

Biology 120 Lab Porifera, Cnidarians

Objectives

- Compare and contrast the morphology of Porifera and Cnidaria.
- Diagram and describe the organization and function of selected tissues and cells within these groups.

General Introduction to the Laboratory Observation of the Animals

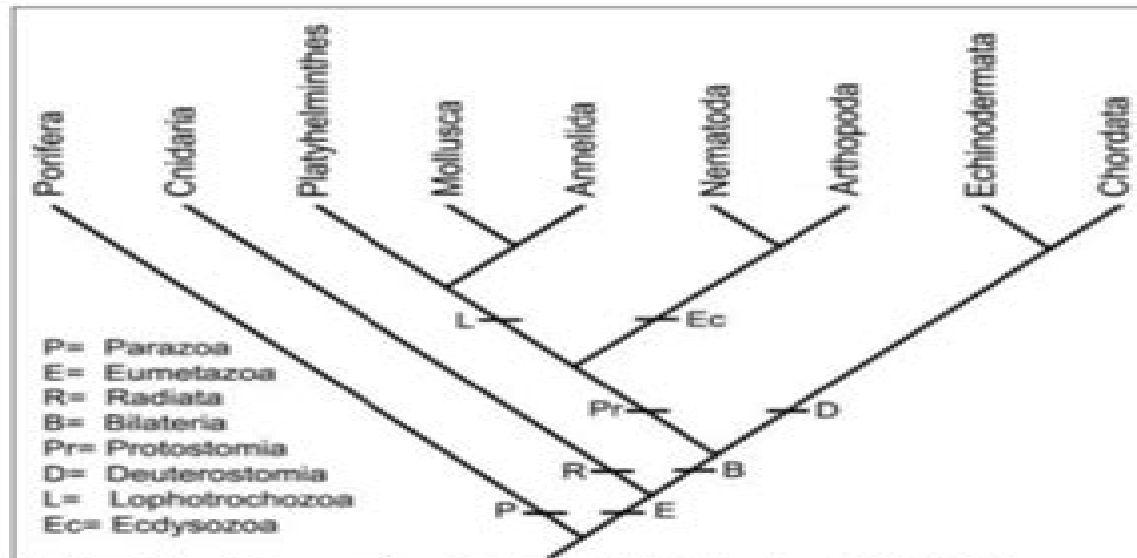


Figure One. Cladogram of the Major Animal Phyla based upon SSU-rRNA.

Animals originated in the oceans of the Precambrian era about 1.5 billion years ago. The first animals were multicellular, eukaryotic and heterotrophic. They were the first "predators." By the beginning of the Cambrian period (543 mya), sponges and cnidarians were already present. During the end of the Precambrian and the beginning of the Cambrian, a huge diversification of the animals took place. This is called the Cambrian Explosion, although it spanned the Cambrian-Precambrian boundary (565 to 525 mya). Most extant phyla are directly traced to this period. During this period, animal phyla displayed dramatic variation in tissue formation, body symmetry, gut tube formation, major feed structures, molting strategies and skeletal arrangements. These evolutionary trends, through natural selection, resulted in the major animal lineages represented in Figure One. Although biologists identify approximately 35 extant phyla within the

Study Guide For Biology 120 Lab

**National Research Council, Division on
Earth and Life Studies, Institute for
Laboratory Animal
Research, Committee for the Update of
the Guide for the Care and Use of
Laboratory Animals**

Study Guide For Biology 120 Lab:

Catalog of Copyright Entries. Third Series Library of Congress. Copyright Office,1977 **Teacher's Wraparound Edition: Two Biology Everyday Experience** Albert Kaskel,1994-04-19 **Resources in Education** ,1980 **Laboratory Manual in Elementary Biology ...** Emanuel Roth Boyer,1894 **Guide for the Care and Use of Laboratory Animals** National Research Council,Division on Earth and Life Studies,Institute for Laboratory Animal Research,Committee for the Update of the Guide for the Care and Use of Laboratory Animals,2011-01-27 A respected resource for decades the Guide for the Care and Use of Laboratory Animals has been updated by a committee of experts taking into consideration input from the scientific and laboratory animal communities and the public at large The Guide incorporates new scientific information on common laboratory animals including aquatic species and includes extensive references It is organized around major components of animal use Key concepts of animal care and use The Guide sets the framework for the humane care and use of laboratory animals Animal care and use program The Guide discusses the concept of a broad Program of Animal Care and Use including roles and responsibilities of the Institutional Official Attending Veterinarian and the Institutional Animal Care and Use Committee Animal environment husbandry and management A chapter on this topic is now divided into sections on terrestrial and aquatic animals and provides recommendations for housing and environment husbandry behavioral and population management and more Veterinary care The Guide discusses veterinary care and the responsibilities of the Attending Veterinarian It includes recommendations on animal procurement and transportation preventive medicine including animal biosecurity and clinical care and management The Guide addresses distress and pain recognition and relief and issues surrounding euthanasia Physical plant The Guide identifies design issues providing construction guidelines for functional areas considerations such as drainage vibration and noise control and environmental monitoring and specialized facilities for animal housing and research needs The Guide for the Care and Use of Laboratory Animals provides a framework for the judgments required in the management of animal facilities This updated and expanded resource of proven value will be important to scientists and researchers veterinarians animal care personnel facilities managers institutional administrators policy makers involved in research issues and animal welfare advocates *Books and Pamphlets, Including Serials and Contributions to Periodicals* Library of Congress. Copyright Office,1977 **General Catalog** ,1973 The Bookseller, Newsdealer and Stationer ,1904 *The Quarterly Review of Biology* Raymond Pearl,1929 Includes section New biological books and other bibliographies *Catalogue of Title-entries of Books and Other Articles Entered in the Office of the Librarian of Congress, at Washington, Under the Copyright Law ... Wherein the Copyright Has Been Completed by the Deposit of Two Copies in the Office* Library of Congress. Copyright Office,1979 **Annual Catalogue of the University of New Mexico at Albuquerque** University of New Mexico,1918 Henry's Clinical Diagnosis and Management by Laboratory Methods E-Book Richard A. McPherson,Matthew R. Pincus,2021-06-09 For more than 100 years Henry s Clinical

