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Molecular Pharmacology will publish the results of investigations that contribute significant new information on drug action or selective toxicity at the molecular level. The term "drug" is defined broadly to include chemicals that selectively modify biological function.

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: identification and characterization of receptors for hormones, growth factors, neurotransmitters, toxins, and other drugs; analysis of receptor response pathways; drug effects on metabolic pathways, biosynthesis and degradation of macromolecules, and cellular regulatory mechanisms; analysis of drug-receptor and drug-enzyme interactions; effects of drugs on structure and properties of macromolecules and membranes; relationships between drug structure and activity; molecular mechanisms of drug metabolism; distribution and transport between biological compartments; molecular mechanisms of chemical mutagenesis, carcinogenesis, and teratogenesis; and molecular mechanisms of selective toxicity, drug allergy, and pharmacogenetics.

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