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Don't be Such a Scientist: The Intersection of Science, Communication and Policy

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For most of our professional lives, we perform fundamental research with a goal towards solving problems that advance scientific knowledge. Such a career requires significant investment in education, skill in analytical thinking and problem solving, and usually some sort of sustained federal funding of instrumentation and personnel. Although the costs associated with basic research are small compared to other federal expenditures, in the current funding era we are increasingly asked to justify the taxpayer investment in scientific research. Simultaneously, we wish to continue to attract the best students into our field. Both the persuasion of people to support a pro-science policy and the attraction of new people into a STEM career require better communication skills than most of us have ever developed. In Randy Olsen's book: "Don't be Such a Scientist", he argues that we have done such a poor job communicating science that we are lucky it continues in the US at all!

The evolution of one particular scientific career from basic nuclear science into one with an applied environmental science direction using nuclear science techniques will be presented. This includes using ion beam analysis to study lake sediments, and to trace flame retardants from consumer products into our environment. Recent studies focus on an emerging class of chemicals of concern (Per- and Polyfluorinated Alkyl Substances) that are ubiquitous in in our textiles, food packaging, personal care products and industrial uses. But the most significant of these findings required improved communication skills in order to achieve any significant effect on science policy. Therefore, it could be argued that more of us should develop the type of communication skills necessary to alter the science policy landscape in the US.

Primary author: Prof. PEASLEE, Graham (University of Notre Dame)