22. Seabold JE, Cohen EL, Beierwaltes WH, et al. Adrenal imaging with 131I-19-iodocholesterol in the diagnostic evaluation of patients with aldosteronism. J Clin Endocrinol Metab. 1976; 42:41-51.
23. Sarkar SD, Cohen EL, Beierwaltes WH, Ice RD, Cooper R, Gold EN. A new and superior adrenal imaging agent, 131I-6β-iodomethyl-19-norcholesterol (NP-59): evaluation in humans. J Clin Endocrinol Metab. 1977; 45:353-62.
24. Bayliss RIS, Edwards OM, Starer F. Complications of adrenal venography. Br J Radiol. 1970; 43:531-3.
25. Eagan RT, Page MI. Adrenal insufficiency following bilateral adrenal venography. JAMA. 1971; 215:115-6.
26. Montagne J-P, Kressel HY, Korobkin M, Moss AA. Computed tomography of the normal adrenal glands. AJR. 1978; 130:963-6.
27. Brownlie K, Kreel L. Computer assisted tomography of normal suprarenal glands. J Comput Assist Tomogr. 1978; 2:1-10.
28. Korobkin M, White EA, Kressel HY, Moss AA, Montagne J-P. Computed tomography in the diagnosis of adrenal disease. AJR. 1979; 132:231-8.
29. Stewart BH, Bravo EL, Haaga J, Meaney TF, Tarazi R. Localization of pheochromocytoma by computed tomography. N Engl J Med. 1978; 299:460-1.
30. Sample WF, Sarti DA. Computed tomography and gray scale ultrasonography of the adrenal gland: a comparative study. Radiology. 1978; 128:377-83.
31. Dunnick NR, Schaner EG, Doppman JL, Strott CA, Gill JR, Javadpour N. Computed tomography in adrenal tumors. AJR. 1979; 132:43-6.
32. Prosser PR, Sutherland CM, Scullin DR. Localization of adrenal aldosterone adenoma by computerized tomography. N Engl J Med. 1979; 300:1278-9.
33. Linde R, Coulam C, Battino R, Rhamy R, Gerlock J, Hollifield J. Localization of aldosterone-producing adenoma by computed tomography. J Clin Endocrinol Metab. 1979; 49:642-5.
34. Stockigt JR, Collins RD, Biglieri EG. Determination of plasma renin concentration by angiotensin I immunoassay: diagnostic import of precise measurement of subnormal renin in hyperaldosteronism. Circ Res. 1971; 28: Suppl 2:II-175-91.
35. Bellon EM, Miraldi FD, Wiesen EJ. Performance evaluation of computed tomography scanners using a phantom model. AJR. 1979; 132:345-52.
36. Ryo UY, Johnston AS, Kim I, Pinsky SM. Adrenal scanning and uptake with 131I-6β-iodomethyl-nor-cholesterol. Radiology. 1978; 128:157-61.
37. McCullough EC, Payne JT. Patient dosage in computed tomography. Radiology. 1978; 129:457-63.

SPECIAL ARTICLE

ARROGANCE*

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IN this George W. Gay Lecture, specifically designated as "upon medical ethics," I shall focus on three issues. The first, an example of intergroup tensions, deals with the common accusation that bioscientists are arrogant, i.e., that they are presumptuous and overweening in their attitudes, decisions, and goals; that they exhibit, in the fashionable noun of the day, hubris. I shall argue that the bioscientist may be arrogant, but no more so than any other group and perhaps just a little bit less so.

The second issue bears on the personal encounter between physician and patient: Is it marked by authoritarianism, paternalism, and domination? My answer is not only "yes" but also that a certain measure of these characteristics is essential to good medical care. In fact, if you agree that the physician's primary function is to make the patient feel better, a certain amount of authoritarianism, paternalism, and domination are the essence of the physician's effectiveness.

Thirdly, I shall maintain that many physicians are indeed arrogant in their behavior toward patients, but in a way that is not even specifically identified by any of the dictionary definitions of the word "arrogance."

Although no learned vocation is exempt from the accusation, the professional group most often belabored for arrogance is that which uses advanced and complex technology in its thinking and doing. It is the scientist, whether in physics or in molecular biology, or even the parascientist in medicine, who is seen as making policy decisions motivated by self-interest and acting with a total disregard for broad human needs. Almost reflexly the hoary Clemenceauism is trotted out that war must be not left to the generals. Because of this societal apprehension, decision-making bodies are being created with the express purpose of limiting the influence of specifically those scientists who possess expertise relevant to the questions that must be answered. Physicians are well acquainted with the provisions of Public Law 93-641, enacted in 1974, which establishes a network of health-systems agencies. The majority of members appointed to bodies responsible for planning and implementing this system, such as area governing boards and sub-area councils, must consist of so-called consumers rather than providers of health care. The same principle is being applied to even more momentous issues, such as whether arbitrary limits should be placed on mankind's search for knowledge. Thus, many maintain that the current frenetic argument about further research in recombi-

*Based on the George W. Gay Lecture, delivered by Dr. Ingelfinger at Harvard Medical School on May 5, 1977, shortly before he retired as Editor of the *Journal*. Dr. Ingelfinger died on March 26, 1980, leaving his lecture notes still only partially edited. He evidently could not persuade himself that his lecture deserved publication and had allowed the unfinished manuscript to languish in his files until his death. However, a recent rereading convinced us that this was vintage Ingelfinger and therefore eminently worth presenting to our readers. With the permission of his family, we present an abridged and slightly edited version of Dr. Ingelfinger's remarks.

The Editors