

Louisiana State University

School of Medicine

in New Orleans

da State University

Graduate School

in all Men by these Presents
of Control of the Florida State University
commendation of the Faculty has conferred upon
Rhodes Burns Holliman

the degree of

Doctor of Philosophy

its honors and privileges thereunto appertaining.

the Seal of the University and the signatures
of duly authorized officers hereunto affixed.

Tallahassee, Florida, this fourth day of June,
our Lord, one thousand nine hundred and sixty



James A. Lewis
President of the University

Certifies that

Rhodes B. Holliman

Completed requirements as a

Fellow in Tropical Medicine

The University of Miami

Rhodes Burns Holliman
Master of Science

June 11, 1973

1973

J. C. Swartz
Program Director

THE FLORIDA STATE UNIVERSITY

TALLAHASSEE

August 23, 1961

OFFICE OF THE PRESIDENT


Mr. Rhodes B. Holliman
Department of Biological Sciences
Florida State University

Dear Mr. Holliman:

Your appointment as an Instructor in the Department of Biological Sciences for the period September 1, 1961 to June 30, 1962 has been confirmed by the Board of Control. Your salary on a ten months basis will be \$5,600.

Will you please indicate in writing your acceptance of this appointment.

Cordially,


M. W. Carothers
Vice President

MWC:by

cc: Dean J. Paul Reynolds

JACKSONVILLE UNIVERSITY

JACKSONVILLE 11, FLORIDA

OFFICE OF THE
DEAN OF THE FACULTY

February 29, 1960

Mr. Rhodes B. Holliman
1501 Mayhew Street
Tallahassee
Florida

Dear Mr. Holliman:

I am pleased to send to you the contract which we have been discussing. Please sign the original and retain the carbon for your personal files. If you will note, there is a statement in the first paragraph indicating that this contract does not imply a commitment for the year following the doctoral period. This is a statement standard in all contracts except for people on tenure. This is not to be interpreted as indication that this is a temporary position.

Once again, it is a pleasure to consider your being with us next year. Please let me or John McCoy know when we can be of service to you in moving to Jacksonville.

With warmest personal regards, I am

Sincerely yours,



William E. Highsmith
Dean of the Faculty

WEH-bh
Enc. 2

FLORIDA STATE UNIVERSITY

TALLAHASSEE, FLORIDA
STUDENT GRADE REPORT

If any grades are omitted, it indicates that the grades have not been received.

▼ STUDENT'S NAME AND ADDRESS ▼

HOLLIMAN RHODES B
1501 MAYHEW ST
TALLAHASSEE FLA

P.O. BOX

--

9

PERIOD ENDING

6	6	1959
MO.	DAY	YEAR

1	5
DIV.	CLASS

▼ TO THE PARENT OR GUARDIAN OF ▼

HOLLIMAN RHODES B
1501 MAYHEW
TALLAHASSEE FLAGRADES CARRY THE FOLLOWING QUALITY POINTS
FOR EACH SEMESTER HOUR: A-4; B-3; C-2; D-1;
F-O. FOR GRADE AVERAGE DIVIDE SEMESTER
HOURS CARRIED INTO QUALITY POINTS EARNED.

DEP'T.	COURSE NO.	TITLE OF COURSE	SEMESTER HOURS	GRADE	QUALITY POINTS	ABSENCES
ZY	538	INVERT MORPH CLASSIF	4 00	A	16 00	
ZY	535	PARASITOLOGY SEMINAR	1 00	A	4 00	
GN	552	GRAD READ KNOWL GN		NC		
ZY	699	DISSERTATION	5 00	S		
	70	1	44721	10 00	20 00	
			STUDENT NO.	SEM. HRS. CARRIED	GRADE	TOTAL ABSENCES
					QTY. PTS. EARNED	

DIVISION CODE

- | | |
|----------------------|--------------------------|
| 1. ARTS AND SCIENCES | 6. LIBRARY SCHOOL |
| 2. EDUCATION | 7. SOCIAL WELFARE |
| 3. HOME ECONOMICS | 8. PUBLIC ADMINISTRATION |
| 4. MUSIC | 9. JOURNALISM |
| 5. GRADUATE | 10. BUSINESS |
| | 11. NURSING |

CLASSIFICATION CODE

- | |
|--------------|
| 1. FRESHMAN |
| 2. SOPHOMORE |
| 3. JUNIOR |
| 4. SENIOR |
| 5. GRADUATE |
| 6. SPECIAL |

GRADING SYSTEM NC: No CREDIT (AUDIT)A; EXCELLENT. B; GOOD. C; AVERAGE. D; BARELY PASSED.
F; FAILED. I; INCOMPLETE. S; SATISFACTORY. W; WITHDRAWN.THIS REPORT DOES NOT CONSTITUTE AN
OFFICIAL TRANSCRIPT.CHARLES H. WALKER
REGISTRAR

FLORIDA STATE UNIVERSITY

TALLAHASSEE, FLORIDA
STUDENT GRADE REPORT

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▼ STUDENT'S NAME AND ADDRESS ▼

HOLLIMAN RHODES B
1501 MAYHEW ST
TALLAHASSEE FLA

P.O. BOX

	9
--	---

PERIOD ENDING

6	2	1958	1	5
MO.	DAY	YEAR	DIV.	CLASS

▼ TO THE PARENT OR GUARDIAN OF ▼

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1501 MAYHEW
TALLAHASSEE FLAGRADES CARRY THE FOLLOWING QUALITY POINTS
FOR EACH SEMESTER HOUR: A-4; B-3; C-2; D-1;
F-0. FOR GRADE AVERAGE DIVIDE SEMESTER
HOURS CARRIED INTO QUALITY POINTS EARNED.

DEP'T.	COURSE NO.	TITLE OF COURSE	SEMESTER HOURS	GRADE	QUALITY POINTS	ABSENCES
ZY	435	BIOL OF VERTEBRATES	4 00	A	16 00	2
ZY	533	PARASITOLOGY SEMINAR	1 00	A	4 00	
BTY	556	SPEC RESEARCH PROBS	4 00	A	16 00	
BLY	C591	DIR INDIV STUDY	3 00	A	12 00	
			44721	12 00	48 00	2
			STUDENT NO.	SEM. HRS. CARRIED	GRADE	QTY. PTS. EARNED
						TOTAL ABSENCES

DIVISION CODE

- | | |
|----------------------|--------------------------|
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| | 11. NURSING |

CLASSIFICATION CODE

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3. JUNIOR
4. SENIOR
5. GRADUATE
6. SPECIAL

GRADING SYSTEM NC: No CREDIT (AUDIT)

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FLORIDA STATE UNIVERSITY

TALLAHASSEE, FLORIDA

STUDENT GRADE REPORT

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▼ STUDENT'S NAME AND ADDRESS ▼

HOLLIMAN RHODES B
1501 MAYHEW ST
TALLAHASSEE FLA

HOLLIMAN RHODES B
1501 MAYHEW
TALLAHASSEE FLA

P. O. BOX

PERIOD ENDING

MO.	DAY	YEAR	DIV.	CLASS
9	2	1 1958	01	5

▲ PARENTS' OR GUARDIANS' NAME & ADDRESS ▲

GRADES CARRY THE FOLLOWING QUALITY POINTS FOR EVERY SEMESTER HOUR: A-4; B-3; C-2; D-1; F-0; FOR GRADE AVERAGE DIVIDE SEMESTER HOURS CARRIED INTO QUALITY POINTS EARNED.

TITLE OF COURSE	ABSEN- CES	DEP'T	COURSE NO.	GRADE	SEMESTER HOURS	QUALITY POINTS		
PROBS HELMINTHOLOGY		ZY	537	B	4 00	12 00		
GENETICS		BLY	526	A	3 00	12 00		
GENERAL PHYSIOLOGY		PY	465	A	3 00	12 00		
					44721	10 00		
			STUDENT NO.	SEM. HRS. EARNED	SEM. HRS. FAILED	SEM. HRS. DEFERRED	SEM. HRS. CARRIED	QTY. PTS. EARNED

DIVISION CODE

- | | |
|----------------------|--------------------------|
| 1. ARTS AND SCIENCES | 6. LIBRARY SCHOOL |
| 2. EDUCATION | 7. SOCIAL WELFARE |
| 3. HOME ECONOMICS | 8. PUBLIC ADMINISTRATION |
| 4. MUSIC | 9. JOURNALISM |
| 5. GRADUATE | 10. BUSINESS |
| | 11. NURSING |

CLASSIFICATION CODE

1. FRESHMAN
2. SOPHOMORE
3. JUNIOR
4. SENIOR
5. GRADUATE
6. SPECIAL

GRADING SYSTEM

NC: No CREDIT (AUDIT)

- A: EXCELLENT. B: GOOD. C: AVERAGE. D: BARELY PASSED.
F: FAILED. I: INCOMPLETE. S: SATISFACTORY. W: WITHDRAWN.

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CHARLES H. WALKER

REGISTRAR

FLORIDA STATE UNIVERSITY

TALLAHASSEE, FLORIDA STUDENT GRADE REPORT

If any grades are omitted, it indicates that the grades have not been received.

▼ STUDENT'S NAME AND ADDRESS ▼

HOLLIMAN RHODES B
1501 MAYHEW ST
TALLAHASSEE FLA

HOLLIMAN RHODES B
8212 6TH AVE S
BIRMINGHAM 6 ALA

P. O. BOX

PERIOD ENDING

MO.	DAY	YEAR	DIV.	CLASS
2	2	1957	1	5

▲ PARENTS' OR GUARDIANS' NAME & ADDRESS ▲

GRADES CARRY THE FOLLOWING QUALITY POINTS
FOR EVERY SEMESTER HOUR: A-4; B-3; C-2; D-1;
F-0; FOR GRADE AVERAGE DIVIDE SEMESTER
HOURS CARRIED INTO QUALITY POINTS EARNED.

TITLE OF COURSE	ABSEN- CES	DEP'T	COURSE NO.	GRADE	SEMESTER HOURS	QUALITY POINTS	
DIR STUDY RESEARCH		ZY	591	A	3 00	12 00	
SURVEY MARINE BIOL		ZY	430	A	4 00	16 00	
BIOCHEMISTRY		CY	481	C	4 00	8 00	
		44721			11 00		
		STUDENT NO.	SEM. HRS. EARNED	SEM. HRS. FAILED	SEM. HRS. DEFERRED	SEM. HRS. CARRIED	QTY. PTS. EARNED
						11 00*	36 00

DIVISION CODE

- | | |
|----------------------|--------------------------|
| 1. ARTS AND SCIENCES | 6. LIBRARY SCHOOL |
| 2. EDUCATION | 7. SOCIAL WELFARE |
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CHARLES H. WALKER

REGISTRAR

FLORIDA STATE UNIVERSITY

TALLHASSEE, FLORIDA STUDENT GRADE REPORT

If any grades are omitted, it indicates that the grades have not been received.

▼ STUDENT'S NAME AND ADDRESS ▼ HOLLIMAN RHODES B 1501 MAYHEW ST TALLHASSEE FLA HOLLIMAN RHODES B 8212 6TH AVE S BIRMINGHAM 6 ALA	P. O. BOX 8 9	PERIOD ENDING				
		MO.	DAY	YEAR	DIV.	CLASS
		8	10	1957	01	5

GRADES CARRY THE FOLLOWING QUALITY POINTS FOR EVERY SEMESTER HOUR: A-4; B-3; C-2; D-1; F-0; FOR GRADE AVERAGE DIVIDE SEMESTER HOURS CARRIED INTO QUALITY POINTS EARNED.

▲ PARENTS' OR GUARDIANS' NAME & ADDRESS ▲

TITLE OF COURSE	ABSEN- CES	DEP'T	COURSE NO.	GRADE	SEMESTER HOURS	QUALITY POINTS
GRAD READ KNOW GN		GN	551	NC		
DISSERTATION		ZY	699	S	5 00	
GRAD STUDY & RESRCH		LS	500	B	1 00	3 00
					44721	01 00
					6 00*	3 00
STUDENT NO.		SEM. HRS. EARNED	SEM. HRS. FAILED	SEM. HRS. DEFERRED	SEM. HRS. CARRIED	QTY. PTS. EARNED

DIVISION CODE

- | | |
|----------------------|--------------------------|
| 1. ARTS AND SCIENCES | 6. LIBRARY SCHOOL |
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CHARLES H. WALKER

REGISTRAR

FLORIDA STATE UNIVERSITY

TALLAHASSEE, FLORIDA

STUDENT GRADE REPORT

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▼ STUDENT'S NAME AND ADDRESS ▼

HOLLIMAN RHODES B
1501 MAYHEW ST
TALLAHASSEE FLA

HOLLIMAN RHODES B
8212 6TH AVE S
BIRMINGHAM 6 ALA

P. O. BOX

PERIOD ENDING

MO.	DAY	YEAR	DIV.	CLASS
9	6	1	1957	01 5

GRADES CARRY THE FOLLOWING QUALITY POINTS FOR EVERY SEMESTER HOUR: A-4; B-3; C-2; D-1; F-0; FOR GRADE AVERAGE DIVIDE SEMESTER HOURS CARRIED INTO QUALITY POINTS EARNED.

▲ PARENTS' OR GUARDIANS' NAME & ADDRESS ▲

TITLE OF COURSE	ABSEN- CES	DEPT	COURSE NO.	GRADE	SEMESTER HOURS	QUALITY POINTS	TOTAL	
							STUDENT NO.	SEM. HRS. EARNED
DIR INDIV STUDY		ATY	591	A	3 00	12 00		
DIR INDIV STUDY		ZY	M592	A	1 00	4 00		
BIOCHEMISTRY		CY	482	B	4 00	12 00		
DIR INDIV STUDY		ZY	M591	A	2 00	8 00		
							44721	10 00
								10 00*
								36 00
							STUDENT NO.	SEM. HRS. EARNED
								SEM. HRS. FAILED
								SEM. HRS. DEFERRED
								SEM. HRS. CARRIED
								QTY. PTS. EARNED

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REGISTRAR

FLORIDA STATE UNIVERSITY

TALLAHASSEE, FLORIDA STUDENT GRADE REPORT

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▼ STUDENT'S NAME AND ADDRESS ▼

HOLLIMAN RHODES B
1501 MAYHEW ST
TALLAHASSEE FLA

P.O. BOX

9

PERIOD ENDING

8	9	1958
MO.	DAY	YEAR

1	5
DIV.	CLASS

8

▼ TO THE PARENT OR GUARDIAN OF ▼

HOLLIMAN RHODES B
1501 MAYHEW
TALLAHASSEE FLA

GRADES CARRY THE FOLLOWING QUALITY POINTS FOR EACH SEMESTER HOUR: A-4; B-3; C-2; D-1; F-O. FOR GRADE AVERAGE DIVIDE SEMESTER HOURS CARRIED INTO QUALITY POINTS EARNED.

DEP'T.	COURSE NO.	TITLE OF COURSE	SEMESTER HOURS	GRADE	QUALITY POINTS	ABSENCES
ZY	699	DOCTORL DISSERTATION	6 00	S		
			44721	6 00		
			STUDENT NO.	SEM. HRS. CARRIED	GRADE	QTY. PTS. EARNED
						TOTAL ABSENCES

DIVISION CODE

- | | |
|--|--|
| <ul style="list-style-type: none"> 1. ARTS AND SCIENCES 2. EDUCATION 3. HOME ECONOMICS 4. MUSIC 5. GRADUATE | <ul style="list-style-type: none"> 6. LIBRARY SCHOOL 7. SOCIAL WELFARE 8. PUBLIC ADMINISTRATION 9. JOURNALISM 10. BUSINESS 11. NURSING |
|--|--|

CLASSIFICATION CODE

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- 6. SPECIAL

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CHARLES H. WALKER
REGISTRAR

FLORIDA STATE UNIVERSITY

TALLAHASSEE, FLORIDA STUDENT GRADE REPORT

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▼ STUDENT'S NAME AND ADDRESS ▼

HOLLIMAN RHODES B
1501 MAYHEW ST

P.O. BOX

9

PERIOD ENDING

8	8	1959	1	5
MO.	DAY	YEAR	DIV.	CLASS

▼ TO THE PARENT OR GUARDIAN OF ▼

HOLLIMAN RHODES B
1501 MAYHEW
TALLAHASSEE FLA

GRADES CARRY THE FOLLOWING QUALITY POINTS FOR EACH SEMESTER HOUR: A-4; B-3; C-2; D-1; F-O. FOR GRADE AVERAGE DIVIDE SEMESTER HOURS CARRIED INTO QUALITY POINTS EARNED.

DEP'T.	COURSE NO.	TITLE OF COURSE	SEMESTER HOURS	GRADE	QUALITY POINTS	ABSENCE
ZY	699	DISSERTATION	6 00	S		
	70	1	44721	6 00		
			STUDENT NO.	SEM. HRS. CARRIED	GRADE	TOTAL ABSENCE
				QTY. PTS. EARNED		

DIVISION CODE

- | | |
|----------------------|--------------------------|
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REGISTRAR

FLORIDA STATE UNIVERSITY

TALLAHASSEE, FLORIDA

STUDENT GRADE REPORT

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▼ STUDENT'S NAME AND ADDRESS ▼

HOLLIMAN RHODES B
 1501 MAYHEW ST
 TALLAHASSEE FLA

P.O. BOX

9

PERIOD ENDING

6	04	1960	75	5
MO.	DAY	YEAR	DIV.	CLASS

▼ TO THE PARENT OR GUARDIAN OF ▼

HOLLIMAN RHODES B
 1501 MAYHEW
 TALLAHASSEE FLA

GRADES CARRY THE FOLLOWING QUALITY POINTS FOR EACH SEMESTER HOUR: A-4; B-3; C-2; D-1; F-O. FOR GRADE AVERAGE DIVIDE SEMESTER HOURS CARRIED INTO QUALITY POINTS EARNED.

DEP'T.	COURSE NO.	TITLE OF COURSE	SEMESTER HOURS	GRADE	QUALITY POINTS	ABSENCES	
ZY	699	DISSERTATION	10 00	A	40 00		
			44721	10 00	40 00		
			STUDENT NO.	SEM. HRS. CARRIED	GRADE	QTY. PTS. EARNED	TOTAL ABSENCES

DIVISION CODE

- | | |
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CHARLES H. WALKER
 REGISTRAR

-Mrs-
-Miss HOLLIMAN, RHODES BURNS
Name Last First Middle Number

	Number		Hours		Points
ZY	435	SPRING SEMESTER 1958 BIOL OF VERTEBRATES	4 00	A	16 00
ZY	533	PARASITOLOGY SEMINAR	1 00	A	4 00
BTY	556	SPEC RESEARCH PROBS	4 00	A	16 00
BLY	591C	DIR INDIV STUDY (Museum Techniques in Helminthology)	3 00 12 00	A	12 00 48 00
ZY	699	SUMMER TERM 1958 8 DOCTORL DISSERTATION	*6 00 6 00	S	
ZY	699	FALL SEMESTER 1958 DISSERTATION	*9 00	S	
ZY	534	PARASITOLOGY SEMINAR	1 00 10 00	A	4 00 4 00
ZY	538	SPRING SEMESTER 1959 INVERT MORPH CLASSIF	4 00	A	16 00
ZY	535	PARASITOLOGY SEMINAR	1 00	A	4 00
GN	552	GRAD READ KNOWL GN		NC	
ZY	699	DISSERTATION	5 00* 10 00	S	20 00
ZY	699	SUMMER TERM 1959 8 DISSERTATION	6 00* 6 00	S	
ZY	699	FALL SEMESTER 1959 DISSERTATION	6 00*	S	
ZY	536	PARASITOLOGY SEMINAR	1 00	A	4 00
BLY	591D	DIR INDIV STUDY (Studies on Avian Schistosomes).	3 00 10 00	A	12 00 16 00
ZY	699	SPRING SEMESTER 1960 DISSERTATION	10 00 10 00	A	40 00 40 00

8212 6th Avenue S., Birmingham, Alabama

Home Address

CORRESPONDENCE AND EXTENSION RECORD

Dept.	Course Number	Descriptive Title	Sem. Hrs.	Gr.	Yr.	Cor. Ext.

TRANSCRIPT SENT: to him 3-9-62

*Dissertation hours may not count as course credit toward a graduate degree.

Passed Graduate Reading Knowledge Examination in French on November 1, 1958.
 Passed Graduate Reading Knowledge Examination in German on April 25, 1959.
 Passed comprehensive examinations for the degree Doctor of Philosophy on October 29, 1959.
 Admitted to candidacy for the degree Doctor of Philosophy on November 11, 1959.
 Passed Examination in Defense of Dissertation for the degree Doctor of Philosophy on May 5, 1960.

Name	Last	First	Middle	Number	Home Address	
DEPT.	Course Number	Descriptive Title of Course		Semester Hours	Grade	Quality Points
HOWARD COLLEGE, Birmingham, Alabama, Bachelor of Science, June 8, 1950						
UNIVERSITY OF MIAMI, Coral Gables, Fla., Master of Science, June 10, 1953						
ZY	591M	FALL SEMESTER 1956 DIR INDIV STUDY (Research)		1.00	A	4.00
ZY	430	SURVEY MARINE BIOL		4.00	A	16.00
CY	481	BIOCHEMISTRY		4.00	C	8.00
				9.00		28.00
SPRING SEMESTER 1957						
ATY	591	DIR INDIV STUDY (Field & Lab. Methods in Archaeology)		3.00	A	12.00
CY	482	BIOCHEMISTRY		4.00	B	12.00
ZY	591M	DIR INDIV STUDY (Parasitology)		2.00	A	8.00
ZY	592M	DIR INDIV STUDY (Parasitology Seminar)		1.00	A	4.00
				1.00		3.60
SUMMER TERM 1957 8						
GN	551	GRAD READ KNOW GN			NC	
ZY	699	DISSERTATION		5.00*	S	
LS	500	GRAD STUDY & RESRCH		1.00	B	3.00
				6.00		3.00
UNIVERSITY OF MIAMI, Coral Gables, Fla., 1952-53: (GRADUATE CREDIT)						
Zy.	601	Seminar, History of Biology		1	B	
Zy.	504	Animal Ecology		4	B	
Zy.	509	Ichthyology		4	C	
Zy.	503	General Entomology		4	A	
Zy.	513	Advanced Parasitology		4	A	
Zy.	512	Limnology		4	A	
Zy.	602	Seminar		1	B	
Zy.	691	Research Thesis		2	B	
Zy.	692	Thesis		2	A	
Zy.	693	Research Thesis		2	A	
FALL SEMESTER 1957						
ZY	537	PROBS HELMINTHOLOGY		4.00	B	12.00
BLY	526	GENETICS		3.00	A	12.00
PY	465	GENERAL PHYSIOLOGY		3.00	A	12.00
				10.00		36.00

Mr. and Mrs. Cecil R. Holliman
Name of Parents or Guardian

Feb. 28, 1928
Date of Birth

Birmingham, Alabama
Place of Birth

Secondary School

Academic Units

EH	FH	SH	LN	HY	CIV	GGY	SY	ES	LAW	S. ST	BLY	CY	G.S.	PS	ALG.	GEOM	TR	MS	TG	SMTH	OTR
----	----	----	----	----	-----	-----	----	----	-----	-------	-----	----	------	----	------	------	----	----	----	------	-----

Graduation Date: September 17, 1956

Date of Admission to Florida State University

Entrance Condition: Graduate

Date Removed: Biological Sciences

College, School or Division: Maj. Prof.: Robert B.

Major: Short

*Dissertation hours may not count as course credit toward a degree.

DISSERTATION: Trematode Cercariae from the Apalachee Bay Area, with a Summary of the Literature on Marine Cercariae of the World.

Miscellaneous

Date Withdrew

Cause of Withdrawal

Doctor of Philosophy

Degree

Graduation Date: June 4, 1960

GRADING SYSTEM

Audit—Audit	F—Failed
A—Excellent	I—Incomplete
B—Good	P—Passed
C—Average	NC—No Credit
D—Barely Passed	W—Withdrawal
	S—Satisfactory

THIS TRANSCRIPT IS NOT OFFICIAL UNLESS IT BEARS THE SEAL OF THE FLORIDA STATE UNIVERSITY

Honorable Dismissal Granted: *yes*

Transcript Issued: 3-9-62

THE FLORIDA STATE UNIVERSITY
Tallahassee, Florida

Registrar: *M. W. ...*

Questions for the Masters Degree examination. April 2, 1953

From Dr. Leigh

1. Make a drawing of the animal tree showing relationships of the major invertebrate phyla.
2. For each of the major phyla list the most important structural advancements of each group over the one lower on the animal tree.
3. Outline the main patterns in life histories followed by trematodes and nematodes. Indicate one parasite that would represent each pattern.

From Dr. Miller

1. Describe the development of a frog with emphasis on early patterns of embryology.
2. What is your concept of the relationship between genes and development of characteristics?
3. What is your concept of the relationship between embryonic development and the environment?
4. How does the heart of a mammal or bird embryo originate and develop?
5. Illustrate the basic Mendelian Laws with an example. Show the cross and subsequent generations in detail.

From Dr. Hunt

1. Discuss the temperature, oxygen, carbon dioxide and pH cycle of a Temperate Lake of the Second Order.
2. Define what is meant by Biological Productivity in reference to our fresh waters. Discuss the factors which have a bearing on it.
3. Give the classification of the Phylum Chordata down to Class. List several distinguishing characteristics of each group.
4. Discuss the major anatomical differences between a shark and a cat.

From Dr. Strohecker

1. The insect fauna of Florida and especially of south Florida is small compared to similar areas north of the state. Comments?

Rhodes B. Holliman

UNIVERSITY OF MIAMI GRADUATE SCHOOL	RHODES		BURNS		HOLLIMAN		COURSE TITLE	Dept.	Course No.	Credit Hours	Grade	Quality Points			
	FIRST NAME	SECOND NAME	SURNAME		Lost	Earned									
DATE OF ADMISSION 18 April 1951							SN- 21826								
PERMANENT ADDRESS 517 South 80th Street, Birmingham 6, Alabama															
DATE OF BIRTH 2-28-28		PLACE OF BIRTH Birmingham													
UNDERGRAD DEGREE B.S.		DATE June 1950		FROM Howard College											
DEGREE BOUGHT M.S.		MAJOR Zoology		MINOR None											
FOREIGN LANGUAGE French - Failed - April 19, 1952							French - Passed Aug. 17, 1952								
CANDIDACY Admitted October 1, 1952															
THESIS Life History of Paramacroderoides schinus Venard, 1941 (Macroderoididae) A Trematode of the Florida Gar															
FINAL EXAMINATION Passed oral and written comprehensive examination April 6, 1953 and April 2, 1953.															
REMARKS Graduate Courses only: Approved for M. S. degree. C attempted 32...; Earned 22...; <i>Miss. Ours</i> Date: <i>June 10, 1953</i> Quality pts. 72...; Average 2.25															
								INTRODUCTION		MB1204		4 A		12	
								HOLLIMAN RHODES B				4		12	
								PHY. MARINE ORGANISMS		MB1634		4 C		4	
								HOLLIMAN RHODES B				4		4	
								SEMINAR		ZOO601		1 B		2	
								ICHTHYOLOGY		ZOO509		4 C		4	
								RESEARCH THESIS		ZOO691		2 B		4	
								ANIMAL ECOLOGY		ZOO504		4 B		8	
								HOLLIMAN RHODES B				11		18 1/2	
								GENERAL ENTOMOLOGY		ZOO503		4 A		12	
								THESIS		ZOO692		2 A		6	
								ADV PARASITOLOGY		ZOO513		4 A		12	
								LIMNOLOGY		ZOO512		4 A		12	
								SEMINAR		ZOO602		1 B		2	
								HOLLIMAN RHODES B				15 1/2		24 1/2	
								RESEARCH THESIS		ZOO693		2 A		6	
								HOLLIMAN RHODES B				2		6	
												TOTAL		36	
								MASTER OF SCIENCE DEGREE CONFERRED		JUNE 10, 1953				84	

NOTE: COURSES WITH D GRADES, AND COURSES NUMBERED BELOW 500, ARE NOT COUNTED TOWARD GRADUATE DEGREE.

Buchs copy

DOCTORAL PROGRAM OF STUDIES

All copies of the Program of Studies should be filed in the Graduate School Office, After they have been checked there, one copy will be kept, one copy will be mailed to the student, and one copy will be mailed to each of the major and minor departments.

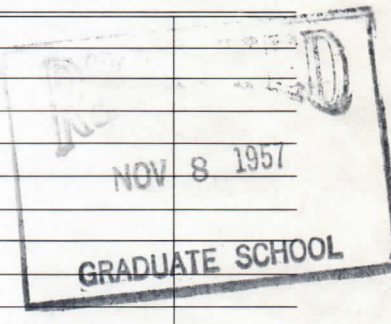
Name Rhodes Burns Holliman Date November 5, 1957
 Local Mailing Address 1501 Mayhew Street
 Undergraduate Degree BS Institution Howard College, Birmingham, Ala.
 Date Conferred June 1950 Undergraduate Major Biology Minor (1) Psychology
 Graduate Degree MS Major Zoology Minor None
 Institution University of Miami Date Conferred June 1953

GRADUATE COURSES TAKEN ELSEWHERE TO BE APPLIED TOWARD THE DOCTOR'S DEGREE

	Dept.	Course Number	Descriptive Title of Course	Grade Rec'd	Sem. Hrs.	Institution	Date
MAJOR	Zoo.	601	Seminar, History of Biology	B	1	Univ. of Miami	2-4-52
	Zoo.	504	Animal Ecology	B	4	" " "	2-4-52
	Zoo.	509	Ichthyology	C	4	" " "	2-4-52
	Zoo.	503	Entomology	A	4	" " "	6-7-52
	Zoo.	513	Advanced Parasitology	A	4	" " "	6-7-52
	Zoo.	512	Limnology	A	4	" " "	6-7-52
	Zoo.	602	Seminar	B	1	" " "	6-7-52
	Zoo.	691	Thesis	B	2	" " "	2-4-52
	Zoo.	692	Thesis	A	2	" " "	6-7-52
	Zoo.	693	Thesis	A	2	" " "	1-31-53

TOTAL HOURS IN MAJOR FIELD 28

MINOR	Dept.	Course Number	Descriptive Title of Course	Grade Rec'd	Sem. Hrs.	Institution	Date



TOTAL HOURS IN MINOR FIELD _____

GRADUATE COURSES ALREADY COMPLETED AT F.S.U.

MAJOR	Dept.	Course Number	Descriptive Title of Course	Grade Rec'd	Sem. Hrs.	Institution	Date
	Zy	591-M	Seminar in Parasitology	A	1	F.S.U.	2-2-57
	Zy	430	Survey of Marine Science	A	4	"	2-2-57
	Cy	481	Biochemistry	C	4	"	2-2-57
	*Aty	591	Dir. Indiv. Study in Aty	A	3	"	6-1-57
	Zy	592-M	Seminar in Parasitology	A	1	"	6-1-57
	Cy	482	Biochemistry	B	4	"	6-1-57
	Zy	591-M	Dir. Indiv. Study	A	2	"	6-1-57
	IS	500	Grad. Study and Research	B	1	"	8-10-57
	Zy	699	Dissertation	S	5	"	8-10-57
	Gn	551	Grad. Read. Know. in Gn	-	NC	"	8-10-57
	GN	552	" " " " "	-	NC	"	Spring 1959

TOTAL HOURS IN MAJOR FIELD 17

*Aty 591 not included in total.

	Dept.	Course Number	Descriptive Title of Course	Grade Rec'd	Sem. Hrs.	Institution	Date Taken
MINOR							

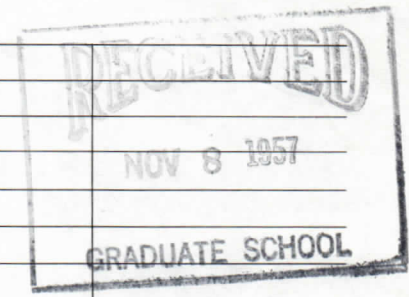
TOTAL HOURS IN MINOR FIELD _____

GRADUATE COURSES TO BE TAKEN (INCLUDING CURRENT ENROLLMENT)

MAJOR							
	Zy	537	Problems in Helminthology	B	4	F.S.U.	Fall, 1957
	Bly	526	Genetics	A	3	"	Fall, 1957
	Py	465	General Physiology	A	3	"	Fall, 1957
	Bty	555 556	Plant Morphology	A	4	"	Spring, 1958
	Bly	525	Cytology		4	"	Spring, 1958
Bly 591-D	591	591	Dir. Indiv. Study		3	"	Spring, 1958
	Zy	538	Invert. Morph. and Class.	A	4	"	Fall, 1958
	Zy	699	Dissertation	NC	(25)	"	Summer, Fall
	Bly	591-c	Dir. Indiv. Study	A	3	"	Spring, 1958-59
	Zy	435	Biology of Vertebrates	A	4	"	Spring 1958
	Zy	533	Parasitology Seminar	A	1	"	Spring 1958
	Zy	534	" "	A	1	"	Fall 1958
	Zy	535	" "	A	1	"	Spring 1959

TOTAL HOURS IN MAJOR FIELD ~~71~~ 31

31



MINOR							

TOTAL HOURS IN MINOR FIELD _____

TOTAL SEMESTER HOURS OF GRADUATE WORK ~~71~~ 71

RESIDENCE IN GRADUATE WORK, LISTED BY SEMESTERS (OR FRACTIONS), GIVING HOURS IN EACH. INCLUDING WORK IN OTHER UNIVERSITIES

Univ. of Miami, Fall 1951, Spring 1952, Fall 1952, Spring 1953. Total 32 hours.	F.S.U. Spring 1957, 10 hours.
F.S.U. Fall, 1956, 9 hours.	F.S.U. Fall, 1957, 10 hours.

APPROVED:

Major Professor

*Chairman of Major Dept., Graduate Committee

Head, Major Dept.

*If department has such a committee

Robert B. Short
David Shanon

Signatures of Members of the Supervisory Committee

A. W. Zugler
John Bejtler
Clayton W. Zenger
W. B. ...

The Florida State University

Tallahassee

December 10, 1959

GRADUATE SCHOOL
OFFICE OF THE DEAN

Mr. Rhodes B. Holliman
1501 Mayhew Street
Tallahassee, Florida

Dear Mr. Holliman:

You were admitted to candidacy for the degree Doctor of
Philosophy on November 11, 1959.

Sincerely yours,

Marie N. Willis

(Mrs.) Marie N. Willis
Executive Secretary

/w

cc: Dr. Robert B. Short

UNIVERSITY OF MIAMI		RHODES		DUNNS		HOLLIMAN	
GRADUATE SCHOOL		FIRST NAME		SECOND NAME		SURNAME	
DATE OF ADMISSION				SN-			
18 April 1951				21826			
PERMANENT ADDRESS							
517 South 80th Street, Birmingham 6, Alabama							
DATE OF BIRTH		PLACE OF BIRTH					
2-28-28		Birmingham					
UNDERGRAD DEGREE		DATE		FROM			
B.S.		June 1950		Howard College			
DEGREE SOUGHT		MAJOR		MINOR			
M.S.		Zoology		None			
FOREIGN LANGUAGE		French - Failed - April 19, 1952		French - Passed Aug. 17, 1952			
CANDIDACY		Admitted October 1, 1952					
THESIS		Life History of Paramacrodereides echinus Venard, 1941 (Macrodereoididae) A Trematode of the Florida Gar					
FINAL EXAMINATION		Passed oral and written comprehensive examination April 6, 1953 and April 2, 1953.					

REMARKS

Graduate Courses only: Approved for M. S. degree.

Cr attempted 32... Earned 32... *Mrs. Dunc Date: June 19, 1953*

Quality pts. 72... Average 2.25

COURSE TITLE	Dept.	Course No.	Credit Hours	Grade	Quality Points		
					Earned	Available	
INTRODUCTION HOLLIMAN RHODES B	MBI	204	4	A		12	
7 30 51			4			12	
PHY MARINE ORGANISM HOLLIMAN RHODES B	MBI	634	4	C		4	
9 08 51			4			4	
SEMINAR ICHTHYOLOGY	ZOO	601	1	B		2	
ZOO			4	C		4	
RESEARCH THESIS ANIMAL ECOLOGY	ZOO	691	2	B		4	
ZOO			4	B		8	
HOLLIMAN RHODES B							
2 04 52			11			18 1/2	
GENERAL ENTOMOLOGY THESIS	ZOO	503	4	A		12	
ZOO			2	A		6	
ADV PARASITOLOGY	ZOO	513	4	A		12	
LIMNOLOGY	ZOO	512	4	A		12	
SEMINAR	ZOO	602	1	B		2	
HOLLIMAN RHODES B							
6 07 52			15			24 1/2	
RESEARCH THESIS	ZOO	693	2	A		6	
HOLLIMAN RHODES B			1			6	
1 31 53			2			6	
TOTAL			36			84	
MASTER OF SCIENCE DEGREE CONFERRED JUNE 10, 1953							

THE SOCIETY OF THE SIGMA XI
The Florida State University Chapter

Dear Mr. Rhodes Burns Holliman,

It gives us great pleasure to inform you that you have been elected to Associate Membership in The Society of the Sigma Xi.

This action was taken at a business meeting of the Florida State University Chapter of Sigma Xi on April 17, 1957.

The initiation fee for your class of membership is \$4.00. Please send this amount together with a letter of acceptance to Dr. Nickolas Heerema, Treasurer, Sigma Xi; Math Dept.; Florida State University; Tallahassee, Fla.

This should be received here by May 3 in order that we may register your name on the rolls of the National Society.

Sincerely yours,

R. Winston Menzel

R. Winston Menzel

Secretary

OHIO NORTHERN UNIVERSITY
REPORT CARD

Coll. L. A. Dept. Spec.

Name Holliman, Rhodes B.

Summer, 1956 Quarter, 195

SUBJECT	No. Hrs.	GRADE
PHYS. ED.		
Chem. 211 Organic	4	A
Chem. 212 Organic	4	A
Chem. 213 Organic	4	A

ADV. CR. _____ Hr. Qr. Pt. Aver. 4.0

TOTALS

Cr. Hrs. 12 Sched. Hrs. _____ Pts. 48
 Accum. Pt. Aver. 4.0 Sat. X Unsat. _____
 Chapel: _____ Qr.: Cr. _____ Cuts _____
 Tot. Ch. Cr. _____ Hrs. added _____
 Class: _____ Qr.: Cuts _____
 Tot. Hrs. added _____
 Phys. Ed. to date _____

HOWARD COLLEGE

Birmingham, Ala.

Name of Student Holliman, Rhodes Burns Woodlawn High School
Last Name Other Names High or Secondary School Attended
8212 6 Avenue South Birmingham, Alabama Entered Fresh Class Birmingham, Alabama
Address Location of School
March 18, 1946 Biology 4 Bachelor of Science 1950
Date Admitted Course Years Attended Degree, Year Taken Graduated? Yes Date 1946

HIGH SCHOOL UNITS **RECORD OF COLLEGE WORK**
 By Certificate }
 By ~~XXXXXX~~ } Erase One
 (If any of the work listed below was completed elsewhere give name of institution, session taken, and credits allowed.)

	SESSION	Course No.	DESCRIPTIVE TITLE OF COURSE	Grades			Qr. Hour Credit
				I	II	SS	
English	4	Spring	Bi 101				5
Latin	2	Quarter	Hi Ia				5
French		1946	PE				1
Spanish			Eh Ib				4
German		Fall	Eh Ib				1
History	3	Quarter	Bi 201				5
Civics		1946	Hi Ib				5
Algebra	2	Winter	Ma 101				5
Plane Geometry	1	Quarter	PE 21				1
Solid Geometry		1947	Bi 102				5
Trigonometry		Spring	Ma 102				5
General Science	1	Quarter	Py 201				5
Biology		1947	Fr Ia				5
Chemistry	1	Quarter	So 200				5
Physics	1	1947	Re Ia				5
Physiography		Fall	Ch 111				6
Zoology		Quarter	Bi 103				5
Physiology		1947	Py 302				3
Commercial Subjects			Bi 303				5
Domestic Science		Winter	Py 401				5
Drawing		Quarter	Fr Ib				5
Manual Training		1948	Re Ib				5
Economics			Mu 222				0
Music	.9	Spring	Bi 207				5
Physical Education		Quarter	Py 303				5
Military Training		1948	Py 202				5
Geography	1	Summer	Py 201				*
Speech	1	Quarter	Bi 205				*
		1948	Eh 201				*
			PE 13				*
		Fall	Bi 302				5
		Quarter	Ph 201				0
		1948	Eh IIIa				5
			Eh IIIb				5
		Winter	Gn Ia				5
		Quarter	Bi 306				4
		1949	Hi 318				2
			Gn Ib				5
		Spring	Py 402				5
		Quarter					5
		1949					5

NOTE: A quarter hour equals twelve hours of recitation or twenty-four hours of laboratory.

Key to Grades: A is Excellent; B is Good; C is Average; D is Poor; E is Condition; F is Failure. Passing grades are A, B, C and D.

The applicant is entitled to honorable dismissal.

Date August 21 1948 Helen S. Kirkland
 Signature of Registrar.

HOWARD COLLEGE

Birmingham, Ala.

Name of Student Holliman, Rhodes Burns
 Last Name _____ Other Names _____
 High or Secondary School Attended _____
 Address _____ Entered _____ Class _____
 Location of School _____
 Date Admitted _____ Course _____ Years Attended _____ Degree, Year Taken _____
 Graduated? _____ Date _____

HIGH SCHOOL UNITS (By Certificate or By Examination) } Erase One
RECORD OF COLLEGE WORK (If any of the work listed below was completed elsewhere give name of institution, session taken, and credits allowed.)

	SESSION	Course No.	DESCRIPTIVE TITLE OF COURSE	Grades			Qr. Hour Credit
				I	II	SS	
English	Spring	Ph 201	General Physics			C	5
Latin	Quarter	So 314	Community Leadership			B	3
French	1949	PE 203	Physical Education			B	1
Spanish	Fall	Bi 301	Histology			B	5
German	Quarter	So 301	Criminology			B	3
History	1949	Ph 202	General Physics			F	0
Civics	Winter	So 204	The Family			B	3
Algebra	Quarter	Bi 205	Bacteriology			D	5
Plane Geometry	1950	Bi 206	Embryology			C	5
Solid Geometry	Spring	Fr IIA	Intermediate French			C	5
Trigonometry	Quarter	PE 213	Archery			A	1
General Science	1950	Fr IIB	Intermediate French			B	5
Biology	Summer	Art IIIa	Appreciation of Fine Arts			A	3
Chemistry	Quarter	Art IIIb	Appreciation of Fine Arts			A	3
Physics	1950	Re IVA	Applied Religion			B	3
Physiography	# Work in progress	PE 213	Archery			A	1
Zoology		PE 203	Tumbling			B	1
Physiology		Ed 202	Principles of Education			#	
Commercial Subjects		Ed 302	Principles of High School Teaching			#	
Domestic Science		Ed 401	Materials & Methods in History of Social Studies			#	
Drawing		Ed 402	Practice Teaching			#	
Manual Training		BIRMINGHAM SOUTHERN COLLEGE--Birmingham, Alabama					
Economics		Eh 101	Composition			C	5
Music		Hi 103	West Civilization since 1815			F	0
Physical Education		Mu 211	Advanced Choir			Audit	
Military Training		Ed 202	Principles of Education			B	2
	Summer	Ed 302	Principles of High School Teaching			C	2
	Quarter	Ed 401	Mat. & Meth. in Hi. and So. St.			A	2
	1950	Ed 402	Practice Teaching			A	5
			Mid-quarter grades				
Total accepted							
Mental test score							

NOTE: A quarter hour equals twelve hours of recitation or twenty-four hours of laboratory.

Key to Grades: A is Excellent; B is Good; C is Average; D is Poor; E is Condition; F is Failure. Passing grades are A, B, C and D.
 The applicant is entitled to honorable dismissal.
 Date August 21 1945 Helen S. Kirkland
 Signature of Registrar.

Doctored

HOWARD COLLEGE

Birmingham, Ala.

Name of Student <u>HOLLIMAN, Rhodes Burns</u>		Woodlawn High School	
Last Name		Other Names	
8212 Sixth Avenue South, Birmingham, Ala.		Entered Fresh. Class	
Address		Bachelor of Science 1950	
Mar. 18, 1946	Biology	Four	Graduated? <u>Yes</u> Date <u>1946</u>
Date Admitted	Course	Years Attended	Degree, Year Taken

HIGH SCHOOL UNITS

By Certificate ~~XXXXXXXXXX~~ } Erase One

RECORD OF COLLEGE WORK

(If any of the work listed below was completed elsewhere give name of institution, session taken, and credits allowed.)

	SESSION	Course No.	DESCRIPTIVE TITLE OF COURSE	Grades			Qr. Hour Credit
				I	II	SS	
English	4						
Latin	2	Transfer	Credits from BIRMINGHAM-SOUTHERN COLLEGE				
French	1945-46	Eh 101	English Composition			B	5
Spanish		Hi 103	West Civ Since 1815			A	5
German		Mu 211	Adv Choir (Audit)			A	NC
History	3		HOWARD COLLEGE CREDITS				
Civics	1	Bio 101	General Zoology			B	5
Algebra	2	Hi 1A	Hist of American Inst and Cult			A	5
Plane Geometry	1	PE	Physical Education			B	1
Solid Geometry	1	Eh 1B	Written Communication			B	4
Trigonometry	1	Eh 1B	Oral Communication			A	1
General Science	1	Fall	Bio 201			A	5
Biology	1	Quarter	Hi 1B			B	5
Chemistry	1	1946	Ma 101			B	5
Physics	1		PE 21			C	1
Physiography	1	Winter	Bio 102			A	5
Zoology	1	Quarter	Ma 202			C	5
Physiology	1	1947	Py 201			A	5
Commercial Subjects	1	Spring	Fr 1A			B	5
Domestic Science	1	Quarter	So 200			A	5
Drawing	1	1947	Re 1A			A	5
Manual Training	1	Fall	Ch 111			D	6
Economics	1	Quarter	Bio 103			A	5
Musio	0.9	1947	Py 302			B	3
Physical Education	1		Bio 303			B	5
Military Training	1	Winter	Py 401			A	5
Geography	1	Quarter	Fr 1B			B	5
Speech	1	1948	Re 1B			A	5
			Mu 222			A	2
		Spring	Bio 207			A	5
		Quarter	Py 303			B	5
		1948	Py 202			C	5
Total accepted	21.9	Summer	Py 201			*	*
Mental test score	1948	Quarter	Bio 205			*	*

NOTE: A quarter hour equals twelve hours of recitation or twenty-four hours of laboratory.

Key to Grades: A is Excellent; B is Good; C is Average; D is Poor; E is Condition; F is Failure. Passing grades are A, B, C and D. The applicant is entitled to honorable dismissal.

Date _____ 19____ Signature of Registrar.

HOWARD COLLEGE

Birmingham, Ala.

Name of Student HOLLIMAN, Rhodes Burns (Page 2)
 Last Name Other Names
 Address Entered Class
 High or Secondary School Attended
 Location of School
 Date Admitted Mar. 18, 1946 Course Years Attended Degree, Year Taken Graduated? Date

HIGH SCHOOL UNITS

RECORD OF COLLEGE WORK

(If any of the work listed below was completed elsewhere give name of institution, session taken, and credits allowed.)

	SESSION	Course No.	DESCRIPTIVE TITLE OF COURSE	Grades			Qr. Hour Credit
				I	II	SS	
English	Summer 1948 cont.	Eh 201	Introduction to Poetry			*	*
Latin		PE 13	Physical Education-Archery			*	*
French				* Withdrew June 25, 1948: Illness			
Spanish	Fall Quarter 1948	Bio 302	Clinical Microscopy			A	5
German		Ph 201	General Physics			B	5
History		Eh 111A	Appreciation of Literature			B	5
Civics	Winter Quarter 1949	Eh 111B	Appreciation of Literature			B	5
Algebra		Gn 1A	Elementary German			C	5
Plane Geometry		Bio 306	Histological Technique			A	4
Solid Geometry		Hi 318	Culture of the Americas			A	2
Trigonometry	Spring Quarter 1949	Gn 1B	Elementary German			B	5
General Science		Py 402	Clinical Psychology			A	5
Biology		Ph 202	General Physics			C	5
Chemistry	Fall Quarter 1949	So 314	Community Leadership			A	3
Physics		PE 203	Physical Education			B	1
Physiography		Bio 301	Histology			A	5
Zoology	Winter Quarter 1950	So 301	Criminology			B	3
Physiology		Ph 203	General Physics			B	5
Commercial Subjects		So 204	The Family			A	3
Domestic Science	Spring Quarter 1950	Bio 205	Bacteriology			B	5
Drawing		Bio 206	Embryology			A	5
Manual Training		Fr 2A	Intermediate French			B	5
Economics	Fall Semester 1950	PE 213	Physical Education-Archery			A	1
Music		Fr 2B	Intermediate French			B	5
Physical Education		Art 3A	Appreciation of Fine Arts			A	3
Military Training	Summer Quarter 1950	Art 3B	Appreciation of Fine Arts			A	3
		Re 4A	Applied Religion			B	3
		PE 203	Tumbling			B	1
		Ed 202	Principles of Education			A	5
	Fall Semester 1950	Ed 302	Principles of High School Teaching			A	5
		Ed 401	Materials & Methods: Social Studies			A	5
		Ed 402	Practice Teaching			A	5
Total accepted				SEMESTER HOURS			
Mental test score		Ch 111	General Inorganic Chemistry			A	5

Key to Grades: A is Excellent; B is Good; C is Average; D is Poor; E is Condition; F is Failure. Passing grades are A, B, C and D.

The applicant is entitled to honorable dismissal.

NOTE: A quarter hour equals twelve hours of recitation or twenty-four hours of laboratory.

Date _____ 19____ Signature of Registrar _____

HOWARD COLLEGE

Birmingham, Ala.

Name of Student HOLLIMAN, Rhodes Burns (Page 3)
 Last Name Other Names
 High or Secondary School Attended _____
 Address Entered Class _____
 Location of School _____
 Mar. 18, 1946
 Date Admitted Course Years Attended Degree, Year Taken
 Graduated? _____ Date _____

HIGH SCHOOL UNITS
 By Certificate }
 By Examination } Erase One

RECORD OF COLLEGE WORK

(If any of the work listed below was completed elsewhere give name of institution, session taken, and credits allowed.)

	SESSION	Course No.	DESCRIPTIVE TITLE OF COURSE	Grades			Qr. Hour Credit
				I	II	SS	
English	Fall						
Latin	1950	Jo 311	Press Photography			A	3
French	cont.	So 202	Cultural Anthropology			A	2
Spanish	Winter	Ch 112	Gen. Inorganic & Qualitative Analysis			A	5
German	Semester	Bio 436	Ecology			B	4
History	1951	Bio 414	Parasitology			A	3
Civics		Ed 301	School and the Community			A	3
Algebra							
Plane Geometry							
Solid Geometry							
Trigonometry							
General Science							
Biology							
Chemistry							
Physics							
Physiography							
Zoology							
Physiology							
Commercial Subjects							
Domestic Science							
Drawing							
Manual Training							
Economics							
Music							
Physical Education							
Military Training							
Total accepted							
Mental test score							

265 Qr. Hours Completed:
 900 Grade Quality Points:
 Quality Point Average of 3.4
 out of a possible 4.00.

Key to Grades: A is Excellent; B is Good; C is Average; D is Poor; E is Condition; F is Failure. Passing grades are A, B, C and D.
 The applicant is entitled to honorable dismissal.

Date _____ 19_____

Signature of Registrar.

NOTE: A quarter hour equals twelve hours of recitation or twenty-four hours of laboratory.

HOWARD COLLEGE, BIRMINGHAM, ALA.

NAME Holliman, Rhodes Burns LOCAL ADDRESS: ST. 8212 6 Ave So CITY Birmingham STATE Alabama
 HOME ADDRESS: ST. Same CITY _____ STATE _____ PHONE 9-8192
 DATE OF BIRTH Feb 28, 1928 BIRTHPLACE Birmingham, Alabama DENOMINATION _____ MEMBER
 ENTERED March 18, 1946 ADDRESS: ST. 8212 6 Ave So CITY Birmingham STATE Alabama PREFER
 PARENT OR GUARDIAN C R Holliman OCC. OF PARENT OR GUARD. _____
 HIGH SCHOOL Woodlawn LOCATION Birmingham, Alabama DATE OF GRADUATION 1946

Eng.	Lat.	Fr.	Sp.	Hist.	Civ.	Alg	Pl Geom.	So Geom.	Trig.	Agri.	Gen.Sc.	Biol.	Chem.	Phys.	Type.	Law	Bkpk.	Shhd.	Oth	Total
<u>4</u>	<u>2</u>			<u>3</u>		<u>2</u>	<u>1</u>				<u>1</u>		<u>1</u>	<u>1</u>					<u>2.9</u>	<u>17.9</u>

VETERAN _____ TEST SCORES _____
 TRANSFER FROM _____ YES OR NO _____ LOCATION Major: Biology 54 Qr Hrs
 REMARKS _____ AREA OF CONCENTRATION Minor: Psychology 28 Qr Hrs
 DEGREE Bachelor of Science DATE OF GRADUATION June 5, 1950
 TRANSCRIPTS ISSUED Self 8-23-50, 1-12-51, 1-17-52, 12-4-52, 8-31-54 St Dept 9-6-50

Dept. Course Number	DESCRIPTIVE TITLE	Lec	Lab	Sem Gr	Sem Hrs Cr.	Qu Pts	Dept. Course Number	DESCRIPTIVE TITLE	Lec	Lab	Sem Gr	Sem Hrs Cr.	Qu. Pts.
<u>Spring Quarter 1946</u>							BIRMINGHAM-SOUTHERN COLLEGE, Birmingham, Ala						
Bi 101	Gen Zoology	3	6	C	5	5							
Hi Ia	Hi of Am Inst & Cult	5		C	5	5	Eh 101	Composition			C	5	5
PE	Physical Educ	2		B	1	2	Hi 103	West Civ since 1815			F	0	0
Eh Ib	Written Communication	4		B	4	8	Mu 211	Adv Choir (Aud)			-	-	-
Eh Ib	Oral Communication	1		C	1	1	HOWARD COLLEGE, Birmingham, Alabama						
<u>Fall Quarter 1946</u>							<u>Spring Quarter 1950</u>						
Bi 201	Comp Anat of the Vert	3	6	D	5	0	PE 213	Archery	1		A	1	3
Hi Ib	Hi of Amer Inst & Cult	5		C	5	5	Fr IIB	Intermediate French	5		B	5	10
Ma 101	College Algebra	5		C	5	5	Art IIIa	Apprec of Fine Arts	3		A	3	9
PE 21	Physical Educ	2		D	1	0	Art IIB	Apprec of Fine Arts	3		A	3	9
<u>Winter Quarter 1947</u>							<u>Summer Quarter 1950</u>						
Bi 102	Gen Zoology	3	4	B	5	10	Re IVA	Applied Religion	3		B	3	6
Ma 102	Trigonometry	5		D	5	0	PE 203	Tumbling	1		B	1	2
Py 201	Prin of Psychology	5		C	5	5	<u>Fall Semester 1950</u>						
<u>Spring Quarter 1947</u>							<u>Winter Semester 1951</u>						
Fr Ia	Elem French	5		C	5	5	Ed 202	Prin of Educ	5		A	5	15
So 200	Introd Sociology	5		D	5	0	Ed 302	Prin of H S Tchg	5		B	5	10
Re Ia	English Bible	5		C	5	5	Ed 401	M&M in Hist & So Std	5		A	5	15
<u>Fall Quarter 1947</u>							<u>Fall Semester 1950</u>						
Ch 111	Gen Inorg Chemistry	4	6	D	6	0	Ch 111	Gen Inorg Chem	3	6	B	5	10
Bi 103	Gen Botany	3	4	C	5	5	Jo 311	Press Photography	3		A	3	9
Py 302	Psy of Adjustment	5		D	3	0	So 202	Cultural Anthropol	2		A	2	6
Bi 303	Genetics	3		D	5	0	<u>Winter Semester 1951</u>						
<u>Scholastic probation 12-17-47</u>							<u>Spring Quarter 1948</u>						
Py 401	Abnormal Psychology	5		C	5	5	Ch 112	Gen Inorg & El Qu Anal	3	6	C	5	5
Fr Ib	Elem French	5		C	5	5	Bi 436	Ecology	2	6	B	4	8
Re Ib	English Bible	5		C	5	5	Bi 414	Parasitology	2	3	B	3	6
Mu 222	A Cappella Choir	1		F	0	0	Ed 301	Sch & Community Chapel	3		A	3	9
<u>Spring Quarter</u>							<u>Fall Quarter 1948</u>						
Bi 207	Human Physiology	4	3	B	5	10	Bi 302	Clinical Microscopy	3	6	C	5	5
Py 303	Psy of Personality	5		C	5	5	Ph 201	Gen Physics	4	3	F	0	0
Py 202	Applied Psychology	5		C	5	5	Eh IIIa	Apprec of Lit	5		C	5	5
<u>Summer Quarter 1948</u>							<u>Spring Quarter 1949</u>						
Py 201	Prin of Psychology	5		*			Gn Ib	Elem German	5		C	5	5
<u>#Withdrew 6-25-48: Illness</u>							<u>Winter Quarter 1949</u>						
<u>Winter Quarter 1949</u>							<u>Spring Quarter 1949</u>						
Eh IIIb	Apprec of Lit	5		C	5	5	Gn Ia	Elem German	5		D	5	0
Gn Ia	Elem German	5		D	5	0	Bi 306	Histological Tech	1	9	A	4	12
Bi 306	Histological Tech	1	9	A	4	12	Hi 318	Culture of the Americans	2		B	2	4
Hi 318	Culture of the Americans	2		B	2	4	<u>Spring Quarter 1949</u>						
<u>Spring Quarter 1949</u>							<u>Fall Quarter 1949</u>						
Gn Ib	Elem German	5		C	5	5	Bi 301	Histology	3	6	B	5	10
Py 402	Clinical Psy	5		B	5	10	So 301	Criminology	3		B	3	6
Ph 201	Gen Physics	4	3	C	5	5	Ph 202	Gen Physics	4	3	F	0	0
So 314	Comm Leadership	3		B	3	6	So 204	The Family	3		B	3	6
PE 203	Physical Educ	1		B	1	2	<u>Winter Quarter 1950</u>						
<u>Fall Quarter 1949</u>							<u>Winter Quarter 1950</u>						
Bi 301	Histology	3	6	B	5	10	Bi 205	Bacteriology	3	6	D	5	0
So 301	Criminology	3		B	3	6	Bi 206	Embryology	3	6	C	5	5
Ph 202	Gen Physics	4	3	F	0	0	Fr IIA	Intermediate French	5		C	5	5
So 204	The Family	3		B	3	6	<u>Spring Quarter 1950</u>						
<u>Winter Quarter 1950</u>							<u>Spring Quarter 1950</u>						

This is a true copy of the student's record.
Louis C. Guenther
 Date 9-4-73 Registrar

Semester	Hours Attempted	Passed	Qual. Pts.

FLORIDA STATE UNIVERSITY

Prospectus of a Dissertation

TREMATODE CERCARIAE FROM THE APALACHEE BAY AREA,
WITH A SUMMARY OF THE LITERATURE
ON MARINE CERCARIAE OF THE WORLD

By
RHODES B. HOLLIMAN

Submitted to the Graduate School of
Florida State University in partial
fulfillment of the requirements for
the degree of Doctor of Philosophy.

Approved:

Robert B. Short
Professor Directing Dissertation

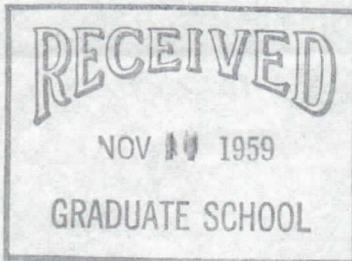
A. Beidler

A. W. Ziegler

Ralph W. Zenger

Kal J. Smith

J. R. Hewitt
Asst. Dean of the Graduate School



November 3, 1959

Purpose of Research:

There are two purposes which motivate this study. The first is an attempt to collect and summarize the literature on marine cercariae of the world so that a check-list might be established for future identification of larval trematodes. The second is a study of local marine cercariae, with descriptions of any new species which might be encountered. This work will constitute the first major effort to study these forms in the Gulf of Mexico. Other elements of this work will include: 1) preliminary studies on life histories of digenetic trematodes; 2) further information leading to a natural system of classification of cercariae and adult flukes; and 3) evidence for or against previous systems of classification.

I. Introduction

- A. Statement of the problem and objectives.
- B. Cercariae and their relation to life cycles in the Trematoda.
- C. Historical review of larval trematodes.
- D. Discussion of various systems of cercarial classification.
- E. Explanation of system of classification used in this research.

II. Materials and Methods

- A. Collections of mollusks.
- B. Localities of collections.
- C. Isolation of mollusks and collection of cercariae.
- D. Methods of slide preparation and study.

JACKSONVILLE UNIVERSITY

JACKSONVILLE 11, FLORIDA

February 29, 1960

Mr. Rhodes B. Holliman
1501 Mayhaw Street
Tallahassee, Florida

Dear Mr. Holliman:

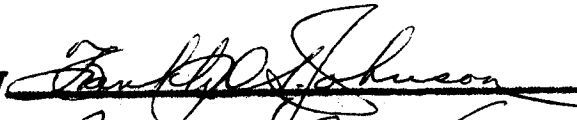
The Board of Trustees of Jacksonville University has appointed you to the position of Assistant Professor in this institution for the school year 1960-61. This contract does not imply a commitment for the year following the term stated herein. Your base salary will be \$5400.00 for nine months, payable in 24 equal payments on the 15th and last day of each calendar month. If you are invited to teach during the 1961 summer session, your additional salary will be in accordance with the academic rank stated in this contract, and payable in one payment at the end of the summer session.

Your duties will be instruction in Biology and such other courses and subjects as may be assigned by the Dean of the Faculty. A normal teaching load is considered to be 15 or 16 semester hours per semester. In co-curricular activities, you may be assigned to one or two activities and one or two faculty committees, all subject to the discretion of the Dean of the Faculty. You are expected to chaperone at least one social affair during each academic semester, if asked to do so.


Your signature on this contract indicates your understanding of and acceptance of the policies and procedures pertaining to faculty employment as published in the By-laws, the Catalog, and the Faculty Handbook.

Your signature below and the return of the original of this letter to the President's office by March 15, 1960 will complete the formal execution of this contract between you and the Board of Trustees of Jacksonville University.

For the University



Faculty Member



3 March '60

This contract provides credit of one academic year toward permanent appointment.

C O P Y

TREMATODE CERCARIAE FROM THE APALACHEE BAY AREA,
WITH A SUMMARY OF THE LITERATURE
ON MARINE CERCARIAE OF THE WORLD

(Publication No.)

Rhodes Burns Holliman, Ph.D.
Florida State University

This is a morphological and taxonomic study of the trematode cercariae infecting 39 species of marine mollusks from Apalachee Bay, Gulf of Mexico. The investigation was conducted during the period September, 1956, to September, 1959. It is the first comprehensive report on these parasitic forms from the Gulf of Mexico, and all host and locality records herein are new.

Twenty-four new species of cercariae are described. Four previously reported cercariae are also included, with information on each hitherto unrecorded. These are: Cercaria purpurae Lebour, 1911; Cercaria caribbea III Cable, 1956; Cercaria quissetensis Miller and Northup, 1926; and Cercaria caribbea XIXVI Cable, 1956.

Nineteen species of gastropods were examined involving 13,961 individuals. Of this total, 2477 or 17.7% were infected with larval trematodes. Eighteen species of cercariae are described and figured from gastropods. Ten species of pelecypods were examined involving 2616 individuals. Of this total, 145 or 5.5% were infected. Ten species are described and figured from bivalves.

The naming of new species is patterned after the system introduced by Sewall (1922) and modified by Cable (1956a) in which each cercaria is given a number preceded by a geographical term. This term in the present study is apalachensis, which is derived from the name of the type locality.

The following numbers and family or superfamily types of new cercariae are described: one cyathocotylid; one schistosoma; two apocotylids; four furcocercous fellodistomatids; one tailless fellodistomatid; one bucephalid; three echinostomes; one monostome microphallid xiphidocercaria; one distome plagiorchioid xiphidocercaria; one cotylacercous monorchid; one cotylacercous opecoid or allocreadid; one allocreadid with long, glandular tail; one leptocercous allocreadid; three pleurolophocercous heterophyids; one hemiurid; and one magnacercous cercaria of unknown affinity.

Contributions of the study include: evidence to support the contention that detailed specific diagnoses are necessary to separate closely related forms and that behavioral characteristics, vital dye reactions and germinal sac morphology are essential diagnostic features which should be recorded in all future cercarial descriptions; an amended general diagnosis of marine apocotylid cercariae to include a form with extreme furcal asymmetry; the first flame cell patterns for marine apocotylid cercariae; an extension of the diversity of flame cell patterns and the position and location of penetration glands in fork-tailed fellodistomatid cercariae; an amended general diagnosis of microphallid cercariae to include a form with 3 pairs of

penetration glands and a flame cell pattern of 2 [(2+2) + (2+2)] ; the description of the first opoecolid-allocrenidiid-like cercaria with a tail other than cotyllocercous, suggesting that tail morphology may not be of taxonomic significance for cercariae in these families; an extension of the known diversity of tail structure, penetration gland position and body pigment in heterophyid cercariae; and the description of a new hemiureid cercaria with primitive features which rival any previously described for cercariae in this group.

A review of the literature on marine cercariae of the world, up to January, 1960, is presented in the form of a table summarizing pertinent information concerning each cercaria. The known marine cercariae (324 species) are taxonomically separated according to the classification of LaSue (1957) and are placed in a key based on his system. This element of the study constitutes the first attempt to classify all described marine cercariae using the combined features of life history studies, embryonic development and general morphology as criteria.

FLORIDA STATE UNIVERSITY

Graduate School

June 5, 1957

MEMORANDUM:

To: Dr. Robert B. Short, Chairman
Dr. A. W. Ziegler
Dr. L. M. Bridler
Dr. R. W. Yarger

From: Dwight B. Goodner, Associate Dean of the Graduate School

I am asking that you serve as members of the Supervisory Committee for the doctoral program of Mr. Rhodes Burns Holliman.

The Dean of the College of Arts & Sciences and the Dean of the Graduate School should be notified of meetings of the Committee so that they may attend if they care to do so.

DBG:es

cc: Dean C. S. Davis
Dr. Leland Shanor
Mr. Rhodes B. Holliman ✓
1501 May, new Street

COMPREHENSIVE EXAMINATION for Rhodes B. Holliman

Dr. R. B. Short

Answer any 7

1. What is meant by host specificity of parasites? Discuss causes for this phenomenon. Give examples.
2. What opposing views on the type of reproduction in sporocysts and rediae of digenetic trematodes have been published? Where does the problem stand today?
3. Discuss the Acanthocephala in regard to:
 - a. taxonomic position
 - b. morphology
 - c. life cycles
 - d. medical importance
4. Discuss the Aspidogastrea in regard to:
 - a. taxonomic position
 - b. morphology
 - c. life cycles
5. What characters are considered important in taxonomy of digenetic trematodes by authorities such as Stunkard, LaRue and Cable?
6. Discuss various possible types of life cycles which occur in the digenetic trematodes; give examples where you can.
7. Outline the classification of tapeworms as far as you can; give characters used to separate the taxa.
8. Discuss the problem of identification and apparent (?) variability in morphology and pathogenicity of "Entamoeba histolytica."
9. Discuss the protozoan family Trypanosomatidae in regard to:
 - a. genera
 - b. morphological types occurring in various genera
 - c. species parasitizing man (diseases caused, vectors and types of transmission, and methods of control)
10. What do the following mean to you:
 - a. progenesis
 - b. tetracotyle
 - c. Anepitheliocystidia
 - d. cysticercoïd
 - e. Babesia
 - f. coenurus
 - g. Toxoplasma
 - h. visceral larva migrans
 - i. mesocercaria
 - j. Linguatula
 - k. myiasis
 - l. neoteny

COMPREHENSIVE EXAMINATION for Rhodes B. Holliman

Dr. R. W. Yerger

Answer any 4 questions.
Suggested time: 20-30 minutes
per question.

1. Discuss the phylogenetic history of the mammalian ear ossicles.
2. The Nearctic fauna is most closely allied to the fauna of what other realm? Explain the reasons for this.
3. The subspecies concept and trinomial is much more widely used in "neo"-zoology than paleozoology. Why is this so?
4. Give as much biological evidence (from various disciplines) as you can to show that birds are more closely related to reptiles than to mammals.
5.
 - a. What is orthogenesis?
 - b. Discuss the differences between parallel evolution and convergent evolution.
 - c. Name and briefly discuss those factors or conditions which have resulted in the extinction of various animals. Use examples wherever possible.

COMPREHENSIVE EXAMINATION for Rhodes B. Holliman

Dr. Irene Boliek

Answer 1 or 2 and 3.
Suggested time: 3 hours.

1. Suppose you were allotted one lecture period to discuss reproduction and development with a beginning class in biology or zoology. Abstract or summarize the information you would present to such a class.
2. Suppose you were instructing a comparative anatomy group and the subject under discussion was Comparative Developmental Anatomy (embryology and organogeny) of the Vertebrates. What notable similarities in the developmental history of the several vertebrate groups would you emphasize?
3. Contrast: a coelenterate, flatworm, nematode, and annelid to show advances in structural complexity (histologic as well as the more gross features).

Dr. L. M. Beidler

- 1a. A spherical cell of 10 μ diameter is placed into 0.1 M NaCl solution. The cell itself contains 0.2 M NaCl. How much sodium goes across the cell membrane, 200 \AA thick, in 30 seconds?

$$\left(D_{\text{NaCl}} = 1.4 \times 10^{-5} \text{ cm}^2/\text{sec} \right)$$

- 1b. If the above cell also contains 1.0 M Na proteinate, calculate the E.M.F. due to Gibbs-Donnan Equilibrium.
2. Describe the initiation of the nerve action potential in ionic terms and relate to the resting potential.
3. Give experimental proof of active transport of sucrose in intestine. Define active transport rigorously and give possible mechanism.

COMPREHENSIVE EXAMINATION for Rhodes B. Holliman

Dr. R.W.Menzel

Suggested time: 1 hour

1. Briefly discuss some known effects of parasites on marine organisms, giving examples and citations.
2. Discuss the "cause and effect" of the "Red Tide" in Florida and elsewhere.

Dr. A. Kohn

Suggested time: 4 hours; answer any two

1. Discuss the factors which influence the growth of animal populations.
2. What in your opinion is the best view of the origin of life on this planet? Give evidence for all conclusions.
3. Discuss the phylogeny of the major groups of Arthropoda. Evaluate the evidence used to construct this phylogeny.

Dr. H.M.Stevenson

Suggested time: 2 hours

Discuss the evolution and adaptations of the paired pectoral appendages in vertebrates.

Dr. A.W.Ziegler

Suggested time: 1 hour

Discuss the evolution of the sporophyte generation in the plant kingdom using examples from the algae, fungi, bryophytes, ferns, gymnosperms and angiosperms.

COMPREHENSIVE EXAMINATION for Rhodes B. Holliman

Dr. A. Gib DeBusk

I. Describe the major contribution to fundamental genetics made by the following individuals. Indicate the nature of any far reaching controversy that arose at the time of or following the publication of their data.

1. Richard Goldschmidt
2. George Beadle and Earl Tatum
3. Gregor Mendel
4. T. H. Morgan
5. A. H. Sturtevant
6. Sewell Wright
7. H. J. Muller
8. Calvin Bridges
9. T. S. Painter
10. J. Lederberg and Earl Tatum
11. Barbara McClintock
12. Seymour Benzer
13. H. Fraenkel - Conrat & R. C. Williams
14. J. D. Watson and F. H. C. Crick
15. O. T. Avery, C. M. MacLeod and M. McCarty

II. What do the following terms signify:

1. linkage
2. independent assortment
3. recombination
4. transformation
5. locus
6. map distance
7. crossing over
8. recon
9. muton
10. ~~distron~~
11. mendelian factor
12. gene
13. DNA
14. gene-enzyme relationship
15. transduction
16. phenotype
17. genotype
18. mutation
19. ionizing radiation
20. maternal inheritance
21. "back-mutant"
22. biochemical mutant
23. mitochondria
24. enzyme induction
25. genetic block

FLORIDA STATE UNIVERSITY

*John
9/15/59*

Prospectus of a Dissertation

TREMATODE CERCARIAE FROM THE APALACHEE BAY AREA, 48

WITH A SUMMARY OF THE LITERATURE

ON MARINE CERCARIAE OF THE WORLD

By
RHODES B. HOLLIMAN

Submitted to the Graduate School of
Florida State University in partial
fulfillment of the requirements for
the degree of Doctor of Philosophy. 38

Approved:

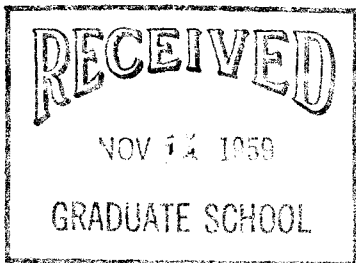
Robert B. Short
Professor Directing Dissertation

L. Keidler

W. Ziegler

Ralph H. Gorges

Hal S. Smith



November 3, 1959

Dean of the Graduate School

Purpose of Research:

There are two purposes which motivate this study. The first is an attempt to collect and summarize the literature on marine cercariae of the world so that a check-list might be established for future identification of larval trematodes. The second is a study of local marine cercariae, with descriptions of any new species which might be encountered. This work will constitute the first major effort to study these forms in the Gulf of Mexico. Other elements of this work will include: 1) preliminary studies on life histories of digenetic trematodes; 2) further information leading to a natural system of classification of cercariae and adult flukes; and 3) evidence for or against previous systems of classification.

I. Introduction

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- C. Historical review of larval trematodes.
- D. Discussion of various systems of cercarial classification.
- E. Explanation of system of classification used in this research.

II. Materials and Methods

- A. Collections of mollusks.
- B. Localities of collections.
- C. Isolation of mollusks and collection of cercariae.
- D. Methods of slide preparation and study.

E. Chart showing summary of:

1. number of mollusks collected, by species.
2. locality of collections.
3. total number of mollusks infected per collection.
4. species of cercariae from each species of mollusk.
5. number of mollusks infected with each species of cercaria.

III. Results

- A. Descriptions of new species, and previously described species, of cercariae from the Apalaches Bay area.
- B. Comparison of new species with previously described species.

IV. Conclusions

V. Summary of the Literature on Marine Cercariae of the World.

- A. Introduction.
- B. Charts on each taxonomic category of cercariae containing:
 1. description of each taxonomic category.
 2. species name and synonyms.
 3. family name.
 4. molluscan host.
 5. locality of collection.
 6. flame cell pattern of cercaria, if known.
 7. life cycle (adult name), if known.
 8. definitive host, if known.
 9. author and date.

VI. Summary

VII. Bibliography

COMPREHENSIVE EXAMINATION for Rhodes B. Holliman

Dr. Irene Boliek

Answer 1 or 2 and 3.
Suggested time: 3 hours.

1. Suppose you were allotted one lecture period to discuss reproduction and development with a beginning class in biology or zoology. Abstract or summarize the information you would present to such a class.
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COMPREHENSIVE EXAMINATION for Rhodes B. Holliman

Dr. R. W. Yerger

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per question.

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COMPREHENSIVE EXAMINATION for Rhodes B. Holliman

Dr. R. B. Short

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 - a. taxonomic position
 - b. morphology
 - c. life cycles
 - d. medical importance
4. Discuss the Aspidogastrea in regard to:
 - a. taxonomic position
 - b. morphology
 - c. life cycles
5. What characters are considered important in taxonomy of digenetic trematodes by authorities such as Stunkard, LaRue and Cable?
6. Discuss various possible types of life cycles which occur in the digenetic trematodes; give examples where you can.
7. Outline the classification of tapeworms as far as you can; give characters used to separate the taxa.
8. Discuss the problem of identification and apparent (?) variability in morphology and pathogenicity of "Entamoeba histolytica."
9. Discuss the protozoan family Trypanosomatidae in regard to:
 - a. genera
 - b. morphological types occurring in various genera
 - c. species parasitizing man (diseases caused, vectors and types of transmission, and methods of control)
10. What do the following mean to you:
 - a. progenesis
 - b. tetracotyle
 - c. Anepitheliocystidia
 - d. cysticercoïd
 - e. Babesia
 - f. coenurus
 - g. Toxoplasma
 - h. visceral larva migrans
 - i. mesocercaria
 - j. Linguatula
 - k. myiasis
 - l. neoteny

COMPREHENSIVE EXAMINATION for Rhodes B. Holliman

Dr. A. Gib DeBusk

I. Describe the major contribution to fundamental genetics made by the following individuals. Indicate the nature of any far reaching controversy that arose at the time of or following the publication of their data.

1. Richard Goldschmidt
2. George Beadle and Earl Tatum
3. Gregor Mendel
4. T. H. Morgan
5. A. H. Sturtevant
6. Sewell Wright
7. H. J. Muller
8. Calvin Bridges
9. T. S. Painter
10. J. Lederberg and Earl Tatum
11. Barbara McClintock
12. Seymour Benzer
13. H. Fraenkel - Conrat & R. C. Williams
14. J. D. Watson and F. H. C. Crick
15. O. T. Avery, C. M. MacLeod and M. McCarty -

II. What do the following terms signify:

1. linkage
2. independent assortment
3. recombination
4. transformation
5. locus
6. map distance
7. crossing over
8. recon
9. muton
10. cistron
11. mendelian factor
12. gene
13. DNA
14. gene-enzyme relationship
15. transduction
16. phenotype
17. genotype
18. mutation
19. ionizing radiation
20. maternal inheritance
21. "back-mutant"
22. biochemical mutant
23. mitochondria
24. enzyme induction
25. genetic block

COMPREHENSIVE EXAMINATION for Rhodes B. Holliman

Dr. R.W.Menzel

Suggested time: 1 hour

1. Briefly discuss some known effects of parasites on marine organisms, giving examples and citations.
2. Discuss the "cause and effect" of the "Red Tide" in Florida and elsewhere.

Dr. A. Kohn

Suggested time: 4 hours; answer any two

1. Discuss the factors which influence the growth of animal populations.
2. What in your opinion is the best view of the origin of life on this planet? Give evidence for all conclusions.
3. Discuss the phylogeny of the major groups of Arthropoda. Evaluate the evidence used to construct this phylogeny.

Dr. H.M.Stevenson

Suggested time: 2 hours

Discuss the evolution and adaptations of the paired pectoral appendages in vertebrates.

Dr. A.W.Ziegler

Suggested time: 1 hour

Discuss the evolution of the sporophyte generation in the plant kingdom using examples from the algae, fungi, bryophytes, ferns, gymnosperms and angiosperms.

