Mike Carey and his wife, Valerie Kickhoefer, enjoy hiking in the Santa Monica Mountains.

Scientific STAND OUT

Dr. Michael Carey

A superb, creative scientist, Mike Carey travels a road that leads over the horizon.

Find yourself an altar boy, a grave digger, an athlete and an enthusiastic scholar — and you'll find Mike Carey.

Professor Michael F. Carey, Ph.D., spends his days searching for the switch that turns normal genes into prostate cancer genes.

He knows that proteins called androgen receptors generate prostate cancer.

Picture the cell as an egg without a shell, and the egg's yolk as the cell's nucleus. View androgen receptors as very important little masses of specialized protein inside the yolk.

"We're trying to understand exactly how androgen receptors recognize the genes that cause prostate cancer, and how and under what circumstances the receptors 'turn on' those genes, thereby generating that cancer," Carey says.

"Once we understand that process, we can find new ways to block androgen receptors from working. Currently, we only know how to block them for limited periods, after which the cancer grows and the patient dies.

"We're making important progress, but the end of the road is over the horizon."

That's research, through and through: "The end of the road is over the horizon." Researchers have to be patient. But patient is not the first adjective that comes to mind in connection with Mike Carey. Words that do come to mind include fervent, zealous, restless, eager, ardent.

"He's always been a hard worker and a natural teacher," says Carey's brother, Brian. "As kids we shared a tiny room. From junior high on, Mike studied until 3 or sometimes 4 a.m., and he'd wake me up to tell me what he'd learned even though I didn't care about it."

Carey's sister, Jody, remembers that "Mike was always determined, always learning, always discovering. He read, he studied, he tinkered with a chemistry set. Once he and Brian teamed up to perform surgery on my dolls. And he's always been into sports. He could spout baseball statistics, and he spent a lot of time with neighborhood kids playing games in the street and in an empty lot near our house."

Despite his gray hair, Carey looks younger than his 41 years. But there's no hiding his intense energy, goal orientation and constantly striving approach to his work.

A magna cum laude graduate of Boston College, with a Ph.D. from U.C. Berkeley in biochemistry and molecular biology and postdoctoral work at Harvard, Carey was an altar boy through high school ("The disadvantage was that the priest always knew who I was in the confessional"), and earned money digging graves during college.

Carey grew up in Northampton, Mass., 85 miles west of Boston, the son of a homemaker and an accountant. In high school, he distinguished himself as a member of the honor society, a varsity pitcher and a varsity soccer player.

In his office, Carey's softball trophies share space with his research awards. He pitches and manages a team in the UCLA Medical Center softball league, plays pickup soccer games on Fridays with medical students, and takes rigorous hiking vacations with his wife, Valerie Kickhoefer, a medical researcher in a lab across the hall from his office.

Carey's interest in how genes work extends far beyond prostate cancer.

"The body 'turns on' different genes for different cellular functions," Carey says. "This activity is called gene expression. I began studying this field in graduate school and I've never stopped. It's gene expression that brought me to UCLA in 1990 because of the internationally recognized excellence of the gene expression program here."

Carey helped inaugurate — and currently directs — the Gene Regulation Program Area at UCLA's Jonsson Comprehensive Cancer Center, which makes available new funding and opportunities for collaboration among researchers. With UCLA molecular biologist Stephen Smale, he wrote a respected book combining the best elements of a classic textbook and a lab manual to guide scholars undertaking projects in gene expression.

Carey works closely with the seven members of his lab, and they admire him.

"Mike is a superb, creative scientist," says Katherine Mitsouras, a grad student in the lab. "He gives us individual attention, he asks our opinions, he encourages us to progress intellectually and professionally, he has tremendous enthusiasm, and that's contagious. He fosters a lab that is simultaneously friendly, fun and highly productive. I respect him hugely, and am incredibly lucky to have him as a mentor."

Carey's numerous off-campus projects related to his work include teaching a gene expression course at the prestigious Cold Springs Harbor Laboratory on Long Island, mentoring gifted high school students who want lab experience, judging the California Science Fair for high school students, co-founding a small biotech company started by UCLA researchers and consulting with several biotech firms.

"Working closely with biotech firms is extremely important," Carey says. "They help me move my research out of the laboratory and into the medical field where it can help people. If my work can't do that, what's the point?" ✯