

# ADVANCE ABSTRACTS

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**ADVANCE ABSTRACTS  
OF LECTURES  
AND SHORT PAPERS**

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## EFFECT OF ADRENOCORTICOTROPIN OR ADENOSIN-3',5'-MONOPHOSPHATE ON IN VITRO ADRENAL PROTEIN SYNTHESIS

*Peter C. Scriba*

II. Medizinische Klinik der Universität München (Dir. Prof. Dr. Dr. G. Bodechtel)

Enhancement of in vitro amino acid incorporation into adrenal protein has been shown both in a cell free system after in vivo treatment of rats with ACTH (*Farese, R. V., and Reddy, W. J., Endocrinology 73, [1963] 294*) and by in vitro addition of ACTH to quartered adrenals (*Bransome, E. D., Jr. and Reddy, W. J., Arch. Biochem. Biophys. 101, [1963] 21*). For amino acid incorporation in a cell free adrenal system a non-dialysable factor of the 105 000 x g supernatant was shown to be rate-limiting and to be increased in activity or amount following in vivo ACTH-treatment. Evidence suggested that this factor was transfer enzyme (*Scriba, P. C., and Reddy, W. J., Endocrinology, April 1965*), whereas no stimulatory effect of any cytoplasmic ribonucleic acid could be demonstrated. ACTH or adenosin-3',5'-monophosphate stimulate in vitro adrenal corticoid production (*Koritz, S. B., Biochem. Biophys. Acta 60, [1962] 179*). Experiments on the in vitro effect of cyclic adenosin-3',5'-monophosphate on adrenal protein synthesis are to be reported.