news THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT DALLAS

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APRIL 1, 1976 CONTACT: Silvi Taylor

******"Teenage Brain" film to premier on April 5.*

DALLAS--"Teenage Brain," a unique film depiction of the specific brain functional areas used by teenagers during their activities, will premier at The University of Texas Health Science Center at Dallas on Monday, April 5, 12 noon, in lecture hall D1.502.

The film is less than 14 minutes in length and will be shown four times during the noon hour.

Written and produced by Roy Mills, faculty associate in Pathology at the center, and Dr. Joel Kirkpatrick, associate professor of Pathology and Neurology, "Teenage Brain" features discoveries of photomicrotomy, a new technique that examines and records data from human brain specimens.

Devised by Mills in 1968, the photomicrotome is a large freezing microtome (an instrument for cutting thin slices of tissue) that dissects sections from frozen brain specimens and photographs the cut surface. When displayed at viewing speed, these serial photographs produce a visual plane that moves through the brain and conveys its intricate three-dimensional structure.

According to Dr. Kirkpatrick, "Teenage Brain" fills a relative void in available audiovisual material covering this field. "While school textbooks discuss principles of nervous system functions with either passing or in-depth explanations of anatomy and terminology, this film enters at the middle level and presents important details of human nervous system structure and function in a way that interests and stimulates the student," he explained. "It is primarily designed to introduce basic concepts and to lay foundations for deeper study and understanding."

The film covers fundamental concepts about cerebrospinal fluid and blood supply, plus microscopic and ultrastructural details of nerve cells. Vision, hearing, memory, sleep and motor control are also described.

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first add teenage brain

Live action sequences are used which portray teenagers engaged in typical activities requiring specific brain functional areas. Illustration and animation scenes created by Edmond Alexander of the Medical Illustration Services department at the center emphasize the scientific information.

Narrated by Bobbie Wygant of KXAS-TV (Channel 5) in Fort Worth and Dr. Kirkpatrick, the film has been received with "overwhelming enthusiasm" in preview showings at Dallas area high schools, Dr. Kirkpatrick reported.

Presently, he and Mills conduct research in human cerebral trauma and stroke in their photomicrotomy laboratory at the center. The team has previously collaborated on two other teaching productions for professional level students, "Photomicrotomy of the Whole Human Brain" (1974) and "Son of Brain" (1975), now used in colleges and medical schools in the United States and Canada.

The films are available for purchase or for rent on a non-profit basis. Funds are used to defray production costs and to finance further development and research.

"In creating 'Teenage Brain,' we hope to inspire teenagers with the thrill of neuroscience," Dr. Kirkpatrick said. "Their (the teenagers) potential is vast if we can reach them."