Microbiology

Information Access Policy Clemson University Libraries

Microbiology Reference Librarian: Lois Sill Policy written by L. Sill, 2004 Revised by L. Sill, March 2012

I. General Purpose

To support instruction and research at the B.S., M.S., and Ph.D. levels in Microbiology.

Description of the Microbiology Program, from the 2011-2012 Department of Biological Sciences Handbook

"Microbiology deals with the study of bacteria, viruses, yeasts, filamentous fungi, protozoa and unicellular algae. Microbes are significant not only for their role in infectious disease, but are essential for nutrient recycling in the ecosystem, in which they make up the majority of the biomass. Bacteria are commonly used in industry and in bioremediation of contaminated environmental sites. Both the standard MICRO and the Biomedicine Concentration curricula are excellent courses of study for graduate or professional school. Both require courses in calculus, physics, chemistry including organic, and biochemistry. Both also require microbial diversity and ecology, pathogenic microbiology, microbial genetics and bacterial physiology as recommended by the American Society for Microbiology. The standard degree requires a course from a select list in each of the areas of the following areas: (1) biomedicine, (2) environmental microbiology, (3) food safety, industrial and technology, and (4) virology."

Undergraduate Program Coursework – <u>Undergraduate Handbook</u>

Bachelor of Science, Microbiology

Bachelor of Science, Microbiology with a Biomedicine Concentration

Graduate Program Coursework - Graduate Student Handbook

MS in Microbiology
PhD in Microbiology

Microbiology Faculty, 2011-2012

Professors: T.A. Hughes, C.D. Rice, S.W. Scott Associate Professors: J.M. Henson, X. Jiang

Assistant Professors: M. Cao, H.D. Kurtz, T.L. McNealy, K.S. Paul, T.R. Tzeng

Senior Lecturer: J.G. Abercrombie

Lecturer: K.B. Rudolph

II. Scope of the Library Collection

The microbiology collections in the Clemson University Libraries primarily support the teaching and research needs of the faculty, students, and staff in microbiology. The collection is also used by a number of Clemson faculty and students outside microbiology and as well as by members of the community. Collecting efforts are aimed at maintaining a well rounded collection, with special strengths in the areas of current research at Clemson University and in areas where advanced degrees are given, but which also provides materials for the undergraduate in all areas of microbiology and which will in the future provide an adequate basic collection as research interests change.

The subjects are cataloged in the following Library of Congress call number ranges. There is considerable interdisciplinary coverage with other degree areas in the Biological Sciences.

A. Microbiology Level of Emphasis

LC Classification Descriptor in Collecting

QH 506	Biology, molecular	Undergraduate and Graduate
QR 1-74	General, History, Technique	Undergraduate and Graduate
QR 75-99	Bacteria	Undergraduate and Graduate
QR 100-177	Microbial Ecology	Undergraduate and Graduate
QR 189-189.	5 Immunology	Undergraduate and Graduate
QR 201-255	Pathogenic microorganisms	Undergraduate and Graduate
QR 301-351	Micro-organisms of animals and plants	Undergraduate and Graduate
QR 352-353	Mycoplasmas, Rickettsias	Graduate
QR 355-502	Virology	Undergraduate and Graduate

B. Core Microbiology Journals

ACTA PROTOZOOL	EUR J CLIN MICROBIOL	J MICROBIOL IMMUNOL
ADV APPL MICROBIOL	EUR J PROTISTOL	J MICROBIOL METH
ADV MICROB PHYSIOL	EXTREMOPHILES	J MOL MICROB BIOTECH
ANAEROBE	FEMS IMMUNOL MED MIC	LETT APPL MICROBIOL
ANN MICROBIOL	FEMS MICROBIOL ECOL	MED MICROBIOL IMMUN
ANNU REV MICROBIOL	FEMS MICROBIOL LETT	METHOD MICROBIOL
ANTIMICROB AGENTS CH	FEMS MICROBIOL REV	MICROB DRUG RESIST
ANTON LEEUW INT J G	FEMS YEAST RES	MICROB ECOL
APMIS	FOLIA MICROBIOL	MICROB PATHOGENESIS
APPL BIOCHEM MICRO	FOOD MICROBIOL	MICROBES INFECT
APPL ENVIRON MICROB	FUTURE MICROBIOL	MICROBIOL IMMUNOL
ARCH MICROBIOL	HELICOBACTER	MICROBIOL MOL BIOL R
BMC MICROBIOL	INDIAN J MICROBIOL	MICROBIOL RES
CAN J INFECT DIS MED	INT J ANTIMICROB AG	MICROBIOL-SGM
CAN J MICROBIOL	INT J FOOD MICROBIOL	MICROBIOLOGY
CELL HOST MICROBE	INT J MED MICROBIOL	MOL GENET MICROBIOL
CELL MICROBIOL	INT J SYST EVOL MICR	MOL MICROBIOL
CLIN INFECT DIS	INT MICROBIOL	MOL ORAL MICROBIOL
CLIN MICROBIOL INFEC	J ANTIBIOT	NAT REV MICROBIOL
CLIN MICROBIOL REV	J ANTIMICROB CHEMOTH	ORAL MICROBIOL IMMUN
CLIN VACCINE IMMUNOL	J APPL MICROBIOL	PLOS PATHOG
COMP IMMUNOL MICROB	J BACTERIOL	PROTIST
CRIT REV MICROBIOL	J BASIC MICROB	RES MICROBIOL
CURR MICROBIOL	J CLIN MICROBIOL	SYST APPL MICROBIOL
CURR OPIN MICROBIOL	J EUKARYOT MICROBIOL	TICKS TICK-BORNE DIS
CURR TOP MICROBIOL	J GEN APPL MICROBIOL	TRENDS MICROBIOL
DIAGN MICR INFEC DIS	J INFECT DIS	TUBERCULOSIS
ENVIRON MICROBIOL	J MED MICROBIOL	VET MICROBIOL
EUKARYOT CELL	J MICROBIOL	YEAST

C. Other Resources Available

- 1. R.M. Cooper Library also provides free interlibrary loan service (ILL) to students, faculty, and staff. Also, the Libraries will use commercial document suppliers if there is no other option.
- 2. Important indexes and abstracts to be retained if financially possible.

AGRICOLA

Biological and Agricultural

Index Plus BIOSIS

Conference Papers Index

Current Contents
Medline (PubMed)

PubMed (Medline) Science Citation Index SciFinder Scholar

Toxline TOXNET

Web of Knowledge Web of Science Zoological Record

III. Collection Management and Parameters

A. Languages

English is the predominant language. If materials in other languages are collected they must generally contain information not readily available in English.

B. Geographic Areas

Much of the material in Microbiology describes subjects which are independent of geography.

C. Chronological Boundaries

Most books considered for purchase are current; materials published prior to the most recent five years are purchased very selectively.

D. Format of Materials Collected

Monographic material purchased will primarily be English language print sources and electronic format, if available. Journals, handbooks, manuals, and encyclopedias will be in electronic format, if available. Materials in languages other than English will be collected only upon specific request. Scholarly, technical and professional treatments are emphasized. DVDs will be purchased as requested by faculty.

- E. The following materials will be excluded unless there is an extraordinary need and/or a specific request.
 - 1. Workbooks
 - 2. Computer software
 - 3. Rare materials
 - 4. Textbooks

F. Weeding Guidelines

Monographic material, with an imprint of 1997 or earlier, which has not circulated for the last ten years, will be reviewed for weeding. Statistical reports are available for review of these titles. If a book has not circulated and is historically important, Special Collections will be asked to house it. If Special Collections does not take the item, storage will be considered if the item is rare or unique to Clemson.

IV. Selection Tools and Review Sources

- A. List of courses offered each semester.
- B. Major Microbiology journals
- C. Publishers websites and catalogs
- D. Microbiology society websites and catalogs
- E. GOBI service from YBP if funds are available
- F. The students and faculty are most helpful in suggesting resources to purchase. While working with undergraduates at the reference desk or through class contacts, one learns what topics are of interest. Also, by reading current journals and professional magazines in Microbiology, the topics of current interest are apparent. Co-workers are also extremely helpful in suggesting areas that may need more coverage. Looking at the ILLs requested also helps in the selection process.
- G. If faculty members fail to recommend material, the librarian will encourage them to take a more active part in selection. If this encouragement fails, the librarian will make the selections.
- H. The librarian is also responsible for the selection of general materials not specifically related to the curriculum and for maintaining a balance between the various subject areas and between standard and current works.

V. Evaluation Tools

- A. "Use studies" involving circulation and browsing data from our online catalog, databases, and journal vendors will show the areas of highest use.
- B. *Journal Citation Reports* purport to pinpoint the most influential journals in any science discipline in several quantitative methods.

VI. Assessment and Planning

A. Qualitative Measures

- 1. The information access policy for this department will be reviewed every five years.
- 2. Appropriate bibliographies will be checked against our holdings.
- 3. Benchmarking projects, to be determined.

B. Quantitative Measures

- 1. Interlibrary Loan and PASCAL Activities will be monitored to see what subject areas are lacking and what type materials are being requested most.
- 2. Circulation Statistics, both for print and electronic resources, will be reviewed to see which areas of the collection are most heavily used.