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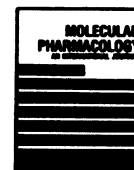


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DRUG METABOLISM AND DISPOSITION

The Biological Fate of Chemicals

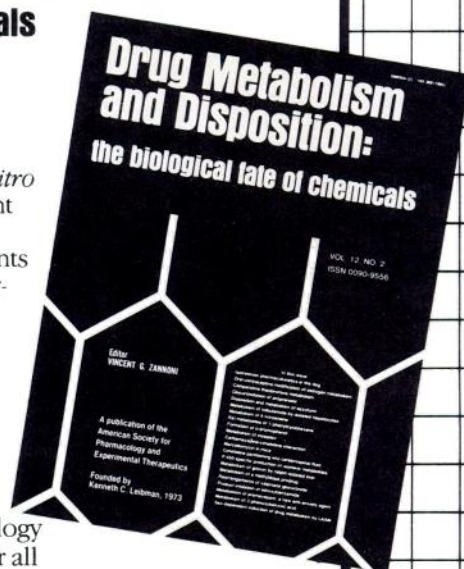
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- pharmacodynamics
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Suitable papers are those that describe applications of the methods of biochemistry, biophysics, genetics, and molecular biology to problems in pharmacology or toxicology. Also suitable are reports of fundamental investigations which, although not concerned directly with drugs, nevertheless provide an immediate basis for further study of the molecular mechanism of drug action. Observations of phenomena that shed no light upon underlying molecular interactions are not appropriate for publication. Comparative studies, such as those involving drug-receptor or drug-enzyme interactions that already have been well characterized in other types of cells or tissues, also are inappropriate for publication unless they contribute significant new insight into mechanisms.

Specific areas of interest include: stereochemical, electronic, and other parameters of drug architecture; conformational analysis of receptors and their function; drug-enzyme and other interactions between drugs and macromolecules; drug effects upon gene replication and transcription and on protein synthesis; mechanism of action of antibiotics and other growth-inhibitory drugs; induction by drugs of changes in macromolecular structure or allosteric transitions; drug-induced alterations in metabolic pathways; effects of hormones and other drugs on cellular regulatory mechanisms; chemical mutagenesis, carcinogenesis, and teratogenesis; pharmacogenetics, idiosyncrasies, and drug allergies; selective toxicity in a single organism or in different species; drug actions on properties and functions of membranes; mechanisms of drug metabolism; distribution and transport of drug molecules between biological compartments.

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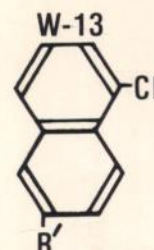
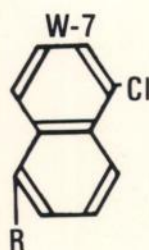
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W-5, W-7, W-12, W-13

For studies of Physiological Functions
of Calmodulin at Cellular Level.



$R = \text{SO}_2\text{NH}(\text{CH}_2)_6\text{NH}_2 \cdot \text{HCl}$

$R' = \text{SO}_2\text{NH}(\text{CH}_2)_4\text{NH}_2 \cdot \text{HCl}$

Affinity of calmodulin antagonists for calmodulin

	$\text{IC}_{50} (\mu\text{M})^*$			
	W-7	W-5	W-13	W-12
Inhibition of phosphodiesterase activation	28	240	68	260
Inhibition of myosin light chain kinase	51	230	58	300
Displacement of ^3H W-7 from calmodulin	31	210	55	280

*) IC_{50} is defined as the concentration of drug required to displace
50% of the labeled W-7 from calmodulin or to produce 50%
inhibition of each enzyme activity.

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