Research Seminar in Parasitism  
BIOLOGY 403 01  
E.E. JUST HALL ROOM 142  
WEDNESDAY  
1:10 PM -3:00 PM  
SPRING SEMESTER 2013  

Instructors  
Dr. Clarence M. Lee, Ph.D  
Dr. Mohammad Ashraf, Ph.D.  

COURSE DESCRIPTION  

This course allows students to discuss major problems in Parasitism. The students review parasites, especially those that cause morbidity and mortality in animals. The emphases will be on current observations (especially techniques, results and discussion). Students are also allowed to present the results of their research.  

OBJECTIVES: By the end of the course a student should be able to:  

- plan, design and execute a scientific investigation in parasitism;  
- have developed competence with techniques and instrumentation used for scientific investigations in parasitism;  
- critically appraise and interpret scientific data and present results in both written and verbal forms;  
- prepare the results of an investigation in a format suitable for publication in a refereed scientific journal or in the format of a dissertation; and  
- to participate as part of a research team to undertake comprehensive investigations under general supervision.  

A. ORAL REPORTS/ABSTRACTS  

Each Student will be asked to select a recent published paper in journals such as Immunology, Experimental Parasitology, Journal of Parasitology, or American Journal of Tropical Medicine and Hygiene or related journals. The abstracts are restricted to articles written between 2009-2013. As far as possible, they should be related to your research topic.
As you prepare for your abstracts, please follow these guidelines:

1. A well prepared abstract enables readers to identify the Basic Content of a document quickly and accurately, to determine its relevance to their interests and thus to decide whether they need to read the document in its entirety.

2. The abstract should not exceed 300 words and should be designed to define clearly what is dealt with in the paper (in your own words).

3. The abstract should:
   a. State the principal objectives and scope of the investigation;
   b. Describe the methodology employed;
   c. Summarize the results, and state the principal conclusion;
   d. List the principal references used in the publication.

4. All abstracts should be typed and submitted at least one week (5 class days) prior to the presentation.

B. SEMINAR SCHEDULE

WEEK I  Organizing the Topics
WEEK II Library and Literature Work
WEEK III Discussion of Current/RESEARCH Topics
WEEK IV Discussion of Current/RESEARCH Topics
WEEK V Discussion of Current /RESEARCH Topics
WEEK VI Discussion of Current/RESEARCH Topics
WEEK VII Discussion of Current/RESEARCH Topics
WEEK VIII Discussion of Current/RESEARCH Topics
WEEK VIII Discussion of Current/RESEARCH Topics
WEEK IX Discussion of Current/RESEARCH Topics
WEEK X Discussion of Current/RESEARCH Topics
WEEK XI Discussion of Current/RESEARCH Topics
WEEKS XII-XIV Presentation of Research/Discussion of Current Topics

Note- Students should be prepared to discuss a current issue in Parasitology or a research topic at each seminar period.
C. GRADING

Total Possible Score

Grading Requirements

Abstract #1--------------------------------------------100 points
Abstract #2--------------------------------------------100 points
Abstract #3--------------------------------------------100 points
Abstract #4--------------------------------------------100 points
Abstract #5--------------------------------------------100 points

Total Points 500

Grading (the traditional grading scale, based on 100% will be used)

SPRING BREAK- March 9-17, 2013

Last Day of Class- April 25, 2013

D. Office Appointments

Conferences can be arranged by contacting Dr. Lee (202) 865-8568; or by email- cmlee@howard.edu; Dr. Ashraf (202) 806-6963 or by email- mashraf@howard.edu

In order to check assignments, prior to the next class, please plan to check your email at least every 24 hours.

E. SELECTED REFERENCES


References provided by the presenter that is directly related to his/her research
F. RESOURCES IN PARASITOLOGY

HU Science librarian
consult the HU library's new plagiarism site
(http://www.howard.edu/library/Assist/Guides/Plagiarism.htm)
http://www.plagiarism.org/learning_center/what_is_citation.html (required reading)

Acta Parasitologica formerly Acta Parasitologica Polonica founded in 1953 by the Polish Parasitological Society
American Association of Veterinary Parasitologists (AAVP)
American Society of Parasitologists
American Society of Tropical Medicine & Hygiene (ASTMH) the principal organization in the United States representing scientists, clinicians and others with interests in the prevention and control of tropical diseases through research and education
Annals of Tropical Medicine and Parasitology Taylor & Francis
Australian Society for Parasitology (ASP) objectives are to: foster association of persons interested in parasitology, foster establishment and proper curation of collections of Australian parasites, and promote investigation and advance knowledge of parasitology by facilitating interaction and discussions
Biosystematics & the US National Parasite Collection maintained by the Agricultural Research Service in Beltsville, Maryland, completed its first century of service to parasitologists in 1992
British Society for Parasitology (BSP) aims to advance the study of parasitology, promote interest and discussion, aid training and education, and disseminate information about recent advances through its regular newsletter and meetings
Canadian Society of Zoologists Parasitology Section established in 1974 to promote and advance the study of parasitic organisms and facilitate the exchange of information among parasitologists in Canada, the only national organization of parasitologists in Canada
Cancer Cell
Carlo Denegri Foundation Italy promotes study of infectious, tropical, and parasitic diseases in Torino and the surrounding Piemonte region, includes an Atlas of Medical Parasitology
Careers in Parasitology from the American Society of Parasitologists
CELLS alive! various links
Cell Regulation
Centre for Applied Entomology and Parasitology (CAEP) University of Keele UK
Centre for the Epidemiology of Infectious Disease Department of Zoology University of Oxford UK
Centre for Parasite Biology (CPB) an organisation within the University of Edinburgh that acts as a focus for teaching and research in all aspects of parasitology in the Edinburgh area
Charles University (Prague) Department of Parasitology and Hydrobiology
Common Names of Plant Diseases searchable database from the American
Phytopathological Society
Czech Society for Parasitology members of the Society assert their activity in basic and applied research, teaching at universities, hygienic service, diagnostic laboratories with human as well as veterinary orientation and other places where knowledge of parasites is required

Daniel Shapiro's Zoonosis Page

Daphnia-Parasite Picture Gallery

Department of Parasitology Chiang Mai University

Deutsche Gesellschaft für Parasitologie (DGP) the German Society for Parasitology, a non-profit making society based in Frankfurt/Main, Germany

Diagnosing medical parasites through coprological techniques online book

Directory of Parasitologists


Diseases of Aquatic Organisms contents and abstracts

DPDx — CDC Parasitology Diagnostic Web Site Division of Parasitic Diseases at the National Center for Infectious Diseases, Centers for Disease Control & Prevention

Dugesia the anatomy of the turbellarian flatworm Dugesia tigrina, commonly known as planaria (part of online university biology course)

Ecological Database of the World's Disease Pathogens (EDWIP) information on fungi, viruses, mollicutes and bacteria infectious in insects, mites and related arthropods, Center for Economic Entomology Illinois Natural History Survey

Ecto- and Endo-Parasites a directory of academic links to ecto- and endo-parasites in medical and veterinary parasitology, Southampton University UK

Ectoparasites and Endoparasites a directory of academic links to Ectoparasites and Endoparasites, Medicine and Veterinary Science

Ege University Medical Faculty Department of Parasitology

Essential Cell Biology: An Introduction to the Molecular of the Cell

European Federation of Parasitologists founded in Jabłonna, Warszawa, Poland in 1996, to promote the exchange of knowledge and the coordination of scientific research in the field of parasitology in Europe

Experimental Parasitology Academic Press

Folia Parasitologica Institute of Parasitology, Academy of Sciences Czech Republic

Harold V. Manter Laboratory of Parasitology and Division of Parasitology University of Nebraska State Museum

Hebrew University — Hadassah Medical School Department of Parasitology

Helminthologia Slovak Academy of Sciences

Helminthological Abstracts CABI

Helminthological Society of Washington founded in 1910 to foster and discuss current research on animal parasites, primarily but not limited to the helminths of humans, domestic and wild animals, and plants

Homepage of Parasites a place for exchange of ideas, software, sites and opinions about parasites, especially evolution and systematics

Host-Parasite Database Natural History Museum, London — outlines criteria for
searching database maintained in Parasitic Worms Division, with sample searches
Host-Parasite Evolution Research Group University of Basel, Switzerland
Hungarian Society of Parasitologists (HSP) Magyar Parazitológusok Társasága (MPT)
Hypodermosis database bibliographic database created by the library service of the Unit
for Avian Pathology and Parasitology of the INRA Research Centre of Tours-Nouzilly
Indian Society for Parasitology
Infectious Diseases and Parasites of Commercially Exploited Shellfish synopsis,
Fisheries and Oceans Canada
Institute of Arthropodology and Parasitology (IAP) an interdepartmental organization at
Georgia Southern University, where the US National Tick Collection is housed
Institute of Parasitology Academy of Sciences, Czech Republic
International Ichthyoparasitology Newsletter
International Journal for Parasitology see also journal homepage
Japanese Journal of Parasitology in future to be published by Elsevier as Parasitology
International
Japanese Society of Parasitology
Journal of Helminthology CABI
Journal of Parasitic Diseases Indian Society for Parasitology, contents to latest issue
Journal of Parasitology American Society of Parasitologists; also available via Allen
Press
Korean Journal of Parasitology
Korean Society for Parasitology founded in 1959 in Seoul, to pursue the improvement of
knowledge on parasites and parasitic diseases and exchange scientific accomplishment
with foreign scientists
Laboratoire de Biologie Parasitaire, Protistologie, Helminthologie Muséum National
d'Histoire Naturelle, Paris
Laboratoire de Taxonomie des Vecteurs ORSTOM, France, studies the taxonomic status
of hematophagus insects (mosquitoes, horse flies, sand flies, biting midges, black flies,
tse-tse flies, ticks, etc...) and creates data processing tools for vector identification
Laboratory of Parasitology Zoological Institute St Petersburg
Liverpool School of Tropical Medicine, Division of Parasite & Vector Biology
Louisiana State University Medical Center New Orleans Department of Microbiology,
Immunology and Parasitology
Malaria Foundation International provides a gateway to internet resources concerning
global problems with malaria
McGill University Institute of Parasitology Montreal, Canada
Microbiology and Immunology Online — Parasitology University of South Carolina
School of Medicine, textbook derived from medical microbiology course lectures
Molecular Analysis of Symbiosis research in molecular analysis of symbiotic
relationships
Molecular Aspects of Medicine
Molecular and Biochemical Parasitology Elsevier — journal of investigations on
molecular biology & biochemistry of parasitic protozoa & helminths and interactions
with their hosts
Molecular Parasitology Network portal site
Molecular and Cellular Biology
Molecular Biology of Virus-Cell interactions

**OnchoNET** onchocerciassis information repository

**ParaDis** parasites and distribution - a negative binomial distribution software, running on PC/DOS

**Parasite** journal of the Société Française de Parasitologie

**Parasite Genome Laboratory** University of Cambridge UK

**Parasite Genomes Web Site** to provide information on advances in the various parasite genome projects and links to the parasite genome "networks"

**Parasitic Diseases website** MIC-KIBIC at the Karolinska Institute

**Parasite-genome discussion list** Mailbase mailing list servicing researchers involved in the computing aspects of parasite genome research, in particular the development of ACeSRI-based databases for analysis and display of genome information

**Parasite Immunology** an international journal devoted to research on parasite immunology in the general sense, with emphasis placed on how hosts control parasites, and the immunopathological reactions which take place in the course of parasitic infections

**Parasites and Parasitological Resources** Ohio State University

**Parasites on the Web** link to parasite internet sites

**Parasitologia al Dia** official publication of Sociedad Chilena de Parasitología y de la Federación Latinoamericana de Parasitólogos (FLAP)

**Parasitological Research Groups and Societies** world wide list by continent

**Parasitological URLs** David Gibson's list of web resources of interest to parasitologists

**Parasitology** Cambridge University Press

**PARASITOLOGY/bionet.parasitology News group Archive**

**Parasitology Diagnostic Services** Oklahoma State University College of Veterinary Medicine

**Parasitology in Düsseldorf** Heinrich-Heine University

**Parasitology Group Homepage** Aberystwyth University, Wales, research group covers a broad range of parasitological research from the molecular to ecosystem level

**Parasitology Images List** a collection of images of medically important parasites

**Parasitology International** international journal of the Japanese Society of Parasitology (formerly Japanese Journal of Parasitology), see also journal homepage

**Parasitology News** published by the British Society for Parasitology

**Parasitology Online** Elsevier, group of specialized journals for parasitologists

**Parasitology Research** Springer

**Parasitology Research Group** University of Glasgow

**Parasitology resources** Pasteur Institute

**Parasitology at University Erlangen-Nurnberg**

**Phytoparasitica** Israel Journal of Plant Protection Sciences

**Plasmodium Genome Database** a relational database for sequence retrieval etc of Plasmodium falciparum genome information

**Quantitative Parasitology** statistical tools to describe parasitic infection of a sample of hosts

**QUT Parasitology Pages** Queensland University of Technology

**Royal Society of Tropical Medicine & Hygiene (RSTMH)** British organisation promoting health and advancement of the study, control and prevention of disease in man and other
animals in warm climates, facilitation of discussion and exchange of information among those who are interested in tropical diseases, and promotion of the work of those interested in these objectives

SciCentral: Best Parasitology Directories
Société Francaise de Parasitologie — created in 1992 to help to achieve parasitology progress and scientific exchange among researchers, and to promote a comparative parasitology
Society for Vector Ecology — concerned with all aspects of the biology, ecology, and control of arthropod vectors
SYMBIOSIS-RESEARCH — BIOSCI/bionet.biology.symbiosis newsgroup archives
Systematic Parasitology — Kluwer Academic Publishers
Trends Parasitology (formerly Parasitology Today), see also journal homepage
Trypanosomiasis and Land Use in Africa (TALA) — Oxford University Dept of Zoology
Trypnews On-line — an initiatives to involve colleagues worldwide and exchange information in a dynamic way as well as to strengthen the Trypnet (Hemoparasite Information Network)
Tulane University Department of Tropical Medicine
Turkish Society for Parasitology (TSP)
University of Berne Institute of Parasitology — Switzerland
University of Queensland Department of Microbiology & Parasitology, Australia
Veterinary Parasitology — journal covering aspects of protozoology, helminthology & entomology of interest in animal health & veterinary sciences, see also journal homepage
Warwick University Ecology and Epidemiology
WHO Tropical Diseases Resources
World of Parasites — McGill University, find out which parasites are found around the world, what diseases they cause, and see pictures of them
World Federation of Parasitologists (WFP)
WormLearn — an online parasitology information package
Parasite Portfolio — www.biosci.ohio-state.edu/~parasite/home.html

G. Statement on ADA Procedures
Howard University is committed to providing an educational environment that is accessible to all students. In accordance with the policy, students in need of accommodations due to disability should contact the Office of the Dean for Special Students Services for verification and determination of reasonable accommodations as soon as possible after admission to the University, or at the beginning of each semester. The Dean of the Office of Special Services can be reached at 202 806-2420.