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Regental Professor, Director
Raymond and Ellen Willie Distinguished Chair in Cancer Research,
In honor of Laverne and Raymond Willie, Sr.

Center for the Genetics of Host Defense

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To whom it may concern:

I have known Dr. George Kollias for more than 30 years and have closely followed his work. He is one of the greats of inflammation science. He is also an inspiring leader.

My acquaintance with Kollias began many years ago because we were both active in the tumor necrosis factor (TNF) field. I consider him one of the real pioneers of cytokine biology in general. Kollias led the way in the use of transgenesis and later knockout technology to study TNF and its many biological activities. He first made mice that overexpressed TNF, and later made mice that could not express the protein. These he found to have abnormal immune development, and to be susceptible to infection by intracellular microbes such as Listeria monocytogenes and Mycobacterium tuberculosis. Some of his work was intertwined with my own, and I came to admire his rigor and precision. Early studies in my lab had identified a UA-rich element in the TNF mRNA 3'untranslated region (UTR), and had implicated this element in controlling TNF protein biosynthesis. Kollias provided critical data bearing on this point in vivo. He deleted the UA-rich element from the 3'UTR, and found that this subtle modification caused severe systemic overexpression of TNF, leading to arthritis. It was a happy moment when I heard him present this work at a meeting, and subsequently read his paper. Kollias also studied both TNF and TNFR knockouts, and various forms of TNF (e.g., membrane-bound TNF vs. soluble TNF, and the selective effects of TNF produced in various organs and tissues). In an earlier phase of his career, Kollias made important contributions to the field of globin gene regulation, while more recently he has been amongst the pioneers that brought yet another field, that of fibroblast biology, in a mechanistic momentum to explain pathophysiology in immunity, inflammation and cancer.

I can think of few scientists who have contributed more than Kollias to cytokine research, and certainly very few who contributed so solidly. While many researchers in the early days of cytokine discovery rushed to conclusions, Kollias used the best tools to determine the "real story" and often surprised the entire field, leading it in unexpected and important directions. Kollias' work gave a major boost to the use of TNF inhibitors in rheumatoid arthritis: a strategy that by now has benefitted millions of people. Beyond this, he was someone who elevated the field in general, imposing new standards on the conduct of research. In the beginning, such standards were relatively poor. Many observations in vitro led to false conclusions. Kollias made germline editing the gold standard for testing hypotheses.



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On a personal level, I have always held Kollias in warm regard. He is a generous, collegial scholar and is always eager to be helpful, hospitable to visiting scientists, and forthright in sharing his ideas. He is not only a fine scientist, but a renaissance man, knowledgeable about many aspects of science, art, and history. To represent an august body of accomplished individuals such as the Academy of Athens, one must have commensurate accomplishments to one's name; also wisdom, tact, a broad scope of understanding, integrity, and personal magnetism. Kollias has all these qualities in abundance. I am certain he would serve perfectly in any leading position aiming to advance science.

Sincerely yours,

Bruce Beutler, M.D.

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