## The First Decade of the Texas Society For Electron Microscopy

10th Anniversary Meeting Hyatt Regency, Houston, Texas May 1975



FOUNDED IN

TEXAS SOCIETY FOR ELECTRON MICROSCOPY -

" FOR THE PURPOSE OF DISSEMINATION OF RESEARCH WITH THE ELECTRON MICROSCOPE"

## A Brief History of the First Ten Years of the Texas Society for Electron Microscopy (1965 – 1975)



1. An evening river Bar-B-Q at Mayan Dude Ranch, Bandera, October, 1973.



2. Four Mayan Caballeros: Joe Wood, Carl Tessmer, Bob Turner, Terry Hoage.

On December 7, 1964, Lea Rudee, then in the Materials Science Department at Rice University in Houston, Texas, wrote a letter to George C. Cocks, Executive Secretary of the Electron Microscopy Society of America (EMSA), asking information about establishing a chapter of EMSA in Houston. Thus began the machinery for establishing what has become one of the strongest affiliates in the United States.

An organization meeting was called for the evening of May 4, 1965 at Rice University, Present at this meeting were twenty-six electron microscopists, PhD's, M.D.'s, technicians and students who then became the charter members. (See Appendix.) The by-laws were drawn up and approved for the Texas Society for Electron Microscopy (TSEM).

The first president was Charles W. Philpot from the Biology Department at Rice University. (See Appendix for 10 year list of officers.) The bylaws called for three meetings per year. one of which was to be a general symposium.

At the time, in the State of Texas, there were several major EM installations - the Pathology and Anatomy Department at the University of Texas Medical Branch in Galveston, the Biology and Virology Department at M.D. Anderson Hospital, Biology and Material Sciences at Rice University and the Botany Department at the University of Texas at Austin. Therefore, the membership expanded greatly during the first year. The first presentation meeting was held at Dallas on October 15, 1965. The principal speakers were Ralph W.C. Wyckoff, University of Arizona, who spoke on "The Study of Microstructure", and Charles T. Ashworth, University of Texas Southwestern Medical School, speaking on "Electron Microscopy of Lipids in Mammalian Physiology".

The next meeting, held on the Rice University campus in Hammond Hall in February 1965, was a contributed-paper session. In the spring of 1966 TSEM met in Galveston with A. C. van Dorsten keynoting the meeting. Henceforth, something of a tradition was established in that fall meetings were reserved for paper presentations, winter meetings were organized as symposia and spring

meetings for graduate student presentations. However, prominent speakers were invited for all of these meetings and TSEM has been fortunate in hosting some very learned and accomplished scientists: John Luft, who established the epoxy embedding method, John Reisner, Edwin B. Bradford, Gunter Bahr, Gareth Thomas, Fritiof Sjostrand, John Watson (who could also have had a significant career in opera), A. P. Wilska and Kenneth M. Smith. We Also hosted Nobelist George M. Palade as our May 17, 1968 meeting in San Antonio. Speaking also on that program were Montrose Moses and A.V.Crewe, former head of Argonne National Laboratory and developer of one of the first scanning-transmission electron microscopes.

Our first workshop was held at the Cell Research Institute of the University of Texas Austin campus in January 1969. Among our speakers were Peter Marsh and E. C. Ketler from Southwestern Camera Co. of Houston presenting methods of darkroom procedures.

Future meetings included Jim McAlear and A.V. Crewe again, Dan Friend, and Don Fawcett who has accomplished so much in the area of electron microscopy of spermatozoa. The Society has also been fortunate in attracting the officers of EMSA as principal speakers: Russell Steere, George Cocks, L.L. Ross, W.J. Humphreys, K.R. Lawless and B. M. Siegel. Other speakers have included Milton Brightman, Daniel Pease, George Pappas, Keith Porter, who has pioneered biological applications of the scanning electron microscope, and Jean Paul Revel. Last, but not least, Russell Barnett has been an invited speaker to TSEM three times and, in recognition of his popularity with our Society, has been made an honor, ary Witch Doctor of Gamboa Cay in a TSEM Quasinative rite at Gamboa Cay in Galveston in May 1969.

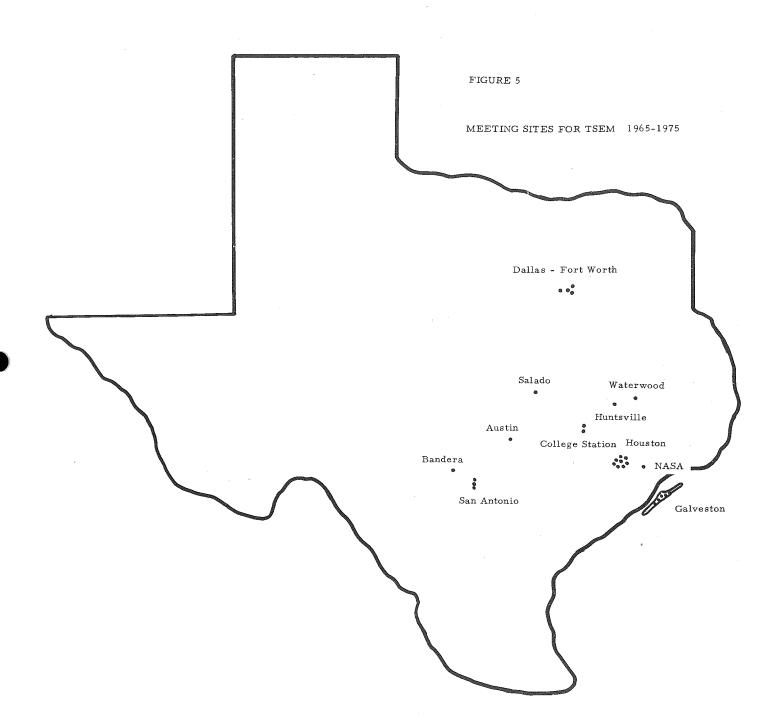
Other highlights of TSEM meetings include a second workshop on the Texas A&M campus in May 1974. It was also at this meeting that the first TSEM graduate student award was presented to the best competitive presentation. This is now an annual event.

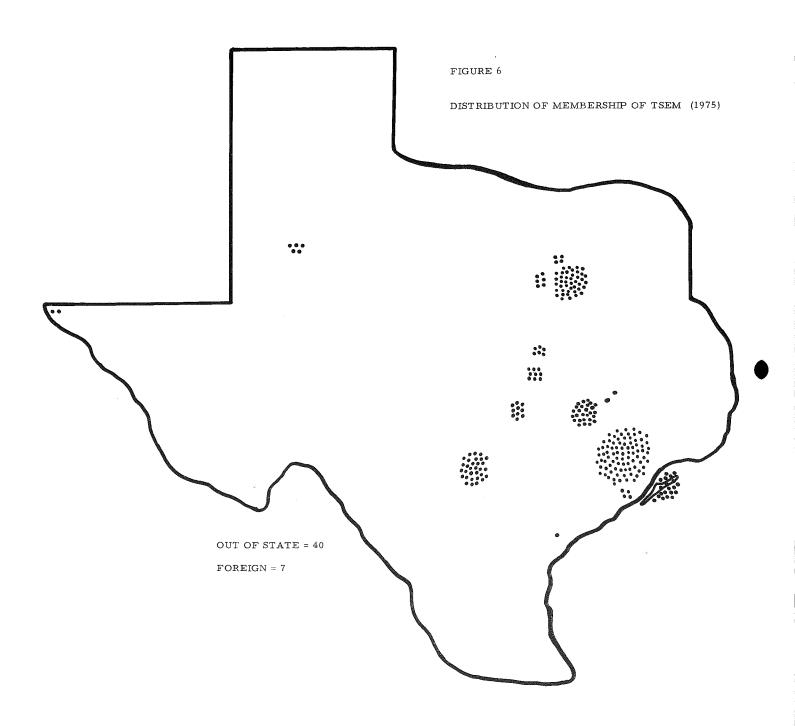
In October 1973 the Society experimented with a meeting in Bandera, Texas at the Mayan Dude Ranch (Figures 1, 2, 3 and 4). There were 88 in attendance and the meeting was hailed as a success. With trail ride breakfasts and a ghost-town cookout, it was an ideal setting for a relaxed meeting. A highlight was a ride down the Medina River in an inner tube. Figure 5 shows the distribution of our meeting sites in the first 10 years.

In February 1972, the Texas and Louisiana Societies held a joint meeting in Fort Worth. The following year the joint meeting took place in New Orleans in the French Quarter. These meetings



3. TSEM Rancheros waiting at the corral. The horses wouldn't come out.







4. Morning Trail Ride Breakfast. That's Katy Jo Miller (left) on a horse called Idonwanna.



7. Jerry Berlin at Waterwood with winnings at casino party.

have been successful to the point that they seem assured of continuation. The third annual joint meeting took place at the Menger Hotel in San Antonio in February 1974, following by the 1975 meeting at the Delta Towers in New Orleans.

Our membership has grown from 26 charter members to approximately 300 at present. In addition, our corporate members have steadily increased each year to a present total of 26. Of our total membership, approximately 32% are associated with medical or dental schools, 27% with universities and colleges, 15th with hospitals and clinics, 10% with industry and the remainder of unknown affiliation. The TSEM also holds 40 out of state memberships and 7 foreign memberships. Figure 6 shows the distribution-plot of the TSEM membership. Our selection of meeting sites has generally corresponded to the distribution of our membership (compare Figures 5 and 6). The two exceptions were the Bandera meeting in October 1973 and Waterwood, east of Huntsville in October 1974. At Waterwood, a new community literally being carved out of the Piney Woods, the program included a lively panel discussion on grants and grantsmanship. The social part of the meeting consisted of a mock casino outing using play money followed by a hilarious auction (Figures 7, 8 and 9).

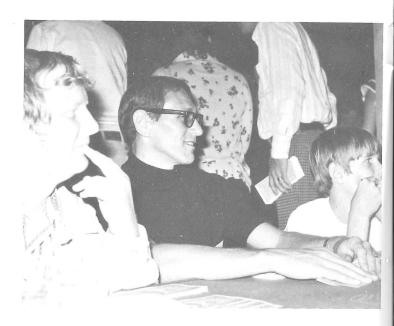
The Texas Society for Electron Microscopy has planned programs in keeping with current develoments and applications of electron microscopy in science. For example, electron microscopy of membranes was quite popular in the late '60's Thus, it was in October of 1967 that Fritiof Sjostrand addressed the TSEM with his classic work on membranes. We followed up on this subject in October 1971 with Daniel Pease speaking to us, again on membranes, in Houston. It was also in Galveston in 1969 that we first saw uses of scanning electron microscopy in viral research and paleontology. During our meeting at NASA in Febuary 1970, we enjoyed a demonstration of the microprobe system while on tour of the Manned Spacecraft Center. And, at the spring 1974 workshop at Texas A&M University, the energy dispersion system at the EM center was demonstrated. As early as May 1968, high voltage electron microscopy was presented by A. V. Crewe.

In 1967, a TSEM newsletter was inaugurated with the appointment of Carl Tessmer as editor. Originally, this began as a mimeographed sheet of information and notes. It evolved into an established intrasociety organ and chronicle. The newsletter now contains major technical articles, editorials, reference listings, area news, technique notes and sustained corporate advertising. The TSEM also maintains a placement service which is published in the newsletter.

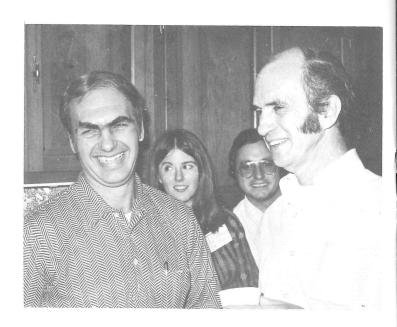
The evolution of the TSEM has mirrored the art and application of electron microscopy. That the TSEM serves a vital communicative function

in the State of Texas can best be demonstated by the more than 150 installations of transmission electron microscopes, 20 scanning electron microscopes and 3 centers capable of energy dispersion analysis and more than 6 microprobe systems. The State is also preparing for its first installation of a high voltage transmission electron microscope.

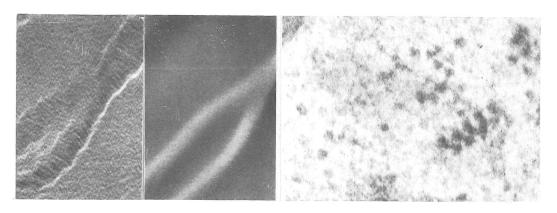
The future of the Texas Society for Electron Microscopy looks bright. We sustain a sizeable graduate student membership and it will be through them that the Society will continue its growth and record of service. The practice of electron microscopy continues with a vibrant flux, and we shall witness, in the years to come, the visualization of living specimens by electron microscopy, elemental analysis and structure of atoms and subatomic particles,a wider forensic use of electron microscopy and what may be a near explosive application of electron optical systems in industrial matrials and medical diagnosis and monitoring. The Texas Society for Electron Microscopy will be ready to meet the challenge of communication in this area as well as sustain the more traditional needs of electron microscopists.



8. Bill Pavlat, Terry Hoage and young Master Hoage figuring out how twin at 21.

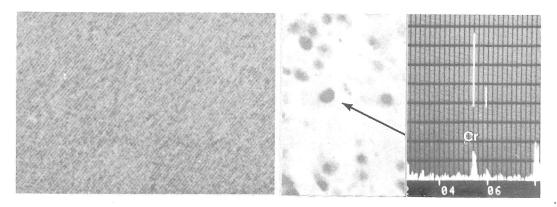


 James Brown of NSF, Bob Turner; Weckerling's in background, at Waterwood retreat.



Branched Collagen

Helical Ribosomes



Pyrophyllite Lattice 020

Chromium in Cellular Granule

## APPENDIX

TSEM - Charter Member List Don Benefiel Heather Mayor Howard Mercer George Brock P.C. Moller Wilhamina Butcher Marion Campbell Ricardo Morales Jeffry Chang Wiktor Nowinski John Ghidoni Charles W. Philpot Ann Goldstein M.L. Rudee Gwenfryn Hopkins Wayne Stenbeck Harwood Johnson Clarmon A. Sumrall Liana Jordon Carl Tessmer Harvey Thomas, Jr. Carl Karnaky R.S. Leibelt Robert A. Turner Joe A. Mascorro Robert D. Yates

TSEM - Officers 1965 - 1975 1965 - 1966 Bill Philpot, President Rice Univ. Vice Pres. Lea Rudea, Rice Univ. Don Benefiel, Secretary Dow Chemical Treasurer Glenn Williams, Southwestern Medical School Program Chrmn. Harwood Johnson, Ivan Sorvall 1966 - 1967 President Lea Rudee, Rice Univ. Vice Pres. Daniel K.Roberts, UTMB, Galveston Don Benefiel, Secretary Dow Chemical Glenn Williams, Treasurer Southwestern Medical School Program Chrmn. Heather Mayor, Baylor U. of Medicine 1967 - 1968 President Daniel K.Roberts, UTMB, Galveston Don Benefiel, Vice Pres. Dow Chemical Secretary R.W.Toler, Texas A&M Treasurer James L. McAtee,

Baylor University

Carl F. Tessmer,

M.D.Anderson Hospital

M.D.Anderson Hospital

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Robert A. Turner,

Scott & White Clinic

Univ. of Texas, Austin

U. Texas Medical School,

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Joyce Kephart,

Bill Winborn,

San Antonio Ward Kischer,

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Don Benefiel.

1968 - 1969 President

1970 - 1971

President

Vice Pres.

Secretary

Treasurer

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Newsletter Ed.

1971 - 1972

Vice Pres.

President Robert D. Yates,

UTMB, Galveston Dimitrij Lang,

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Dallas

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Program Chrman. Jeffrey Chang, M.D.Anderson Hospital

Ward Kischer, Newsletter Ed.

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Southwestern Medical School,

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Joe Mascorro, Treasurer

UTMB, Galveston

Terry Hoage, Program Chrmn.

Sam Houston

Newsletter Ed. Ward Kischer,

UTMB, Galveston

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Program Chrmn. Larry Thurston,

Texas A&M

Newsletter Ed. Ivan Cameron,

U. Texas Medical School,

San Antonio

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Terry Hoage, Sam Houston

Vice Pres.

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UTMB, Galveston Jerry Berlin,

Secretary

Texas Tech

Treasurer

Ernest Couch,

Program Chrmn.

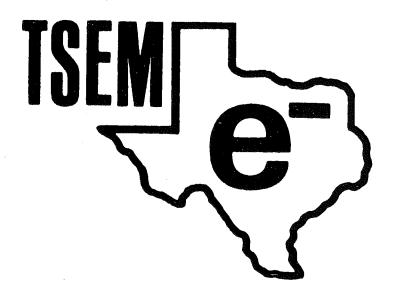
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