might also be concerned about the possible creation of aerosols by the evaporating liquid nitrogen. We are unaware of the stability of other infectious agents in liquid nitrogen, but appropriate safety precautions appear to be indicated if glass vials are used for their storage. Possibly, plastic vials (which are commercially available) could be investigated as an alternative storage container.

In the past 75 years, some 3500 cases of laboratory-acquired infections have resulted in more than 150 deaths (*2*). The sources of such infections were frequently difficult, if not impossible, to trace. These statistics, and the recent discussions of laboratory biohazards and potential biohazards (*2, 3*) underscore the need for constant vigilance in the microbiology laboratory.

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"Affinity" Chromatography

The terms "affinity chromatography column" and "affinity purification" are used inaccurately and often indiscriminately in many publications (*1*). For the last two decades it has generally been believed that the attachment of an appropriate substrate or inhibitor to a support matrix can produce a highly specific chromatographic column which can be designed to isolate a particular protein or enzyme. Recently, however, it has become evident that in many cases the column specificity is less than adequate. There are three major causes which may interfere with the specificity.

1) The matrix offered by the major commercial manufacturers of the activated gel used for the attachment of the ligand is Sepharose 4B, and this matrix retains its molecular sieving properties and will selectively retard proteins of low molecular weight.

2) In cases where the manufacturer offers a spacer attached to the matrix, the spacer contains a charged moiety to which the ligand is to be bound, and this can act as an ion exchanger if not properly blocked. Ion exchanging properties can also result from charged groups on the ligand itself.

3) In many instances, the strong adsorption of an enzyme on an affinity column has been shown to be a result of hydrophobic interactions between the spacer attached to the matrix, or the matrix itself, and certain regions of the enzyme.

Although a good resolution of proteins is obtained by "affinity" chromatography, ascribing the results to a real affinity binding process is often more speculative than proven, and the actual cause of the resolution is disregarded. We suggest that, unless affinity binding is specifically demonstrated, terminology such as "activated gel column" or "modified gel column" is preferable.

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Notes

1. See, for example, P. O'Carra, *Methods Enzymol.* **34**, 108 (1974).

Cross-Cultural Health Assessment

It may interest those who read Horatio Fabrega's article "The need for an ethnomedical science" (19 Sept., p. 969) to know that an interdisciplinary group at the University of Washington is developing the Sickness Impact Profile (SIP), by which self-perceived changes in usual daily activities related to health can be measured (*1*). The rationale for developing the SIP closely parallels Faberga's concern: the need for a culture-free measure that would permit evaluation of treatment and assessment of need both within and across sociocultural groups. The developmental study design includes examination of the relationship between the SIP and clinician measures of disease and dysfunction, between the SIP and a subject's self-assessment of sickness and dysfunction, and between the SIP and diagnostic measures (*2*).

The SIP is being used in England and in Alabama, and a translation into a Chicano dialect of Spanish has just been completed. Such efforts should permit study of the cross-cultural issues Fabrega mentions.

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References and Notes

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