

# SOUTHWESTERN NEWS

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## **UT SOUTHWESTERN OPHTHALMOLOGISTS FIND LINK BETWEEN DRY EYES AND DEFECTIVE LIPID STRUCTURE**

DALLAS – August 19, 1998 – A defective lipid structure appears to be the culprit behind many chronically dry eyes, a condition that affects millions of Americans, according to clinical research by ophthalmologists at UT Southwestern Medical Center at Dallas.

Scientists have long known that dry eye (keratoconjunctivitis sicca) could be caused by insufficient tear production. New research suggests the condition also may be the result of tears evaporating too quickly, resulting in inadequate moisture in the eye. This unusually rapid evaporation appears to be the result of a flawed lipid structure, the layer of fatty oils responsible for coating the eye and preventing evaporation of watery tears, said Dr. Ward Shine, assistant professor of ophthalmology at UT Southwestern.

In the study, the composition of tear liquid in normal patients was compared to that of patients with chronic blepharitis (inflammation of the eyelids) alone, and chronic blepharitis with associated dry eyes.

Dr. James McCulley, chairman of ophthalmology, hopes these latest findings will lead to improved ways of treating dry eye.

"Artificial tears and surgical procedures have been commonly used to treat the condition with variable success. Now that we seem to have pinpointed a major defect, we think we'll soon be able to develop better methods for treating dry eye resulting from over-evaporation, (a problem that potentially affects 50 percent of all patients with keratoconjunctivitis sicca)," said McCulley, holder of the David

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## DRY EYES-2

Bruton Jr. Chair in Ophthalmology.

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