

centrifuge

♪ Oh, oh, oh!  
I got the  
T-cell  
activation  
blues...



# Dog Head Blues

back and listens intently to the deep-throated tones filling the room. "It's very gratifying to watch him perform," Kappler remarks. "It sounds great in his hands." A few performers later, Kappler, who at 62 is old enough to be the father of nearly anyone else in the room, gets up with his own "Dog Head" guitar to do some blues, folk, and country and western tunes.

By day, Kappler, a member of the National Academy of Sciences, studies T-cell biology at the National Jewish Medical and Research Center and is a professor of immunology at the University of Colorado Health Sciences Center. Often working in collaboration with Philippa Marrack, his wife and fellow HHMI investigator, he has mapped out many of the complicated mechanisms T cells use to recognize foreign invaders and has advanced knowledge of how that process, when it goes awry, can lead to autoimmune disorders.

But he has other passions too, such as making music and making instruments that make music. Five years ago, he began studying with stringed instrument master craftsman Edward Dick and to this day serves as an apprentice in his Denver shop. Under Dick's tutelage, Kappler built guitars at first for himself. He designed an image in mother-of-pearl of Billie, the

family's beloved Labrador retriever (who has since died), and the Kappler guitar brand, the Dog Head, was born.

While playing at open stages around the city, Kappler met local musicians and began taking in their guitars in need of repair. He took pleasure in fixing them as good as new, but that wasn't quite enough. "I wanted to see and hear something I built being played on stage," he explains.

Making Medina an offer he couldn't refuse, Kappler asked him what he might like in a custom guitar. "How could I say no?" Medina recalls.

Kappler says a guitar takes around 100 hours to build and that the materials—not counting tools and space—cost about \$300. He makes his instruments exclusively for musicians playing on the local circuit and charges \$1,000 for them, which is actually a steal. Those who have played and listened to Kappler's guitars are effusive in their praise. "I have yet to adjust to the chills and goose bumps I get when I play it," says Medina of his Dog Head. "He really is a wizard."

That's all the recompense Kappler needs: "I'm not doing this for the money."  
—Marc Wortman

**It's a Sunday night** in Denver and at Cricket on the Hill, a smoky neighborhood bar and musician's hangout, the place is buzzing. It's open-mike night, and young performers waiting to take the stage fill the room. As Tony Medina, host of the weekly gathering, steps to the microphone, someone in the crowd notices his gleaming guitar's engraved Celtic knot and distinctive mother-of-pearl dog's-head emblem.

"What brand of guitar is that?" he calls out.

Medina points to a gray-haired man in the crowd and says, "A wizard's wand," and with that strikes the first chord and bursts into one of his original songs.

The wizard who built that wand, HHMI investigator John W. Kappler, sits

## Labor of Love

"I wanted to see and hear something I built being played on stage."

JOHN KAPPLER



Of all the guitars John Kappler has built, his favorite is his own personal "Jumbo," which has an extra-wide body and, he says, a "big, bass-y sound." Kappler's innovative bracing on the inside of the soundboard (the wood face of the body) gives the guitar a much cleaner sound in the higher registers. "It turned out spectacularly well," he says. "I just love it." ¶ Kappler is building another Dog Head Jumbo for a local musician, which, with the planning, carpentry, finishing, and inlay work, will take several months to complete. He is crafting a fancy rosette around the sound hole made of abalone shell and highly figured maple wood and sculpting his trademark mother-of-pearl dog's head for the guitar's headstock, that upper part of the neck that holds the tuning pegs. The guitar will have additional shell inlay as well, because the future owner, a country-and-western musician, requested some flash.

Illustration: Peter Arkle Photo: Ray Ng