Did you know that...?

By Irvin B. Krukenkamp, MD
Chairman, DCA Health & Research Committee

The inaugural Betty Garvin Lecture series was held at the 2007 DCA National Specialty in Fort Mitchell, Kentucky. The lecturers and topics were: Danika Bannasch, DVM, PhD – The Uric Acid Gene; Suzanne Hughes, DVM – Clinical Stone Disease; and Mary Lynn Jensen, PhD – The Backcross Project. After nearly three hours of presentations and "Q and A," did you know that...?

Fact: An 11-generation Backcross Pedigree contains 4,095 dogs of which only ***one*** is a Pointer.

Fact: An 11-generation Backcross Pedigree contains more ***than 4,080 AKC Registered Dalmatians***, or over **99.6%** "purity" based on pedigree analysis alone.

Fact: An 11-generation Backcross Pedigree contains **only 10 – 15 LUA** (Low Uric Acid) Dalmatians, *depending on which breeding is analyzed*, for less than one half of one percent (**0.24% to 0.36%**) Low Uric Acid Dalmatians.

Fact: *Every single puppy* (**100%**) whelped from Backcross breeding has been tested for urinary uric acid to urinary creatinine, and based on a highly significant ***ten-fold difference*** in this ratio, the puppies are categorized as either HUA (High Uric Acid) or LUA (Low Uric Acid).

Fact: The proper categorization of Backcross puppies as HUA or LUA on urine analysis has been confirmed retrospectively by DNA analysis and found to be **100% accurate**!

Fact: Urine testing of ten **Adult** Backcross (LUA) Dalmatians reveals *a persistent six-fold reduction* in the urinary uric acid to urinary creatinine ratio compared to High Uric Acid, AKC Registered Dalmatians.

Fact: Researchers have been studying the uric acid defect for over 100 years and have concluded that **all** AKC Registered Dalmatians are homozygous recessive for the uric acid defect, represented as [uu]. In scientific terms this defect is *genetically fixed.*

Fact: All present day LUA Dalmatians are heterozygous dominant represented as [Uu]. No LUA homozygous dominants [UU] are currently known to exist.

Fact: The gene controlling the uric acid defect in the Dalmatian has been identified!

Fact: A transporter protein appears to be responsible for the Dalmatian uric acid defect.

At the Board of Governors meeting in Chicago this August 2007, both the DCA and DCAF Boards voted unanimously to offer a DVD digital video recording of these materials as an educational piece at NO CHARGE to anyone interested. If you would like a copy of this DVD, please e-mail your name and address to me privately, and I will send one out to you as soon as possible. E-mail: *ibkmd@hotmail.com*