

- 4:00 CHEUNG, P. J. and R. F. NIGRELLI. Osborn Laboratories of Marine Science, New York Aquarium, Brooklyn.
Ecdysterone-induced molting in isolated penis and appendages of the barnacle, Balanus eburneus Gould, kept in sterilized sea water. (165)
- 4:20 BURNETT, B. R. Scripps Institution of Oceanography, La Jolla, California.
Blood circulation in four species of the barnacle family Lepadidae. (Introduced by D. EPEL) (166)

FRIDAY AFTERNOON, DECEMBER 27

SESSION 6. Vertebrate Morphology II. Contributed Papers.

MILTON HILDEBRAND, presiding.
Greenlee Room

- 2:00 GOSLOW, G. E., JR, M. WETZEL and D. G. STUART. Northern Arizona University, Flagstaff, University of Arizona and University of Arizona College of Medicine, Tucson.
Problems in the neural control of locomotion. (Invited Paper) (170)
- 2:40 VAN DE GRAAFF, K. M., R. G. WILLIAMSON, J. A. O'MORROW and G. E. GOSLOW, JR. University of Minnesota, St. Paul and Northern Arizona University, Flagstaff.
Motor units and action of extensor muscles of the hind limb in the striped skunk, Mephitis mephitis. (171)
- 3:00 MESSINGER, DAVID S. Northern Arizona University, Flagstaff.
Ankle extensor activity in the walking cat. (Introduced by GEORGE E. GOSLOW, JR.) (172)
- 3:20 Intermission
- 3:30 HILDEBRAND, MILTON. University of California, Davis.
Structure and function of the tibial digital extensor muscles and related sesmoid bone in rodents. (173)
- 3:50 RIESER, GEOFFREY D. University of California, Davis.
A functional analysis of bipedalism in lizards. (Introduced by MILTON HILDEBRAND) (174)
- 4:10 PETERSON, JANE A. Harvard University, Cambridge, Massachusetts.
Locomotor adaptation in Anolis: 2. Convergence within ecomorphs. (175)
- 4:30 DALRYMPLE, G. H. University of Toronto.
Variation in the cranial feeding mechanism of Trionyx. (Introduced by THOMAS S. PARSONS) (176)

FRIDAY AFTERNOON, DECEMBER 27

SESSION 7. American Microscopical Society II. Contributed Papers.

BURTON J. BOGITSH, presiding.
Coconino Room

- 1:30 BARLOW, BERYL M., and HAROLD E. FINLEY. Howard University, Washington, D. C.
Comparative studies on vorticellas by SEM and light microscopy. (180)
- 1:50 SAWYER, THOMAS K. National Marine Fisheries Service, Oxford, Maryland.
Description of a heat-tolerant species of Acanthamoeba (Amoebida) from ocean sediment. (181)
- 2:10 GITTLESON, STEPHEN M. Fairleigh Dickinson University, Teaneck, New Jersey.
Measurement of aggregate sedimentation rate as a chemical bioassay. (182)
- 2:30 SPOON, DONALD M., and BENJAMIN ENG. Georgetown University, Washington, D. C.
Predation of Heliophrya erhardi on twenty-seven species of ciliates. (183)
- 2:50 SPOON, DONALD M., GEORGE B. CHAPMAN, and RUTH CHENG LI. Georgetown University, Washington, D. C.
Light and electron microscopic study of Heliophrya erhardi feeding on Paramecium. (184)
- 3:10 Intermission
- 3:30 SPOON, DONALD M., GEORGE B. CHAPMAN, and RUTH CHENG LI. Georgetown University, Washington, D. C.
Light and electron microscopic morphology of attached Heliophrya erhardi adults. (185)
- 3:50 SAWYER, THOMAS K. National Marine Fisheries Service, Oxford, Maryland.
Histological observations on discolored gills of the lady crab, Ovalipes ocellatus, from Sandy Hook Bay, New Jersey. (186)
- 4:10 LACOMBE, DYRCE, and SOPHIE JAKOWSKA. Instituto Oswaldo Cruz, Rio de Janeiro, Brazil, and Staten Island Community College, New York.
Cement glands and attachment of Octolasmis lowei to the gills of Callinectes danae from Guanabara Bay, Brazil. (187)
- 4:30 BROWN, HARLEY P. University of Oklahoma, Norman.
Additions to the dryopoid beetle fauna of Baja California, Mexico. (188)

The presentation of your paper, entitled "Cement Glands and Attachment of Octolasmis lowei to the gills of Callinectes danae from Guanabara Bay, Brazil" coauthored with D. Lacombe, is scheduled for 4:10 p.m., Friday afternoon, December 27, 1974 at the Annual Meeting of the American Microscopical Society, at the University of Arizona, Tucson, Arizona.

Kindly,
Bridget V. Young

BRS100-DL-DP-DE-22-01-FA

Transmittal form for paper to be presented
at the Annual Meeting, December 27-30, 1974,
at the University of Arizona, Tucson, Arizona.

If you intend to present a paper at the December meeting, please complete this form and submit it to: Dr. Thomas C. Cheng, Vice-President and Program Chairman, Institute for Pathobiology, Lehigh University, Bethlehem, Pennsylvania 18015, by August 1, 1974.

Name(s)* Lacombe, Dyrce and Jakowska, Sophie*

Affiliation Instituto Oswaldo Cruz, Rio de Janeiro, Brazil, and
Staten Island Community College, City University of New York.

Title of paper Cement Glands and Attachment of *Octolasmis lowei*
to the gills of *Callinectes danae* from Guanabara Bay, Brazil.

Time required () 15 minutes; () 20 minutes.

Audiovisual equipment required () 2x2 projector; () 8 mm movie projector.**

ABSTRACT

Please limit your abstract to no more than 200 words (single spaced) and follow the sample provided.

Smith, J. F. and Jones, T. D. University of Michigan. An Electron Microscope Study of *Escherichia coli* Subjected to Low Level Ozone Treatment.

By employing transmission electron microscopy.....

Lacombe, Dyrce and Jakowska, Sophie*. Instituto Oswaldo Cruz, Rio de Janeiro, Brazil, and Staten Island Community College, City University of New York. Cement Glands and Attachment of *Octolasmis lowei* to the gills of *Callinectes danae* from Guanabara Bay, Brazil.

Different stages of *O. lowei*, taken from crabs collected at 2-3 m depth, show cement glands which are somewhat simpler than those of *Lepas anatifera* but unlike those of balanid barnacles. They are seen directly in the anterior part of the transparent cylindrical peduncle, next to the ovaries (reddish when mature) and a dense muscle network. The secretory cells, concentrated mostly in the pedunculo-capitular region, form two chains between the ovarian follicles and the muscular peduncular wall. Their cytoplasm is homogeneously dense at the secretory pole. At the other pole the cement accumulates in small vacuoles oriented towards the principal canals. These form separate tubular ducts, supported by connective tissue, extending down to the basal disc. Polarized light reveals the flow of cement to the outside through the openings of the principal canals located near the attachment region of the cypris larva. A dense layer of cement spreads through the entire base of the peduncle and infiltrates the gills. A clear-cut interface appears between the cement and the chitin of the peduncular base. The region of attachment to the host has not been previously described by others who characterized the organisms as either commensals or symbionts. Further studies may clarify this relationship.

* If there is more than one author, please indicate by use of an asterisk which one will present the paper.

** No 4x5 lantern slide projectors will be available.

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