marcescens) did contain thioUMP, and their ribosomes were sensitive to the thiol reagent; whereas the rRNA of two (*Pseudomonas aeruginosa* and *Bacillus subtilis*) contained no detectable amounts of thioUMP, nor were the ribosomes of these two organisms sensitive to the thiol reagent.

We therefore conclude that in those bacteria whose rRNA contains thioUMP, the thionucleotide contributes to the stability of the 70S ribosomes.

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The Histones of Some Human Tissues

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Considerable attention has been given recently to the role of the histones, the basic proteins of the nucleoprotein complex. Despite suggestions that these proteins might control gene expression (De Reuck & Knight, 1966), the histones of many tissues appear remarkably similar (Hnilica, 1967). Since little information is available concerning the histones of human tissues, the present report describes the isolation and partial characterization of histones from human thymus, liver, placenta, bronchial tumour and leucocytes.

Preliminary experiments showed that extracts of whole histones from such tissues contained electrophoretic components similar to those of calf thymus whole histone. Histone fractions were then prepared by the methods of Johns (1964). In general, method 1 was used with nucleoprotein obtained from nuclei prepared by conventional sucrose methods. With leucocytes, method 2 was used with nuclei prepared by lysis with acetic acid (MacGillivray & Monjardino, 1968) and treated with acidic ethanol (Pogo, Allfrey & Mirsky, 1966). Total and N-terminal amino acid analysis together with electrophoretic evidence showed that each of the human tissues studied contained the same four main histone components and that these were similar to the histone fractions of calf thymus. The yields of fractions F1 and F2(b) were found to be high in human thymus, in tumour and in some preparations of leucocytes.

These results suggest that the general pattern of histones seen in lower animals is conserved during the evolutionary process that led to man. Similar types of histones have also been described in trout (Palau & Butler, 1966) and in molluscs (Cozcolluela & Subirana, 1968). Peptide analysis

(Hnilica, 1966; Laurence, Phillips & Butler, 1966) and partial sequences (Smith, 1968) of some histones have shown the similarity of the primary structure of these proteins in different species. In addition, histones appear to be poor antigens (Hnilica, 1966; MacGillivray & Monjardino, 1968). These observations indicate that the genes coding for histones may be of primitive origin.

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Protein Components of Fowl-Plague Virus

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Fowl-plague virus is an influenza A virus, consisting of a helical nucleoprotein core surrounded by a lipoprotein envelope. Apart from the type-specific complement-fixing antigen of the nucleoprotein, the virus envelope contains two subtype viral antigens, neuraminidase and haemagglutinin.

The virus was purified by adsorption-elution from chick erythrocytes, centrifugation to a sucrose-D₂O interface and successive centrifugation on gradients of sucrose and potassium tartrate. The virus was free of obvious contamination, as judged by the electron microscope, and when [³H]valine-labelled virus was centrifuged in a caesium chloride density gradient, all the radioactivity was associated with virus haemagglutinin at a density of 1.250g./ml. Extraction of the proteins from the purified virus (both Dutch and Rostock strains) by the method of Summers, Maizel and Darnell (1967), followed by polyacrylamide-gel electrophoresis showed that the virus contained at least four major components and probably two minor components, as judged by staining with Amido Black or by counting of [³H]valine-labelled virus. The slowest of the major components was rather diffuse. No difference was

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