Response: Letter to the Editor

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Dr. Lowe requested the opportunity to make the following response to Dr. St. Geme's commentary.

My talk before the SPR in April of last year, "Pediatric Research: Substance and Process" appears in this issue of PEDI-
ATRIC RESEARCH along with a thoughtful commentary by Dr.
Joseph St. Geme. I appreciate his favorable evaluation and the
generosity of Dr. Bellanti in affording me an opportunity to
respond.

Dr. St. Geme points out correctly that 30% of our population is
under 21 years of age and concludes that accordingly 30% of the
NIH research dollar should also be committed to research on
children. Here I believe he is far afield. His proposition is impos-
sible to document, but if accepted would lead to allocating about
\$450 million to the National Institute of Aging (NIA) (current
budget about \$40 million) because approximately 12% of our
population is over 65. I doubt that even the most militant advo-
cates of NIA would consider this figure reasonable.

Although the considerations determining the distribution of
research dollars are multiple, the percentage of constituents of an
Institute among the population as a whole is not one of them.
Among the issues commonly invoked include the number of

text. It was for that reason that I did choose to emphasize the
important contribution made by other Institutes to the support of
research in departments of pediatrics (65%).

The coincidence of 3% for the number of pediatric investigators
as a fraction of all investigators funded by NIH and the proportion
of NIH funds supporting pediatric research was unexpected, and
the figures depend for accuracy on the method used to determine
the true size of the national pool of trained investigators. For this
number, I chose the total membership in the APS and the SPR
after removing names appearing on both rosters. The reader will
have to judge whether the method chosen provides a sound
extrapolation.

My text specifically questions whether all faculty members are
investigators, viz, "an assumption that is probably over generous,"
and hence, I find myself in agreement with Dr. St. Geme on this
matter.

I make no brief for membership criteria used by the American
Federation for Clinical Research, but feel certain that to exclude

Table 1. *Competing applications submitted by departments of pediatrics*

Year	Total ¹		Recommended for funding ²		Funded			
	Ped	NIH	Ped	NIH	Ped ³	% ⁴	NIH	% ⁴
1974	270	9448	194	7061	98	51	4540	56
1975	252	10,096	167	7510	102	61	4663	54
1976	323	10,119	190	7231	78	41	3464	41
1977	314	13,305	215	9852	81	37	3840	35
1978	363	14,500	251	11,249	97	38	5200	41
1979	370	14,461	251	11,207	127	50	5944	47
					Average	46.3		45.6

¹ Number of applications submitted to Council (recommended and not recommended).

² Number of applications recommended for funding.

³ Number of applications.

⁴ Percentage of recommended applications that were funded.

trained investigators in a field as related to the size, continuity,
and breadth of their support and a perception of research oppor-
tunities as well as unmet needs.

The source of certain numerical data used by Dr. St. Geme is
not identified, but I would like to emphasize my sources. All
numerical information was obtained from the data set maintained
by the Division of Research Grants, NIH, with the exception of
information on society membership, and reviewed for accuracy by
senior staff members.

My analysis in large measure examined grant activity as related
to departments of pediatrics, the denominator of greatest interest
to members of SPR. To discuss the research grant approval rate
of the National Institute of Child Health and Human Develop-
ment is less informative. As a reader will note in Figure 5, while
in 1980 35% of all NIH competing grant awards to departments of
pediatrics came from NICHD, only 9% of the budget of NICHD
went to support departments of pediatrics. NICHD has a broad
and varied mission, and to confuse funding by that Institute of all
competing grants with awards explicitly to departments of pedi-
atrics is to miss the whole point of the figure and the accompanying

these members from the body of nonpediatric investigators eligible
for service on NIH review bodies gives a very false sense of the
size of that universe.

If one assumes that there are approximately 15,000 board
certified pediatricians, then roughly 8% are members of the APS-
SPR. A similar calculation for internists, assuming that only
ASCI-AAP members are of a stature equal to those in the APS-
SPR, would reveal that only 2% of board-certified internists have
the credentials to serve on NIH advisory groups. It seems unlikely
to me that pediatricians are four times as capable as internists in
advising NIH, and to do so skews the data to no benefit. Perhaps
more to the point is Dr. St. Geme's failure to study Figure 13
more carefully. The figures given are for the total number of
individuals that served on any NIH advisory panel during the
decade 1973 through 1982 and not the number currently serving.
The failure to note the context of Figure 13 explains the extreme
distortion entailed in Dr. Geme's calculation.

The argument about effective lobbies is valid and deserves
highlighting, but is not germane to the issues discussed by me and
was accordingly not subjected to analysis.

Table 2. *Percentage of total recommended competing grants funded by selected institutes*

Year	NCI	NHLBI	NIAMDD	NIAID	NICHHD	Ped ¹
1974	61	56	59	52	52	51
1975	54	44	59	38	57	61
1976	42	47	47	19	35	41
1977	34	37	43	26	30	37
1978	40	38	39	34	38	38
1979	41	44	47	47	40	50
Average	45	44	49	36	42	46

¹ Percentage of all recommended grants submitted to NIH by departments of pediatrics funded in each calendar year.

Dr. St. Geme comments on the funding level by NICHHD of all approved applications sent to Council. The issue is important and worth examining. I emphasized that the funding rate by NICHHD to departments of pediatrics over the past 6 years has been virtually identical with that for the NIH as a whole, 45%. The 10% discrepancy Dr. St. Geme identifies must have arisen from a misreading of the text or tables, but in any case is non-existent.

I have provided, with this response, some of the numerical data used to construct Figures 9 and 10. The Institutes chosen for comparison are those providing the bulk of NIH funding to departments of pediatrics (Table 1). It is clear that these Institutes have funded departments of pediatrics with roughly the same generosity as shown their own categorical constituents. In fact, in general, investigators in pediatric departments fared a bit better than those in other organizations (Table 2).

Although I may well have failed to discuss a number of important items, training is not among them. Item 4 in the listing of disincentives to a research career addresses this matter.

Although research on maternal and child health must continue to demand a fair share of federal funding, Dr. St. Geme's conclusions are inconsistent with the facts. My approach was neither gloomy about the past nor enthusiastic about the future, but rather focused on fact. I am persuaded by history that so long as high quality research is sponsored by departments of pediatrics and conducted by scientists with the skill shown by members of the APS-SPR, we will continue to compete successfully with our colleagues in other disciplines as we seek support for research activities. In addition, the available evidence points to the importance of a number of Institutes rather than just one as sources of support for pediatric research.

Although the 80s will surely be years of austerity, I believe they will present no threat to pediatric investigators not shared by other scientists. Any real threat will emerge from a failure to learn from the past that quality prevails or to yield to the temptation to make unsupported and unsupportable claims upon those resources that may become available in the future.