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Symposium on hamster as research model draws researchers in virus, cancer and immunology

DALLAS--An international symposium on the use of hamsters in research will be held at The University of Texas Health Science Center at Dallas June 4-5. Participants will focus on Syrian hamsters as animal models for the study of immune responses, genetics, infectious diseases and cancer.

Hamsters are uniquely suited to the study of certain diseases—specifically viruses, including slow virus infections and cancer. The species demonstrates an unusual lack of naturally occurring viral infection and cancer, but it is strongly susceptible to these kinds of disease from other species. Malignant tumors, even from humans, can be grown in hamsters, and hamsters are an excellent model for human leukemia. The animal's immune responses are of particular interest because of these surprising findings.

The symposium coordinator is Dr. J. Wayne Streilein, professor of cell biology and internal medicine at UTHSCD. The symposium is sponsored by the Fogarty International Center with the support of the National Institutes of Health.

Topics of interest will include:

\*\*Isolation of the agent that produces a highly transmissible infectious lymphoma in Syrian hamsters. The agent has been tentatively designated a viroid. Dr. Joseph H. Coggin Jr., University of South Alabama. Presentation: 3:10 p.m., June 5. Jones Lecture Hall (Room D1.602).

\*\*Latest information on a new type of biological infectious agent, the "slow virus."

Presentations on scrapie: Dr. Richard Marsh, University of Wisconsin-Madison, 1:30 p.m.,

June 5. Dr. Paul Brown, Laboratory of Central Nervous System Studies, NIH, 1:55 p.m.,

June 5. Dr. Robert G. Rohwer, Laboratory of Central Nervous System Studies, NIH, 2:10 p.m.,

June 5. Dr. Stanley Prusiner, University of California, San Francisco, 2:25 p.m., June 5.

\*\*Some viruses, when replicating in certain hosts, produce "defective interfering" (DI) particles as well as new virus. DI particles contain shorter strands of DNA. To the host cell, DI particles "look" like the virus but effectively protect the cell from the infectious virus by suppressing its replication. Presentations: Dr. Patricia Fultz, research fellow in cell biology, UTHSCD, 11:50 a.m., June 5. Dr. C. Yong Kang, associate professor of microbiology, UTHSCD, 12:15 p.m., June 5.

\*\*Syrian hamsters have been brought out of the wilds for research only three times. Most of those in laboratories today are descended from the three brought out in 1930. Twelve were brought out in 1970. The last expedition to trap wild hamsters was made in 1978 by Dr. William Duncan and his wife, Marilyn Duncan. By engaging the natives of four villages in their project, the Duncans managed to bring back two wild hamsters. Duncan says the hamsters present quite a challenge since they burrow 12 feet down and move frequently. The Duncans are experienced trappers since they trap wild mice all over Texas for his studies of genetics and the immune system. Duncan is interested in the fact that there is more variation in the immune systems of wild animals than in the immunity of animals bred in the laboratory for many generations. He is assistant professor of cell iology.

\*\*The hamster is less well established as a medical research model than the mouse, and research funds for hamster studies are harder to get. For interview: Streilein or Dr. R.E. Billingham, chairman of the Department of Cell Biology, UTHSCD.

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