STUDENT NEWS

Students In Honoraries

Phi Zeta

Phi Zeta is an honorary for only veterinary students and graduate veterinarians as well as a select few who have rendered great service to the veterinary profession. A veterinary student must complete at least two years and one term of his course of instruction. He must possess high ideals respecting professional service. He may be elected in his junior year, and be in the upper 10 percent of his class in scholarship. In his senior year he must be in the upper 25 percent of his class.

This honorary was started in 1925 at the New York State Veterinary College at Cornell University. Gamma chapter was installed at Iowa State College in 1931. There are 12 chapters in the National Society of Phi Zeta.

Some of the activities of the chapter are to recognize and encourage high scholarship and ethical standards in veterinary medicine. They also sponsor scientific programs on campuses for faculty members, students, alumni and the public. Students who have met the above qualifications are Lawrence Birchmier, Robert Billiar, Roger Hogle, Rulan Hansen, Kenneth Fertig, Richard Houck, Garret Zoet, David VanSickle, Jack Scott, Oscar Walker, Gilbert Samuelson, Richard Stride, Jack McDowell, Stanley Held, Hal Holst, Joseph Krichel, Raymond Morter, Ralph Schwake and David Tyler. Graduate students are Dr. Charles Hatch and Dr. Milton Taylor. Honorary memberships go to Dr. R. Scott Allen and Dr. Richard W. Pohl.

Alpha Zeta

Students wearing straw hats to class and red handkerchiefs around their necks are pledges of Alpha Zeta. This is an honorary fraternity that selects mostly students in the school of agriculture but does take some from the related fields such as veterinary medicine, rural sociology and landscape architecture. A student must have completed at least 1½ academic years of his four-year course with a grade point average putting him in at least the upper two-fifths of his class.

Ohio State University started the first chapter in 1897 with Wilson Chapter at Iowa State College starting in 1905. There are 49 chapters in this fraternity. On some campuses Alpha Zeta has its own chapter houses and operates under the same rules as social fraternities. Activities of Wilson Chapter include a plaque presented to the oustanding instructor in agriculture. The pledges do clean-up and fix-up work during their pledge week.

In 1940 Alpha Zeta was one of the first honoraries to admit veterinary students. Students now in school who belong to this honorary are James Carpenter, John Berg, Carleton Lohse, Kenneth McKenzie, Randall Taylor, Philip Finney, Rich-

ard Jones, Bernard Danelan, William Dubbert, George Burgermeister, James Dunn, Russell Schelkopf, Mark Young, Henry Philmon, Francis Copeland, Dale Longtin, Donald Allgood, Richard Campbell, Stanley Held, Richard Houck, Jack McDowell, Gilbert Samuelson, Ralph Schwake, David Tyler, Jack Scott, Tom Spencer and Joseph Krichel.

Gamma Sigma Delta

Gamma Sigma Delta was started at Iowa State College in 1907 as a strict honorary society. It takes students mostly from the school of agriculture but also some from related fields such as botany, zoology, and veterinary medicine. This honorary pleges only senior students that rank in the upper 25 percent of their class. This is very similar to Alpha Zeta but differs in that Gamma Sigma Delta is managed by the faculty and eligibility is based entirely on scholarship. Alpha Zeta is student managed and puts some weight on leadership and activities in selecting its members.

There are 15 chapters of Gamma Sigma Delta whose activities include some of the following. They sponsor agriculture programs on local campuses, recognize outstanding sophomore and senior students each year in agriculture and related sciences as well as sponsor banquets and recognition programs for initiation of new members. Veterinary medicine students who belong are Hal Holst, Ralph Schwake, David Tyler, Jack Scott, Tom Spencer, Raymond Morter, Joseph Krichel and Russell Schelkopf.

Phi Kappa Phi

Scholarship is the only method of selecting members for Phi Kappa Phi. This honor society takes the top one-sixteenth scholastically of the graduating class of the college as a whole making no discrimination whether home economics, veterinary medicine, agriculture, engineering or science. Phi Kappa Phi was started in 1897 and was brought to Iowa State College in 1911 and now enjoys 75 chapters in the national organization. Major activities include initiation and a banquet as well as giving 25 dollars to the senior student with the highest grade point in his class which this year went to Mrs. Mikel Sandbulte, wife of Gerald Sandbulte, a junior in veterinary medicine. Members from our division include James Dunn, Ralph Schwake, David Tyler, Jack Scott and Joseph Krichel.

—Dale Longtin

SENIOR STATISTICS

This year the Division of Veterinary Medicine of Iowa State College will graduate its smallest class since 1947. The class of 1957 consists of 55 men. This class is also setting a record in that it is the first class in which less than one-half of the class are veterans. In fact, only one-fourth of the graduates have had any previous military experience. The number of married students has remained fairly constant in the past four years with about 70 percent of the class being married. The pendulum of matrimony has swung from the freshman year when only 20 percent of the class was married. This year finds 39 men married. The number of children, which is 34, has dropped below the one per family average of the previous two classes. The average age is 26, which is the same as that of last year's class, but slightly under the 27 year-old average of 1953, 1954 and 1955. The average time of college training amounts to 6.72 years. Ten men have B.S. degrees, one a B.A. and one a M.S. degree.

This article had to be written early in the spring so it has been hard to determine where everyone will locate, but the following figures may give some indication as to what type of work they will enter. Fifteen are planning to enter large animal practice, 23 mixed practice, 10 small animal practice, 1 equine practice, 2 institutional work, and 1 government service. Twenty-three of the class members expect to be hired as assistants, eight will enter partnership and nine are planning to engage in practice independently.

—Bruce Ewald

Class of '57

AUXILIARY ACTIVITIES

The Auxiliary of the ISC Student Chapter of the American Veterinary Medical Association is part of a national organization, and sends a delegate to the national convention each year. There are 128 members; 37 are wives of seniors, 34 juniors, 28 sophomores, and 26 freshmen. Their advisor is a member of the Veterinary Circle. Meetings are held monthly at which they have guest speakers; one meeting consists of a party for the Veterinary Circle.

Each fall these women serve the luncheon at Veterinary Medicine Homecoming. The senior wives attend a series of classes where they learn how to help their husbands when out in practice. Their membership in the auxiliary is climaxed when they are awarded P.H.T. (putting hubby through) certificates at the time their husbands are about to graduate.

The most rewarding service that the auxiliary rendered this past year was the polio survey; 57 of the girls were active in this public-spirited act. The fact that two of their members, Julianne McGehee and Betty Held, had polio while their husbands were in school made the group more enthusiastic in their campaign. The college hospital has given over 4,000 vaccinations since the start of their survey. The National Polio Foundation awarded the auxiliary a scroll in appreciation, and numerous " thank you's" made their efforts rewarding.

Officers for next year are: Mrs. Bernie (Russ) Schelkopf, president; Mrs. Mickey (Bob) Maahs, vice-president; Mrs. Helen (Merle) Lockwood, secretary; Mrs. Jane (Larry) Herbold, treasurer; Mrs. Nancy (Phil) Finney, historian; Mrs. Shirley (Wayne) Steckelberg, program chairman. Advisor is Mrs. Baker, wife of Dr. D. L. Baker, Dept. of Medicine and Surgery.

JR. AVMA OFFICERS

The executive council of the Iowa State Student Chapter of the American Veterinary Medical Association for the last term of the 1956-57 year is composed of: Francis Copeland, President; Warren Bohnhoff, President-Elect; Garrett Zoet, Vice-President; Bob Schepers, Secretary; Robert Billiar, Treasurer; Jim Ahern, Critic; Sterling Schelkopf, Freshman Representative; Bill Speer, Sophomore Representative; Gerald Sandbulte, Junior Representative; and Joe Krichel, Senior Representative. Dr. James Lovell is the Faculty Advisor.

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35 NEW BOOKS

Dr. Milton Taylor (left) and Bruce Ewald of the Veterinary Medical Library Committee arrange $277.00 worth of new books. These were paid for by contributions from the student chapter and Veterinary Alumni Association.

MARRIAGES

James Maxted and Mary Jo Butler were married March 23, 1957, at Marshalltown, Iowa. Mr. Maxted is a second year student.

BIRTHS

A daughter, Cindy Sue, was born to **Duane and Betty Gipple** on March 22, 1957, at Mary Greeley Hospital. Duane is a member of the first year class.

Tom and Marilyn Lensing announce the birth of a daughter, Lori Ann, on Feb. 21, 1957, at Mary Greeley Hospital. Tom is a member of the first year class.

A son, Craig Allan, was born to **Donald and Carol Andrle** on Feb. 10, 1957, at Mary Greeley Hospital. Don is a member of the first year class.

JR. AVMA SPEAKER

Dr. George J. MacLean as he addressed the ISC Jr. AVMA, March 6, on problems in the diagnosis of diseases of swine.

THE PATHOLOGY OF CHRONIC ARTHRITIS FOLLOWING NATURAL AND EXPERIMENTAL ERYSIPELOTHRIX INFECTION OF SWINE. Swine which developed erysipelas and arthritis following contact with acute naturally occurring cases as well as those that were inoculated intravenously with smooth colony culture isolated from an acute septicemic field case were used in this study.

Animals from both groups developed temperatures of 107° to 108° F. on the fourth day. Those which contacted erysipelas naturally lived and developed a chronic polyarthritis which persisted until the animals were killed for necropsy at one year after exposure. Of those inoculated intravenously, two showed a mild transient febrile response, then recovered; two died, and one developed a chronic arthritis which persisted until the necropsy was performed at 10 months after exposure.

At 100 days following exposure the animals had enlarged carpal and tarsal joints. Radiograms at 7 and 9 months showed narrowed joint spaces, early osteophyte formation and some rarefaction of the bones. The distal ends of the radius and ulna were slightly enlarged.

At necropsy, the carpal and tarsal joints were much enlarged and firm. Most of this was due to fibrosis of the joints. The kidneys were found to be fibrotic, enlarged and pale. In some cases the adrenal glands were enlarged and contained cysts while other were atrophic. All other viscera were normal. Bacteriologic examination of joints was negative for *Erysipelothrix rhusiopathiae.*

Sequence of events which are believed to lead to chronic arthritis: Bacteria entering the body are picked up by lymphatics and carried to the nearest regional lymph node where infection is established. The organisms then spread from here resulting in a bacteremia. Infection is soon localized in the joints. Edema and congestion of synovial membranes occur, followed by proliferative changes in intra-articular structures. Suppuration is rare and when it occurs it is local. Numerous lymphocytes and plasma cells invade the area with a limited number of polymorphonuclear leucocytes and a few eosinophiles. The synovial membrane becomes converted into a form of granulation tissue and individual villi resemble granulamatous polyps. The synovial fringes combine with proliferating perichondrium to form a pannus. The articular cartilage becomes eroded superficially in areas of pannus attachment and deeply as a result of inflammatory reaction in the subchondral bone. Bacteria may not be demonstrated in the joint but the arthritic process continues because the synovial granulation tissue assumes some of the properties of a benign neoplasm and proliferates in absence of the exciting microorganism. Thus, the arthritis is maintained in a state of clinical activity. Renal and adrenal damage may play a part in cases of advanced chronic arthritis.

The pathologic changes in joints of arthritic swine resemble rheumatoid arthritis in man in many respects.

Sikes. Dennis, D.V.M.; Neher, George M., Ph.D.; Doyle, L. P., D.V.M. The pathology of chronic arthritis following natural and experimental erysipelothrix infection of swine. The American Journal of Pathology. 32:1241-1251 (Nov.–Dec.) 1956.