national centrifuge cup 353A), covered with aluminium foil and autoclaved. In practice, however, contamination has never been a problem, and it has been found practicable to remove the used capillary tubes after one run and replace these carefully with fresh sterile ones. If the capillary tubes had been charged with pathogenic microorganisms, this handling procedure might constitute a hazard to the operator. In that event, the lower ends of the used capillary tubes should be immersed in an appropriate disinfectant contained in a suitable vessel such as a 600 ml beaker. The height of the vessel would be adjusted with the laboratory jack so that the capillary tubes are introduced below the surface of the disinfectant before their removal. Each tube would be individually removed by applying forceps below the lower polypropylene sheet of the capillary holder and carefully pulling downwards until the tube is freed from the teflon collar and slides into the disinfectant. This method effectively safeguards against splashing. If the number of cell suspensions

to be tested is large, the apparatus could be readily modified by preparing larger rectangular capillary holders and patterns as recommended by Hartman and Pattee (1968) and using appropriately sized plates.

Using the apparatus as described, it was found possible to inoculate the surface of 190 plates with 12 inocula on each plate in less than two hours.

The main advantages of this apparatus are its relatively low cost, its simplicity of operation, and its reproducibility of performance.

This work was undertaken during tenure of grant A1 05518 from the US Department of Health, Education and Welfare Public Health Service.

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Letters to the Editor

Immunofluorescent Techniques for the Diagnosis of Respiratory Syncytial Virus

Professors Court and Gardner in their recent letter (*J. clin. Path.*, 1973, 26, 312) find the immunofluorescent examination of nasopharyngeal secretions for combined detection and identification of respiratory syncytial (RS) virus 97% efficient whereas we have diagnostic results in only 45% (Urquhart and Walker, 1972). Differences in technique and reagents to explain these results are not apparent from published reports (Gardner and McQuillan, 1968; McQuillan and Gardner, 1968) although we note that others using this technique (Hers, 1963) experienced variable results with positive diagnoses in 38% to 82%. However, we agree that immunofluorescence is specific.

Conversely in applying immunofluorescence for combined detection and identification of RS virus in tissue cultures we find 95% overall agreement with standard tests (Urquhart and Martin, 1970) whereas they find only 87% comparative efficiency (Gardner and McQuillan, 1968; McQuillan and Gardner, 1968). Again details of technique and the time at which tests are applied are important and could account for these differences. An analysis of variables in this method of

application shows a major problem to be small numbers of infective virus particles in inocula (Urquhart and Martin, 1970).

While further evaluation of both of these applications proceeds in individual laboratories we may say that for identification of tissue culture isolates showing cytopathic effect, the immunofluorescent test is 100% efficient (Urquhart and Martin, 1970).

This alone represents significant improvement in laboratory efficiency and ensures continuation of immunofluorescence as an essential laboratory procedure in the diagnosis of RS virus infection.

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Trypsin-treated Human Erythrocytes for Rubella Haemagglutination Inhibition Tests

The haemagglutination inhibition (HI) test is the most sensitive and practical test for the detection of rubella antibodies and is now in general use in virological laboratories. The cells most often employed in the test are 1-day-old chick erythrocytes since they have a high sensitivity to specific agglutination.

We wish to draw the attention of laboratory workers to the report by Quirin (1972) of the usefulness of trypsin-treated human O erythrocytes instead of chick cells for the rubella HI test. He compared rubella HI antibody titres obtained by trypsin-treated human ery-