

## REVIEW OF AUDIOVISUAL MATERIAL

The following audiovisual units were reviewed by Drs. Phyllis Bogner, Joseph Hoffman and Stanley Schultz. Each unit is rated from 1 to 10 in two categories: content and production; ten indicates a rating of excellent. The descriptive paragraph for each unit is supplied by the producer.

Title: **Biological Potentials**

Name: Iazaro J. Mandei

Media: Videocassette. Color.

Runtime: 34:11 minutes

Description: This videotape introduces the concept of electrical potentials in biological systems, discusses their importance and describes their origin in basic terms with ample examples and the use of animation. The videotape starts from basic principles of diffusion and permeability of ions across artificial membranes and applies these principles to the understanding of biological potentials, both passive and active. Topics covered are: Fick's law, generation of liquid-junction potentials, Nernst equation, introduction to resting and action potentials in nerve, and active transport of sodium in the frog skin.

Rating: Content - 7; production quality - 7.

Recommended: Medical, dental, veterinary, graduate, advanced undergraduate, nursing and allied health students.

Useful as: Primary educational instrument and enrichment material.

Available from: AV/MD, 850 Third Avenue, New York, NY 10022

Title: **Intestinal Transport Potentials**

Name: D.O.X. W. Powell

Media: Videocassette. Color.

Runtime: 22:04

Description: The purpose of this videotape is to demonstrate the electrical potential difference across the mammalian small intestine, to clarify its origin and to demonstrate how it is altered by agents which either stimulate or inhibit sodium transport. Basically, this is a laboratory demonstration which is combined with animated sequences to clarify how sodium transport is perturbed by these various agents. It is hoped that the combination of animated sequences and an actual laboratory demonstration will bring reality to conceptual knowledge and will demonstrate how modern physiological techniques uncover the mechanism of the action of various phenomena. Topics covered are: the significance and origin of the transport potential in the mammalian GI tract, the difference between active and passive transport, and a description of how several agents alter the transport potential of the intestinal epithelium and why.

Rating: Content - 7; production quality - 8.

Recommended: Medical, dental, veterinary, graduate, advanced undergraduate, nursing and allied health students.

Useful as: Primary educational instrument and enrichment material.

Available from: AV/MD, 850 Third Avenue, New York, NY 10022