Letters to the Editor should be typed double-spaced (including references) with conventional margins. The overall length is limited to five manuscript pages, including not more than one figure or one table.

Professional Clinical Chemists

To the Editor:

Dr. Sobel's Letter (1) caught my attention for a number of reasons, among them the fact that his professional life started at about the time that my biological life did. While I wouldn't presume to answer his closing question as to whether a clinical chemist is a "hospital-associated person" or an "industrial person," this is a pertinent question that does need to be expanded upon and answered.

As one who has practiced clinical chemistry at some stage of my career in almost every setting—academic hospitals, community hospitals, government laboratories, and industry—I would like to respond with one perspective to keep this valuable discussion alive, and to make some suggestions about how we might proceed to actually get answers and make a difference.

Research, teaching, and service were at one time all centered in academic hospital laboratories. The evolving circumstances and technology have resulted in a diffusion of these functions. Although hospital laboratories are a focal point for the provision of service, service is also provided from independent laboratories and even, despite the fear invoked by CLIA 88, from near-patient laboratories within hospitals, in clinics, and in physicians' offices. Support of these sites may require the input of hospital-based clinical chemists, but may also require the services of clinical chemists on staff in those laboratories and (or) as consultants. They all certainly require the services of clinical chemists in industry who research, design, build, and support the equipment and methods that are used.

To define the profession, one must clearly be inclusive of locations beyond the hospital. A profession is defined by the body of knowledge and expertise that is mastered, not by the place where it is applied. Is a physician any less a physician for practicing outside the hospital or private practice setting (even to the point of serving as a "health correspondent" to a TV network)? The National Committee for Clinical Laboratory Standards (NCCLS) has recognized the need for balancing the different perspectives in clinical laboratories, and has structured itself to ensure input from academia, government, and industry in its consensus process.

We need to move beyond defining the field by using the word "or." Rather than asking whether a clinical chemist performs in a hospital laboratory or elsewhere, we must recognize that there is a partnership between clinical chemists in the hospital and elsewhere. By all of our efforts and through the concern of all of us, the benefits of clinical chemistry are brought to health care. There is a symbiotic relationship between the practitioners of clinical chemistry wherever they are and a need to develop the practice in each of those settings.

As the technical development aspect of the hospital clinical chemist's job diminishes, other opportunities to apply our scientific and clinical expertise in that setting must be found. Clinical interpretation of laboratory results is one area of greater involvement for clinical chemists, although in that arena we will have to look for a complementary niche with pathologists, medical technologists, and others (2).

Getting more involved in management decision making for the laboratory is another potential growth area. Decisions will be made that affect laboratory purchases, staffing, income, and profitability. Who is better prepared to understand the implications of these decisions on the quality of laboratory performance and patient care than a clinical chemist who has acquired the requisite management skills?

So as not to be consigned to an uncertain future in a role that will be defined by others, we need to assume an active posture and finally come to grips with the questions that we have flirted with for so long: What in the way of training, experience, and expertise qualifies one for the title "clinical chemist"? What functions do clinical chemists perform? What are acceptable standards of practice for clinical chemists, and how will the public be assured of that level of performance?

Answers to these questions will come from some hard professional soul-searching and an active dialogue such as is being conducted in this space, culminating in some focused effort by a small group to draft a definition of and standards of practice for the profession. Let the discussion continue around these documents until working consensus can be obtained. Then let us not fail to communicate this message, so that all people will know and understand what clinical chemists are and what they do. Defining multiple roles for clinical chemists need be no more confusing than doing the same for physicians. It is not necessary that any one clinical chemist fulfill all of the roles.

Undertaking this task is entirely consistent with the AACC's thrust of recent years toward certification for clinical chemists. The Association's Long Range Plan should also reflect and be consistent with these findings.

I would comment to Dr. Sobel that perhaps he did not leave the field of clinical chemistry when he moved into full-time research. Perhaps what he did by moving into a setting where he could feel valued and respected for his contribution was help to expand the boundaries that define "active participation." In so doing, he has added to the list of settings where clinical chemistry can be actively practiced and broadened the opportunities for those of us who are following him.

References

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Amplification of the Mas Oncogene by Polymerase Chain Reaction

To the Editor:

In an attempt to relate the mas oncogene to the angiotensin II (AII) receptor, we selected two sets of primers from