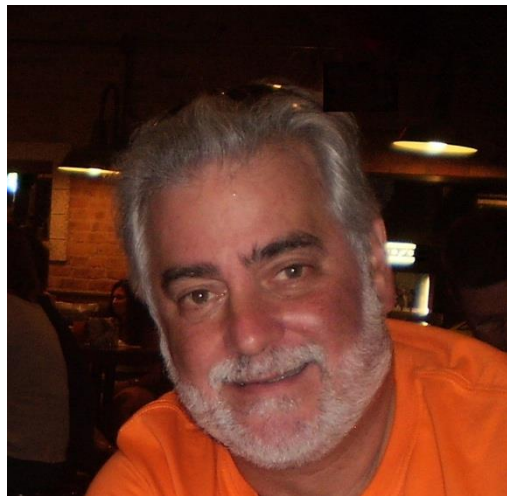


*GIVING THE FLOOR TO... KOSTAS KAMPOURAKIS IN A TRIBUTE TO NORMAN  
GEORGE LEDERMAN: A PASSIONATE PIONEER*

TEM A PALAVRA... KOSTAS KAMPOURAKIS NUM TRIBUTO A NORMAN GEORGE LEDERMAN: UM  
PIONEIRO APAIXONADO

TIENE LA PALABRA... KOSTAS KAMPOURAKIS EN HOMENAJE A NORMAN GEORGE LEDERMAN:  
UN PIONERO APASIONADO



*Figure 1 Norman Lederman*

## 1. TRIBUTE TEXT

There is a lot one can write about Norm Lederman (Figure 1). Norm's passing was a shock to many people, and he will be missed –by both friends and foes. The reason is that he was a brilliant scholar with a distinctive presence in whatever he did. He can be practically considered a founder for the field we today call Nature of Science, and he is certainly the most highly cited author in this field. I am not very fond of metrics, but the numerous citations to his papers indicate the importance and the influence of his writings. He was also the PhD advisor and mentor of many science educators who are currently doing brilliant work, following his path. In this essay, I would like to honor his memory by highlighting some fascinating aspects of his personality.

Norm and I met for the first time in 2011, during a conference. At that time, I was working as a high school teacher, but I had also established my own research group in my school, conducting research and publishing papers. "Are you a teacher who is doing research?" were his first words to me. When I confirmed, he asked me to pay a visit at the IIT, which I did next year.

Norm was always insisting on the importance of being pragmatic when it comes to science teaching. And in order to be pragmatic, it is very useful to have been a school teacher as he had been in the beginning of his career. So he was thrilled that I was both a teacher and involved in research. Whenever we were chatting with people he did not know in conferences, one of his first questions was “Have you taught in school?”. While I was a visiting scholar at IIT, I was impressed about his affection and care for the teachers attending his courses. He was telling them that they were important, and he was eager to support them in doing their important work. Norm was a Distinguished Professor, a highly-cited author, a super-mentor, and a lot more. But I believe that above all he was a teacher, and he thought of this as his most important duty.

Norm was nice and friendly but not easy-going when it came to science teaching and learning; but he often did this for good reasons. We have spent a lot of time arguing and disagreeing about the nature of science and how to teach it. He would give me a very hard time arguing against what I was suggesting. But very early on I understood why he was doing this. He was not arguing against me; he wanted me to argue against myself in order to think harder about what I was suggesting. And this often worked well. In the end, either I would revise my suggestion, or he would gladly admit that I was right. But both of us would then be more certain than before. Norm took nothing for granted, not even his own views. He would put everything to test, and he was open to criticism. He was teaching about the nature of science, but first and foremost he behaved scientifically himself. This is why he prioritized empirical studies over theoretical ones. He liked theory, but he cared more about practice. “Does it work?” he would ask. And he was always concerned about teachers and students. He would always prefer focusing on anything “... that teachers can teach and students can learn.”

Norm was also extremely generous. Not only to his students and colleagues, but to the community as a whole. He would gladly share ideas and materials, and all of his work, in order to help improve teaching and learning. He set up an international consortium to do research on the nature of scientific inquiry in many countries, without any funding at all: just through friends and people who respected him and his work. He would urge his students to present and publish their work, but above all to do good work. He would urge colleagues to stand up for their views, even when he disagreed. Along with his wife and closest collaborator, Judy, Norm left an indelible mark on science education.

Norm was a passionate pioneer who made significant contributions to teaching and learning about nature of science. He will be dearly missed, but his legacy will be here forever.

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