

## 4105

## Tularemia in the Cat.

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The susceptibility of the cat to tularemia was considered by McCoy<sup>1</sup> in his original description of the disease which he later named tularemia. The infective material consisting of an emulsion of spleen of a guinea pig dead on the 5th day after inoculation, was injected into 3 young cats. The control guinea pig died. McCoy reported that the cats suffered no ill effects and when examined at necropsy on the 14th day, there was no reaction at the site of the inoculation, and no buboes had formed. He concluded it was safe to infer that cats are probably not susceptible to this infection.

In a later publication this problem was again considered by McCoy,<sup>2</sup> and he reported on the subcutaneous inoculation of 4 cats with large doses of an emulsion made from liver of a guinea pig dead of the disease. He stated that all cats remained well, while the control guinea pig died on the 7th day.

Cases of tularemia which have occurred in Minnesota<sup>3</sup> have incriminated the cat as a possible carrier of the disease, and indicate that cats sometimes acquire an active infection after eating an animal dead from tularemia.

A rabbit which was responsible for a human case of tularemia was fed to 3 cats of a household and appeared to be the cause of a serious illness lasting about a week in the 3 cats eating the carcass. A 4th cat which did not eat the infective material did not become sick.

A second human case appeared to obtain the infection of tularemia by the bite of a sick cat, the cat dying a few hours after inflicting the wound.

Because of these suggestive findings we have reinvestigated the susceptibility of the cat to tularemia by feeding infective material. A young cat was given a carcass of a guinea pig dead of tularemia, and the cat consumed the entire carcass in one day. Two days later the cat did not appear to be well, and when given a second guinea

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<sup>1</sup> McCoy, George W., *Pub. Health Bull.*, No. 43, April, 1911.

<sup>2</sup> McCoy, George W., and Chapin, Charles W., *J. Inf. Dis.*, 1912, x, 61.

<sup>3</sup> Occurred in the practice of Dr. E. C. Hanson, Park Rapids, Minn.

pig carcass on the 3rd day consumed only one-half of it, but finished eating the carcass on the 4th day. The following day it appeared to be well. On the 8th day the cat again consumed the entire carcass of a guinea pig dead of tularemia, and on the 13th day it consumed another infected carcass. Except for the short period following ingestion of the first pig the cat appeared to be perfectly well and would purr very vigorously upon being petted. It was chloroformed on the 18th day. Its blood gave a positive agglutination for *Bact. tularensis* in a dilution of 1:80. At necropsy all organs were apparently normal.

A guinea pig injected with an emulsion made from the cat liver remained well and at autopsy after 2 weeks appeared to be normal. A guinea pig injected with an emulsion made from the cat spleen died on the 6th day from tularemia.

A second cat was given a single feeding consisting of a liver from a guinea pig dead of tularemia. The cat appeared well for 4 days, when it began to show signs of inactivity. On the 5th day it did not want to be disturbed and was found dead on the morning of the 6th day. Necropsy showed enlargement of the mesenteric lymph nodes. All other organs were apparently normal. No lesions typical of tularemia could be observed in the liver and spleen. Two guinea pigs inoculated respectively with blood and spleen emulsion remained well. The guinea pig inoculated with the liver emulsion died on the 4th day with lesions typical of tularemia. A guinea pig inoculated with emulsion of mesenteric lymph nodes died on the 5th day with lesions typical of tularemia.

Of the 5 cats known to have eaten material infected with *Bact. tularensis* one showed mild transient symptoms, three showed signs of serious illness lasting a week, and one died on the 6th day. The mild case and the fatal case only were available for necropsy, the organism being found in the spleen of the former and in the abdominal lymph nodes and liver of the latter. Of 11 cases of tularemia in Minnesota, one appeared to be due to a cat directly, and 2 others resulted from rabbits singled out by cats and transported to the abode of man. It appears that a cat in the woods is not only a contact carrier of tularemia, but may also be an infected carrier.

#### CORRECTION

On page 514, Volume XXV, No. 7, line 31, the first word within parenthesis should read *without* instead of *with*.

# SECRETARY'S ANNUAL REPORT

April 1, 1927—March 31, 1928

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With the steady growth of the Society it is increasingly important for the Secretary to inform the members periodically of basic facts, significant changes in policy and procedure. The following is a concise statement of such facts.

*The Secretary wishes to draw attention particularly to*

1. *Proposed changes in constitution.*
2. *Surplus of \$2641.28 for the year.*
3. *Increase in the number of subscribers.*
4. *Increasing standards of PROCEEDINGS.*

*For details see below.*

*The Secretary wishes to express his appreciation of the splendid cooperation given by the members.*

## **Changes in Constitution.**

With changing conditions and growth there has been a continuing endeavor to meet these changes in practice and by constitutional enactment. Hence, the changes in the Constitution in 1922, 1925, and 1928.

*These constitutional changes, initiated by the New York group, have been consistently in the direction of transforming a local group into a national society by distributing nation wide the labors and responsibilities.*

### *Comparison of 1922, 1925, and 1928 Constitutions.*

Formerly the Council consisted of 5 New York members,\* now there are 20. The chairman of each section is a *de facto* member of the Council.

Formerly there was but one editor; now there are eight (2 N. Y., 2 Pa., 1 Ill., 1 Minn., 1 Mich., 1 N. Car.).

Formerly applications for membership were considered by the Council of 5; now by Branch officers, Membership Committee of 3, and Council of 20. The proposed Constitution provides for a Membership Committee of 10, consisting of 1 member selected by each Section (Branch).

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\* Plus past presidents.

Formerly only one Treasurer; now committee of 3 trustees.

Formerly one secretary; now 10 secretaries; each Branch secretary keeps records and reports all meetings, and aids in maintaining standards.

### *Types of Decentralization.*

Federation of American Societies for Experimental Biology. Independent societies, officers, finances, journals. Federated for meeting purposes only.

Wistar Federation (Williams and Wilkins, Science Press, etc.), Independent societies, federated for economy in publication.

Journal of Dental Research. Independent societies, officers, finances. Publish in one journal. There is a General Editor and General Treasurer (in addition to each Society editor and treasurer).

Botanical Society of America. Federation of different societies in related fields. Sectional officers and general officers (including Council, Editor, Treasurer, Secretary). Federated for publication and meeting.

Society for Experimental Biology and Medicine, American Chemical Society, etc. *Regional groups* of one society, each group engaged in similar work. Sectional officers and general officers (including Council, Editor, Treasurer, Secretary). Common publication. Separate meetings. Common annual meeting.

A study of the societies listed in the Handbook of Scientific and Technical Societies and Institutes of the United States and Canada, in the Bulletin of the National Research Council, May, 1927, and correspondence with secretaries of all the Societies in any way analogous with ours is almost unanimously in favor of the type of organization proposed in the new Constitution.

The Council feels that the maximum decentralization or division of responsibility to all groups in the Society should be provided consistent with high standards and economy. This is offered in the proposed constitution. Further decentralization jeopardizes high standards and is too great a burden financially on the members.

A copy of the proposed Constitution will soon be distributed to each member.

### ANNUAL MEETING OF OFFICERS AND DELEGATES OF BRANCHES.

The second annual conference of officers of the Society with the officers and delegates of Branches was held during the Federation meetings at Ann Arbor, April 12, 1928. With increasing size and diversity of the needs of the Branches it is hoped that these annual

conferences will inform and unify the scattered Branches, bring about closer cooperation, and maintain highest standards within the Society.

The best type of organization for adoption in the constitution was the major topic of discussion. It was the sense of the conference that the form of organization in the proposed constitution served the best interests of the Society; that the Membership Committee should be enlarged to include one member from each Branch, excepting Peking.

#### COMMENT ON FINANCES.

*There is a surplus for the fiscal year of \$2641.28.* The present surplus is due primarily to (a) decreased cost of printing. The Griffiths Press kindly consented to a reduction in cost of 15%. (b) The number of subscribers was considerably enlarged.

Whether it is best to build a reserve, or decrease the cost of dues or excess space, or grant more free reprints can best be determined after another year's experience.

#### CAMPAIGN FOR SUBSCRIBERS.

The Secretary circularized selected lists from the leading research and medical societies. We received 143 additional subscribers. It is hoped that members will aid in further increasing our subscription lists. This should make it possible to make considerable reductions in cost to members and authors.

#### MEMBERSHIP.

Members, March 31, 1927 .....	851	
Elected to March 31, 1928 .....	116	
	—	967
Honorary Members, March 31, 1928.....		8
		—
Total .....		975
Resignations, year ending March 31, 1928 .....	19	
Deaths, year ending March 31, 1928 .....	8	
Dropped for arrears, year ending March 31, 1928 .....	4	
	—	31
		—
Net membership .....		944

#### SUBSCRIPTIONS.

Subscriptions, March 31, 1927 .....	214	
March 31, 1928 .....		357

Free subscriptions, March 31, 1927 -----	31	
March 31, 1928 -----		7
Exchange subscriptions, March 31, 1927 -----	18	
March 31, 1928 -----		8
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Total, March 31, 1928 -----		372
Total No. of PROCEEDINGS distributed March 31, 1927 -----	1122	
March 31, 1928 -----		1316

OFFICERS.

*President:* Stanley R. Benedict.

*Vice-Pres.:* Peyton Rous.

*Secy.-Treas.:* A. J. Goldforb.

*Council:* O. F. Avery (1929), Robert Chambers (1929), A. E. Cohn (1930), A. F. Hess (1930), W. W. Palmer (1931), H. D. Senior (1931).

*Past Presidents:* F. B. Wilson, Simon Flexner, F. S. Lee, T. H. Morgan, James Ewing, Graham Lusk, William J. Gies, Gary Calkins, George B. Wallace, James W. Jobling.

*Nominating Committee:* A. J. Carlson, E. F. DuBois, P. J. Hanzlik, A. F. Hess, L. B. Mendel, V. C. Myers, H. C. Sherman, Donald VanSlyke, G. B. Wallace.

*Editorial Committee:* Present members are A. J. Carlson, B. M. Duggar, M. H. Jacobs, John Kolmer, H. B. Lewis, W. deB. MacNider, A. M. Pappenheimer, A. J. Goldforb.

*Membership Committee:* Present members are E. A. Doisy, Robert Chambers, I. Greenwald.

*Financial Committee:* Present members are William J. Gies, William H. Park, A. J. Goldforb.

PAST OFFICERS.

<i>Date</i>	<i>President</i>	<i>Vice-Pres.</i>	<i>Secy.</i>	<i>Treas.</i>
1903-04	Melzer	Park	Gies	Calkins
1904-05	Melzer	Ewing	Gies	Calkins
1905-06	Wilson	Dunham	Gies	Calkins
1906-07	Flexner	Dunham	Gies	Calkins
1907-08	Flexner	Morgan	Gies	Calkins
1908-09	Lee	Morgan	Gies	Lusk
1909-10	Lee	Gies	Opie	Lusk
1910-11	Morgan	Gies	Opie	Lusk
1911-12	Morgan	Levene	Wallace	Lusk
1912-13	Ewing	Levene	Wallace	Norris
1913-14	Ewing	Field	Jackson	Norris
1914-15	Lusk	Gies	Jackson	Murlin

			<i>Secy-Treas.</i>
1915-16	Lusk	Calkins	Jackson
1916-17	J. Loeb	Gies	Jackson
1917-18	Gies	Auer	Jackson
1918-19	Gies	Auer	Jackson
1919-20	Calkins	Wallace	Jackson
1920-21	Calkins	Wallace	Jackson
1921-22	Wallace	Jobling	Jackson
1922-23	Wallace	Jobling	Myers
1923-24	Jackson	Jobling	Goldforb
1924-25	Jackson	Jobling	Goldforb
1925-26	Jobling	Benedict	Goldforb
1926-27	Jobling	Benedict	Goldforb
1927-28	Benedict	Rous	Goldforb

## BRANCHES.

*Illinois.*

Chairman: A. B. Luckhardt. Sec'y: W. F. Petersen. Members: 70.

Meetings: Michael Reese Hospital, October 25, 1927.

Billings Hospital, December 20, 1927.

Northwestern University Medical School, February 28, 1928.

University of Illinois, April 24, 1928.

City Club, Chicago, May 25, 1928.

*Iowa.*

Chairman: W. W. Swingle. Sec'y: H. A. Mattill. Members: 21.

Meetings: University of Iowa, November 2, 1927.

University of Iowa, February 1, 1928.

University of Iowa, March 25, 1928.

University of Iowa, April 30, 1928.

*Minnesota.*

Chairman and Secretary: F. H. Scott. Members: 42.

Meetings: University of Minnesota Med. School, October 26, 1927.

University of Minnesota Med. School, Feb'y 29, 1928.

University of Minnesota Med. School, March 27, 1928.

University of Minnesota Med. School, April 25, 1928.

University of Minnesota Med. School, May 31, 1928.

*Missouri.*

Chairman: John Auer. Sec'y: P. A. Shaffer. Members: 38.

Meetings: St. Louis Univ. School of Medicine, November 16, 1927.

Washington Univ. School of Medicine, Jan'y 18, 1928.

St. Louis Univ. School of Medicine, Feb'y 29, 1928.

Washington Univ. School of Medicine, May 16, 1928.

*New York.*

Chairman: S. R. Benedict. Sec'y: A. J. Goldforb. Members: 605.  
Meetings: Post Graduate Hospital, October 19, 1927.  
Rockefeller Institute, November 16, 1927.  
College of Physicians and Surgeons, December 21, 1927.  
Cornell University Med. College, January 18, 1928.  
Presbyterian Hospital, February 15, 1928.  
University and Bellevue Med. Coll., March 21, 1928.  
College of the City of New York, April 18, 1928.  
Yale University, May 19, 1928.

*Pacific Coast.*

Chairman: William Ophüls. Sec'y: T. D. Beckwith. Members: 69.  
Meetings: University of California Faculty Club, October 15, 1927.  
Stanford University School of Medicine, Dec. 14, 1927.  
University of California Hospital, February 15, 1928.  
Stanford University, April 28, 1928.

*Peking (China).*

Chairman: Hsien Wu. Sec'y: R. H. F. Sia. Members: 15.  
Meetings: Peking Union Medical College, November 3, 1927.  
Peking Union Medical College, February 9, 1928.  
Peking Union Medical College, May 10, 1928.

*Southern.*

Chairman: W. Denis. Sec'y: W. H. Harris. Members: 22.  
Meetings: Tulane University, December 13, 1927.  
Tulane University, February 28, 1928.  
Tulane University, May 22, 1928.

*Western New York*

Chairman: J. B. Sumner. Sec'y: H. S. Liddell. Members: 44.  
Meetings: Cornell University, October 15, 1927.  
Clifton Springs Sanitarium, December 17, 1927.  
University of Buffalo, February 11, 1928.  
University of Rochester, May 12, 1928.

*Wisconsin.*

Chairman: A. S. Loevenhart. Sec'y: F. L. Hisaw. Members: 18.  
Meetings: University of Wisconsin, April 30, 1928.

*New Branches.*

The application of the Wisconsin members to form a Branch of the Society was approved. This makes the tenth Branch.



## DEATHS OF MEMBERS.

The Council records with regret the death of the following members: D. H. Dolley, G. A. Friedman, Holmes C. Jackson, K. K. Koessler, S. A. Matthews, Francis W. Peabody, Charles E. Simon, Abraham Zingher.

## GIFTS.

The Secretary wishes to acknowledge, with the thanks of the Council, the receipt of back numbers by gift from Drs. William N. Berg, H. C. Bazett, S. C. Brooks, M. M. Brooks, Vernon Kellogg, Robert L. Levy, William F. Petersen.

The Society has become affiliated with the Biologic Union and with the American Association for the Advancement of Science.

Comments, criticisms, and suggestions of members are earnestly requested.

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EDITOR'S ANNUAL REPORT

April 1, 1927 – March 31, 1928

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There have been many expressions of appreciation of the higher standard of publication.

This is in part due to the fact that the Board of Editors have more carefully examined manuscripts than heretofore and to the fact that authors have cooperated in withdrawing duplicate and trivial manuscripts and have revised manuscripts when called upon to do so.

There were 425 papers published, of which *60% were Preliminary and 40% Complete.*

With this increase in standards there has been no increase in the size of the volume. Volume 22 contained 619 pages; Volume 23, 900 pages; Volume 24, 1004 pages, and Volume 25, 900 pages approximately.

The problem is how to get authors to state their findings in sufficiently *concise form and in such a manner that the significance of their results may be understood by colleagues in allied fields.*

## TREASURER'S REPORT

April 1, 1927 to April 1, 1928

### RECEIPTS.

#### Income, 1927-28—

Dues -----	\$4814.95
Reprints -----	2174.07
Excess space -----	1734.27
Author's changes, bank interest, and misc. --	136.08
Cuts -----	547.75
Subscriptions -----	2538.06
Back numbers -----	571.95

Total annual income ----- \$12,517.13

#### Special Receipts—

Endowment Fund contributions -----	242.12
Annual interest of Endowment Fund -----	473.89

Total ----- 716.01

Cash balance, April 1, 1927 ----- 1,623.98

Total cash available, April 1, 1927, to April 1, 1928---- \$14,857.12

### DISBURSEMENTS.

#### Publication Costs of PROCEEDINGS—

Printing -----	\$4253.96
Reprints -----	2330.96
Cuts -----	577.21

----- \$ 7,162.13

#### Administrative Expense—

Office supplies and postage -----	772.95
Salaries -----	2100.90
Storage and insurance -----	89.59
Miscellaneous -----	51.28
Purchase of back numbers -----	6.00
Refunds -----	15.67

----- 3,036.39

Total annual disbursements ----- \$10,198.52

Transferred to Endowment Fund ----- 716.01

Transferred to Life Membership Fund ----- 75.00

Cash balance, April 1, 1928 ----- 3,867.59

Total cash available during 1927-28 ----- \$14,857.12

## SUMMARY.

Income (net) -----	\$12,517.13
Disbursements (net) -----	10,198.52
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Surplus for year -----	\$ 2,318.61
Bills payable -----	none
Bills collectable, April 1, 1928 -----	\$1,448.29
Bills collectable, April 1, 1927 -----	1,125.62
Bills collectable in excess of last year -----	322.67
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Total surplus for year -----	\$ 2,641.28

*The Treasurer desires to acknowledge with many thanks the extraordinary cooperation of Alexander Dolowitz, C. P. A., of New York, who volunteered the services of his staff to examine the books of the Society, who advised how the records should be kept in the most accurate and most economical way, who supervised the work of his staff, as his contribution to the Society.*

## ENDOWMENT FUND.

In R. R. Coop. Bldg. Loan Assn., April 1, 1927 -----	\$ 9,753.06
Contributions to April 1, 1928 -----	242.12
Interest for year April 1, 1927, to April 1, 1928 -----	484.01
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Total, April 1, 1928 -----	\$10,479.19

**Auditors' Report.**

We have examined the accounts of the Society and the Treasurer's report, have checked the book entries against the totals, and have verified the bank balance.

The auditors would like to express their appreciation of the services rendered by Mr. Alexander Dolowitz, C. P. A., and the skill that he has shown in making available to the Treasurer records on which to base action. We strongly commend the system of book-keeping that he has devised.

May 8, 1928.

ISIDOR GREENWALD.

WALTER H. EDDY.