

TEXAS SOCIETY OF ELECTRON MICROSCOPY

NEWSLETTER

No. 1

22 February 1967

TSEM Meeting of 18 March 1967 at College Station

Robert L. Halliwell, chairman of local arrangements, has provided the following general information on the March TSEM meeting:  
(Note also the details in the accompanying announcements of the Texas Academy of Science)

March Meeting TSEM

1. Texas Academy of Science registration fee will be \$1.50 for TSEM members and graduate students, no charge for undergraduate students.
2. Registration will be held in the Biological Sciences Building.
3. Luncheon and business meeting will be held in the Memorial Student Center. The price will be \$2.25.
4. Information on lodging and a campus map, etc., is in the TAS Newsletter.
5. Guest cards to the Faculty Club will be provided at registration for those wanting cocktails after the meetings. The Club is located in the Ramada Inn which is adjacent to the campus.

Tentative Schedule

Registration	8:00 - 10:00
General Session	10:00 - 11:30
Lunch-Business Meeting	11:45 - 12:45
Concurrent Paper Sessions	1:30 - 5:00

Nominating Committee

The nominating committee will meet Saturday, March 18 at 9:00 a.m. in Room 303 of the Plant Sciences Building (across the street from the Biological Science Building). Chairman is Don Benefiel. He has stated that any discussions relating to nominations would be welcome.

Queries or Comments -- Any communication regarding local arrangements should be addressed to Robert S. Halliwell, College of Agriculture, Texas A and M University, College Station, Texas 77843.

Information on Electron Microscopes

A list of the electron microscopes in the region has been compiled, including type of instrument, location and responsible individual. While not guaranteed to be complete in every detail, it may be useful to members wishing to learn the whereabouts of certain types of instruments and the individual with whom they may correspond. This is available in limited numbers. The list contains 73 entries. Address requests to Dr. Carl F. Tessmer, The University of Texas M. D. Anderson Hospital and Tumor Institute, Houston.

Annual Meeting - May 1967 - Galveston

Dr. Daniel K. Roberts, vice president and local arrangements chairman, announces that the second annual May meeting of the Texas Society for Electron Microscopy will be held at the Flagship Hotel in Galveston on Saturday, May 20, 1967. The program planned will emphasize basic concepts of cell biology. It will be divided into 40 to 50 minute

sessions during which the structure function relationships of a single subcellular entity will be discussed in detail. Part of the sessions will be devoted to a discussion of some aspect of instrument design or operation. However, this topic will not be selected until after Doctor Reisner's presentation at the March symposium.

It is obvious that all parts of the cell cannot be discussed in a single meeting. Therefore, enclosed is a list of possible subjects in the area of cell biology that are being considered. It would be of considerable assistance in planning this meeting if the membership would return the attachment to this Newsletter with their ranked preference of four of these subjects. Any other suggestions are welcomed.

A preregistration form will be sent approximately three weeks prior to the meeting so that the lines encountered at the last meeting might be avoided. We are anticipating another well attended meeting on the beach.

#### Notes on Two International Meetings - H. D. Mayor - Baylor University College of Medicine

The Sixth International Congress for Electron Microscopy was held in Kyoto, Japan from August 28 - September 4, 1966. The Congress site was the magnificent new Kyoto International Conference Hall. Due to the enormous number of papers for presentation many biological and non-biological sessions were held concurrently. Of particular interest among the general lectures was the elegant paper on High Resolution Electron Microscopy of Biological Specimens by H. Fernandez-Moran (Chicago). A series of interesting papers on high voltage electron microscopes culminated in a visit to the 500 KV instrument at Shimadzu Ltd Kyoto.

In my opinion the sessions on structure of biomacromolecules (Bradley, Beer, Parsons and Haggis) and immune electron microscopy were highlights of the biological program and represented significant advances in areas of very difficult technology. In the fields of virus structure and function the session on Tumor Viruses and Virus Tumors (deThé, deHarven, Moore) was particularly outstanding and resulted in some very lively and informative discussion. In a number of the virus sessions the individual contributions were very often outstanding (e.g. Peters' paper on localization of DNA inside DNA viruses and the Morgan et al paper on development of herpes simplex). However a scarcity of qualified interpreters unfortunately limited useful discussion to the English-speaking participants. An enormous exhibition of first-rate electron micrographs from many participants as well as many technical exhibits rounded out the program.

The Second International Biophysics Congress was held in Vienna, Austria from September 5-9, 1966. Of particular value for biologists interested in electron microscopy was the Symposium on Symmetry in Biological Systems chaired by J. Kendrew of Cambridge. Scholarly papers on Symmetry and the Genesis of Forms (J. D. Bernal), Structure of Viruses (A. Klug), Relationships between Symmetry and Function of Globular Proteins (J. Monod), and Symmetry in Cells (A. V. Grimstone) were presented. The paper by H. E. Huxley in the Symposium on Topics in Contemporary Biophysics showed how two refined techniques such as low-angle X-ray diffraction and high resolution electron microscopy could be utilized to complement one another in elucidating the molecular structure of muscle.

The sessions on Virus Structure and Symmetry, Nucleic Acids, and Proteins were particularly rewarding. A. K. Kleinschmidt (New York) discussed recent advances in quantitation of nucleic acids by electron microscopy while R. L. Erikson (Colorado) and R. M. Franklin (New York) presented exciting electron microscopic evidence for a double-stranded RNA molecule with single-stranded side chains for the replicative intermediate form of the RNA from bacteriophage R17.

#### Metropolitan Microscopic Society Organized - Mrs. Katy Miller

A group from the Dallas-Ft. Worth-Denton area with an interest in electron microscopy organized December 6, 1966, to form the Metropolitan Microscopic Society. Informal dinner

meetings are held on the first Tuesday of each month with speakers, field trips, demonstrations, etc., planned for each meeting. The officers are: Glen T. Williams (Chairman) and Katy Miller (Recording Secretary). Dr. Joe Lynn of Baylor Hospital Pathology Department spoke on tissue preparation technics at the January 11, 1967 meeting. Dr. Paul Donaldson of Micro Department at Southwestern Medical School directed a panel discussion on "Artifacts" at the February 7 meeting. Membership numbers about 30, and guests are welcome at all meetings.

Contribute to Your Newsletter

A card is included with this mailing for your secretary--let her assemble items which you can check off to send in to the Editor, TSEM Newsletter

Carl F. Tessmer, M.D.  
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- Nucleic Acids and the Nucleus
  - DNA
  - RNA
- Mitochondria
- Lysosomes
- The Functions of the Smooth Surfaced Membranes of the Cytoplasm
- Cell Structure in Relation to the Secretory Process
- Genetic Code
- Ribosomes
- Enzymes and Intracellular Control Mechanisms
- General Concept of Pathobiology
- Cell Membrane

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Please indicate your ranked preference of four subjects for the May meeting at the Flagship in Galveston and return to

Dr. Daniel K. Roberts  
Departments of Pathology and OB-Gyn  
The University of Texas Medical Branch  
Galveston, Texas 77551

Any other suggestions are welcomed.