Chronic Obstructive Pulmonary Diseases:

Journal of the COPD Foundation



Letter to the Editor

Fifty Years of the Division of Lung Diseases: A Program Officer Perspective

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Abbreviations: National Heart, Lung, and Blood Institute, **NHLBI**; Division of Lung Diseases, **DLD**; National Institutes of Health, **NIH**; request for application, **RFA**; funding opportunity announcement, **FOA**

Citation: Croxton TL. Fifty years of the Division of Lung Diseases: a program officer perspective. *Chronic Obstr Pulm Dis.* 2019;6(4):371-373. doi: https://doi.org/10.15326/jcopdf.6.4.2019.0163

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Dear Editor

The 50th anniversary of the establishment of the National Heart, Lung, and Blood Institute's (NHLBI) Division of Lung Diseases (DLD) prompted me to look back at the state of pulmonary science and at how the National Institutes of Health (NIH) operated in the 1970's. A watershed event occurred in 1975 with the publication of a Request for Research Grant Applications: RFA "Pathogenesis of Inflammation in the Lung". 1 This was the first ever request for applications (RFA) released by the NIH, and it came from our own NHLI ("B", for blood, was not added until the following year). That RFA makes for interesting reading. The main questions posed were how inflammatory responses of the lung differ from those of other organs and why different insults produce different types of inflammatory reactions within the lung. Remarkably, those questions remain important even now. In fact, it would be quite reasonable to publish a similar RFA today. We might want to mention genetics, encourage single-cell analytics, require data sharing, and remind applicants of the importance of studying diverse populations, but these core questions certainly remain of interest in 2019.

While the scientific issues discussed in the 1975 solicitation sound remarkably contemporary, the RFA itself offers a curious mix of familiarity and strangeness. Other than the requirement to provide 24 paper copies of an application, the core RFA instructions have changed little over time. Applications were to be submitted on Form 398, a letter of intent was requested but not required, the stated review criteria were very similar to what we use today, funding was for a maximum of 5 years, and a qualifier about "availability of funds" was carefully included in the RFA.

On the other hand, the format of an RFA has changed dramatically since 1975. The original was only 5 pages long (with very wide margins), over half of that document was devoted to describing the scientific area of interest, and the instructions were worded in a remarkably simple and understandable way. We do not find in the 1975 RFA most of the funding opportunity announcement (FOA) content that now fills our solicitations - sentences such as, "In accordance with the regulatory requirements provided at 45 CFR 75.113 and Appendix XII to 45 CFR Part 75, recipients that have currently active Federal grants, cooperative agreements, and procurement contracts from all Federal awarding agencies with a cumulative total value greater than \$10,000,000 for any period of time during the period of performance of a Federal award, must report and maintain the currency of information reported in the System for Award Management (SAM) about civil, criminal, and administrative proceedings in connection with the award or performance of a Federal award that reached final disposition within the most

recent five-year period."

Is this really progress?

Given the simplicity and clarity of the 1975 RFA, it is tempting to imagine how nice it must have been to be a Program Officer in the old days - before the NIH recognized the need for bureaucratic detail and precision. But in fact, that way of thinking is completely wrong. The best time to be an NIH Program Officer is now, not then. Funding for pulmonary research in 1975 was a tiny fraction of what we now support, we knew almost nothing about the molecular mechanisms of our diseases, qualified lung investigators were few, and the experimental tools available at that time were things like spirometers, chest x-rays, and microscopes.

A phenomenal body of pathobiological knowledge on pulmonary diseases has been acquired over the past 50 years, we now manage a substantial and steady stream of funding for lung research, our scientific workforce is well-trained and enthusiastic, powerful research tools are readily available that allow single laboratories to collect and analyze astounding amounts of useful data, there are well trodden pathways for translation, and networks are available to conduct large clinical trials. I actually expect that the progress in pulmonary science over the past 50 years will be greatly surpassed in the next decade alone. This is a great time to have the privilege of promoting lung research.

Happy 50th anniversary, fellow DLD Program Officers. Keep up the good work, and remember that we need to know more about the pathogenesis of inflammation in the lung.

References

- 1. National Institutes of Health (NIH). Request for research grant applications: RFA. Pathogenesis of inflammation in the lung. NIH Guide. 1975;4(9).
 - https://grants.nih.gov/grants/guide/historical/1975_10_22_ Vol_04_No_09.pdf. Accessed October 2019.