MUSEUM OF PHARMACOLOGY

PROMINENT INVESTIGATORS IN THE FIELD OF QUANTITATIVE CELLULAR PHARMACOLOGY: DRUG - RECEPTOR INTERACTION THEORIES
DISCOVERERS OF SIGNAL TRANSDUCTION IN THE NERVOUS SYSTEM
A.CARLSSON
P.GREENGARD
E.R.KANDEL
DISCOVERERS OF THE BIOLOGIC ROLE OF NITRIC OXIDE IN CARDIOVASCULAR SYS
R.F.FURCHGOTT
L.J.IGNARRO
F.MURA
KATZ AND THE NEUROTRANSMITTER ACETYLCHOLINE
B.KATZ
1911 - 2003
AXELROD AND THE NEUROTRANSMITTER NORADRENALINE
J.AXELROD
1912 - 2004

EXTRACELLULAR
PASSIVE DIFFUSION OF WATER-SOLUBLE DRUGS THROUGH AQUEOUS CHANNELS
PASSIVE DIFFUSION OF LIPID-SOLUBLE DRUGS VIA HYDROPHOBIC BONDING WITH MEMBRANE LIPIDS
ACTIVE TRANSPORT AND FACILITATED DIFFUSION VIA MEMBRANE CARRIER MOLECULES
INTRACELLULAR
Pathways of drug permeation across cell membranes. Aqueous channels occur between lipids and in the interstices of proteins.
DRUG DOSAGE
Absorption
BIOTRANSFORMATION
BINDING TO SERUM PROTEINS
FREE DRUG CONCENTRATION IN EXTRACELLULAR WATER
METABOLITES
BILIARY EXCRETION
BINDING AND STORAGE IN TISSUES
RENAL EXCRETION
DRUG CONCENTRATION AT SITE OF ACTION
RECEPTOR OCCUPANCY
INTENSITY OF PHARMACOLOGIC EFFECT
Pathways of drug disposition.
PLASMA
The main routes of drug administration and elimination.
Phase 1
Phase 2
Sequence and biologic effects of phase 1 and phase 2 drug biotransformation reactions.

Morphology of Viruses
Morphology of Fungi
Parasitic Cysts & Ova in Stool
Ascaris lumbricoides
The Hookworms

Entamoeba histolytica