachusetts Institute of Technology, Cambridge, Massachusetts.

BEINFORO, PROF. RAYMOND, Buck Creek Camp, Marion, North Carolina.

BISONNETTE, DR. T. HUME, Trinity College, Hartford, Connecticut.


BODINE, DR. J. H., Department of Zoology, State University of Iowa, Iowa City, Iowa.

BORING, DR. ALICE M., Yenching University, Peking, China.

BRADLEY, PROF. HAROLD C., University of Wisconsin, Madison, Wisconsin.

BRODIE, MR. DONALD M., 522 Fifth Avenue, New York City, New York.

BRONFENBRENNER, DR. JACQUES J., Department of Bacteriology, Washington University Medical School, St. Louis, Missouri.

BROOKS, DR. MATILDA M., University of California, Department of Zoology, Berkeley, California.

BROOKS, DR. S. C., University of California, Berkeley, California.

BROWN, DR. DUGALD E. S., New York University, College of Dentistry, 209 East 23rd Street, New York City, New York.

BROWN, DR. FRANK A., JR., Department of Zoology, Northwestern University, Evanston, Illinois.

BUCKINGHAM, MISS EDITH N., Sudbury, Massachusetts.

BUCK, DR. JOHN B., Department of Zoology, University of Rochester, Rochester, New York.


BURLINGTON, DR. W. E., Randolph-Macon College, Ashland, Virginia.

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CARTER, PROF. GAIL L., Mercer University, Macon, Georgia.

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CATTELL, PROF. J. MCKEEN, Garrison-on-Hudson, New York.
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CHASE, DR. AURIN M., Princeton University, Princeton, New Jersey.
CHENEY, DR. RALPH H., Biology Department, Long Island University, Brooklyn, New York.
CHIDESTER, PROF. F. E., Auburndale, Massachusetts.
CHILD, PROF. C. M., Jordan Hall, Stanford University, California.
CHURNEY, DR. LEON, 155 Powell Lane, Upper Darby, Pennsylvania.
CLAFF, MR. C. LLOYD, Department of Biology, Brown University, Providence, Rhode Island.
CLARK, DR. LEONARD B., Department of Biology, Union College, Schenectady, New York.
CLARKE, DR. G. L., Harvard University, Cambridge, Massachusetts.
CLELAND, PROF. RALPH E., Indiana University, Bloomington, Indiana.
COE, PROF. W. R., Yale University, New Haven, Connecticut.
COHN, DR. EDWIN J., 183 Brattle Street, Cambridge, Massachusetts.
COLE, DR. ELBERT C., Department of Biology, Williams College, Williamstown, Massachusetts.
COLE, DR. KENNETH S., College of Physicians and Surgeons, Columbia University, 630 West 168th Street, New York City, New York.
COLLETT, DR. MARY E., Western Reserve University, Cleveland, Ohio.
COLTON, PROF. H. S., Box 601, Flagstaff, Arizona.
COOPER, DR. KENNETH W., Department of Biology, Princeton University, Princeton, New Jersey.
COPeland, PROF. MANT0N, Bowdoin College, Brunswick, Maine.
COSTELLO, DR. DONALD P., Department of Zoology, University of North Carolina, Chapel Hill, North Carolina.
COSTELLO, DR. HELEN MILLER, Department of Zoology, University of North Carolina, Chapel Hill, North Carolina.
CRAMPTON, PROF. H. E., American Museum of Natural History, New York City, New York.
CROWELL, DR. P. S., JR., Department of Zoology, Miami University, Oxford, Ohio.
CURTIS, DR. MAYNIE R., 377 Dexter Trail, Mason, Michigan.
CURTIS, PROF. W. C., University of Missouri, Columbia, Missouri.
DAN, DR. KATSUMA, Misaki Biological Station, Misaki, Japan.
DAVIS, DR. DONALD W., College of William and Mary, Williamsburg, Virginia.
Dawson, DR. A. B., Harvard University, Cambridge, Massachusetts.
Diller, DR. WILLIAM F., 1016 South 45th Street, Philadelphia, Pennsylvania.
REPORT OF THE DIRECTOR

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DOLLEY, PROF. WILLIAM L., University of Buffalo, Buffalo, New York.

DONALDSON, DR. JOHN C., University of Pittsburgh, School of Medicine, Pittsburgh, Pennsylvania.

DuBois, DR. EUGENE F., Cornell University Medical College, 1300 York Avenue, New York City, New York.

DUGGAR, DR. BENJAMIN M., University of Wisconsin, Madison, Wisconsin.

DUNGAY, DR. NEIL S., Carleton College, Northfield, Minnesota.

DURIEE, DR. WILLIAM R., Department of Biology, Washington Square College, New York University, New York City, New York.

EDWARDS, DR. D. J., Cornell University Medical College, 1300 York Avenue, New York City, New York.

ELLIS, DR. F. W., Monson, Massachusetts.

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FAILLA, DR. G., College of Physicians and Surgeons, 630 West 168th Street, New York City, New York.

FAURÉ-FREMIET, PROF. EMMANUEL, Collège de France, Paris, France.

FERGUSON, DR. JAMES K. W., Department of Pharmacology, University of Toronto, Ontario, Canada.

FIGGE, DR. F. H. J., 4636 Schenley Road, Baltimore, Maryland.

FISCHER, DR. ERNST, Department of Physiology, Medical College of Virginia, Richmond, Virginia.

FISHER, DR. JEANNE M., Department of Biochemistry, University of Toronto, Toronto, Canada.

FISHER, DR. KENNETH C., Department of Biology, University of Toronto, Toronto, Canada.

FORBES, DR. ALEXANDER, Harvard University Medical School, Boston, Massachusetts.

FRISCH, DR. JOHN A., Canisius College, Buffalo, New York.

FURTH, DR. JACOB, Cornell University Medical College, 1300 York Avenue, New York City, New York.

GALE, PROF. S. H., Lock Box 70, Interlaken, New York.

GALTSOFF, DR. PAUL S., 420 Cumberland Avenue, Somerset, Chevy Chase, Maryland.

GARREY, PROF. W. E., Vanderbilt University Medical School, Nashville, Tennessee.

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