procedure. The contaminating RNA was removed from DNA by alkali treatment. The DNA was degraded by the formic acid-diphenylamine method. The resulting purine bases and the pyrimidine mono-, oligo- and poly-nucleotides were fractionated on a Sephadex G-25 column. It was found that 4.5% of the total pyrimidine nucleotides of *A. vinelandii* DNA exist as large pyrimidine clusters.

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Ribonucleoprotein Nature of an Organ-Specific Protein from Monkey and Goat Brain

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An organ-specific protein isolated from goat brain by preparative electrophoresis on polyacrylamide-gel columns of the fraction left unprecipitated by 75% saturation with ammonium sulphate at pH 7.4 has been found to be a ribonucleoprotein. That this protein is a ribonucleoprotein is demonstrated by (a) the absorption spectrum, (b) shifts in the absorption characteristics of ribonuclease-treated preparation, (c) chemical tests showing the presence of ribose, purines and pyrimidines and absence of deoxyribose, sialic acid and lipids, and (d) changes in the elution characteristics on Sephadex columns of native protein after ribonuclease treatment.

Radioactive uridine and lysine given intracisternally to monkeys are incorporated in the band analogous in its properties and immunological reaction to this protein in the goat brain. The protein is rich in acidic amino acids and deficient in aromatic amino acids. The native protein from goat brain has a molecular weight of 25120, and the ribonuclease-treated residual moiety has a molecular weight of 19060 as determined by a gel-permeation procedure.

Antiserum against this protein raised in rabbits gives immunological cross-reaction with preparations from the brains of many species and also with the protein secreted by human astrocytomas in culture. On the other hand no reaction was observed with similar preparations from liver, lung, kidney, spleen,

heart and blood. Native and ribonuclease-treated preparations gave identical precipitin lines, suggesting that the antigenic determinants were present primarily on the protein moiety.

Metabolism of Myelin Lipids in the Developing Brain

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Immediately before the onset of myelination, sterol and phospholipid cholesteryl esters are synthesized at a maximum rate, and sterol precursors appear transiently in the developing brain. The first formed myelin lamellae seem to be loosely wound about the axon and to have a lipid composition close to that of brain cytomembranes, being richer in phospholipid than cholesterol. Later, as compact myelin accumulates, the membrane acquires the characteristic lipid and protein composition of adult myelin. Thus cerebroside and basic protein are found in mature but not in 'early' myelin. It is possible to isolate a myelin-like fraction from developing brain (Agrawal *et al.*, 1970) that is postulated to be glial plasma membrane. Although previously it was considered that myelin is metabolically stable (Davison, 1970), recent evidence suggests that cholesterol molecules within the sheath may exchange with those of Schwann or oligodendroglial cells (Hedley-Whyte *et al.*, 1969; Banik & Davison, 1970; Spohn & Davison, 1971).

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