

## **CSI: Honolulu**

Bugs become crime solvers in the hands of forensic entomologist Dr. Lee Goff. By Jenny Quill

IT'S DIFFICULT TO FOCUS WHEN A MUMMIFIED CAT WEARING A HULA SKIRT and lei is staring at you. The cat, named Rigor, is one of several peculiar decorations in Dr. Lee Goff's office, alongside dangling fake skeletons, preserved bug specimens and Harley-Davidson paraphernalia. It's not exactly what I expected to find in the office of the director of Chaminade University's forensic sciences program, but, then again, Goff is a pioneer, an author and even a kind of TV star, thanks to his work in forensic entomology.

The television show *CSI: Crime Scene Investigation* has taken Goff's work into households nationwide. The forensic entomology background of Gil Grissom, one of the show's most popular characters, is more or less based on Goff's experiences using insect evidence to aid in legal investigations. The show's creators had been using Goff's book, *A Fly for the Prosecution: How Insect Evidence Helps Solve Crimes*, as a reference for several of the show's earliest episodes, a few of which were based on crimes committed in Honolulu. Over the years, Goff has served as the show's resident expert on all things creepy and crawly. "If there's anything with insects," says Goff, "typically they're going to call up and ask me, 'Will it work?""

Goff considers his entomology career a happy accident, one that began when

he moved to Honolulu from Los Angeles to surf in 1962. Enrolled at the University of Hawai'i at Mānoa and studying marine biology, Goff supported himself by play-

ing acoustic folk music in Waikīkī bars.

When that didn't take off, he took an entomology job at the Bishop Museum, discovered he liked the work and changed his major to zoology with an entomology emphasis.

After two years in the
Army working in a morgue,
then completing his master's
and doctorate degrees, Goff found
himself at an Entomological Society of
America lecture given by Lamar Meek, an
early leader in forensic entomology. While
many of the attendees were literally running
out of the presentation, Goff was having an
epiphany. "I was thinking, 'I've got this exposure to dead bodies courtesy of the Army
and now I have the entomology background
... this might work."

Goff struck up an informal partnership with Honolulu medical examiner Charles Odom that gave him the necessary handson experience, and his membership in the "dirty dozen," a group of pioneering forensic entomologists, provided Goff with additional guidance as he began applying his knowledge of entomology to forensic techniques, including the practice of calculating time of death.

"Probably 98 percent of what we do is estimating a minimum period of time since death," says Goff. When someone dies, their body becomes attractive to insects, including flies. A female fly will enter the body either through a wound or natural body opening to lay her eggs, which begins a biological clock. Given a set of temperatures, the eggs will develop in predictable lifecycle stages. "When we get to the body," says Goff, "we make the [egg] collection and look for the most mature specimens ... and then we can work backwards and determine when that egg was laid."

It's not a typical 9 to 5 gig, but that's just how Goff likes it.

34 NONOLULU JULY 2009 www.honolulumagazine.com