A Tribute to Leon Knopoff May 5, 2011

by Joseph Rudnick, Dean, Division of Physical Sciences, Professor of Physics, UCLA

I would like to take the liberty of speaking not only on my behalf, but also on behalf of my parents, Millie and Izzy Rudnick to whom both Leon and Joanne were dear friends.

Because of this, I got to meet Leon and Joanne well before I came to UCLA as a faculty member in 1984, and I also got to know about Leon and his extraordinary career when I was quite young.

For example, I remember my father talking about how remarkably young Leon was, at the time of his admission to the National Academy of Sciences.

My father's respect for Leon was enormous, and I can tell you from my own experience that his respect was not easily earned, as his standards were always unremittingly high. As easygoing as he was on a social level, he was a stern and unforgiving judge of scientific merit.

He and Leon were close in another way, in that they were members of a small and exclusive area committee (the term used for the portion of physics faculty whose research placed them in an affinity group). An external review of the physics department performed during a turbulent episode in that department's history described their area committee as an "island of tranquility."

My parents considered my father's closest colleagues as an extended family, and few members of that group were as important to them as Leon and Joanne.

In my current position as Dean of Physical Sciences, I can also speak on behalf of UCLA.

Leon was, and will always remain, one of the most distinguished scholars to have honored this institution by his association with it.

UCLA likes to boast of the stellar array of researchers that represent the cream of our faculty, and Leon was in the forefront of that leading cohort.

His renown transcends the scientific field with which he is nominally associated.

His seminal contributions to our understanding of complex systems has inspired generations of researchers, not only in the geosciences, but also in physics and mathematics, where his ideas have exerted a profound influence on the thinking of investigators.

I recall vividly attending a seminar at the Institute for Theoretical Physics in Santa Barbara, in which a member of the UC Santa Barbara faculty there gave a seminar on the work she was doing with a very distinguished senior colleague who at the time was in fact Director of that Institute.

She reported on investigations of a one-dimensional model that mimicked the action of a system of faults, a model invented and first exploited by Leon.

The two of them were quite proud of the fact that the model produced a distribution of earthquake-like events that was suggestive of the existing records of the distribution in both space and time of seismic phenomena.

Afterwards, I told Leon about the talk; his response was "of course".

In fact, he was at the time focusing on the implications of a fractal model of fault distributions that originated in work he performed with Kagan.

I have been told that recent investigations have lent even stronger support to the picture that the two of them first proposed.

Through the continued influence of this work and in many other ways, I am absolutely certain that Leon's ideas will continue to resonate in the scientific community.

Returning to my own experiences with Leon, he was always more than a respected senior colleague; he was to me, as he was to so many others, a wise and generous friend.

A fountain of erudition.

An exemplar of what it means to be a patient and caring mentor of students and junior colleagues.

He was in every respect a gentleman and a scholar.

Few in this world merit comparison with him. His ideas will continue to inspire and challenge us, and we will always carry fond memories of Leon in our hearts.

With profound gratitude for the privilege of having known Leon, it is my honor to join all of you, and especially Joanne and the rest of Leon's family in sharing our memories of this most remarkable man.

Finally, it is my great pleasure to tell you about a lasting contribution to UCLA of Leon and Joanne. Because of their generosity, UCLA will be able to offer one of our most promising young faculty members the Leon and Joanne VC Knopoff Assistant Professorship in Physics and Geophysics.

This gift ensures our ability to support, in perpetuity, research in areas related to Leon's passions, and it serves as a permanent reminder of the many contributions of both Leon and Joanne to the quality of life at UCLA.

On behalf of all of us at UCLA, it is my privilege to extend our most heartfelt gratitude to Leon, Joanne and the entire Knopoff family for this most important, and most deeply appreciated, gift.