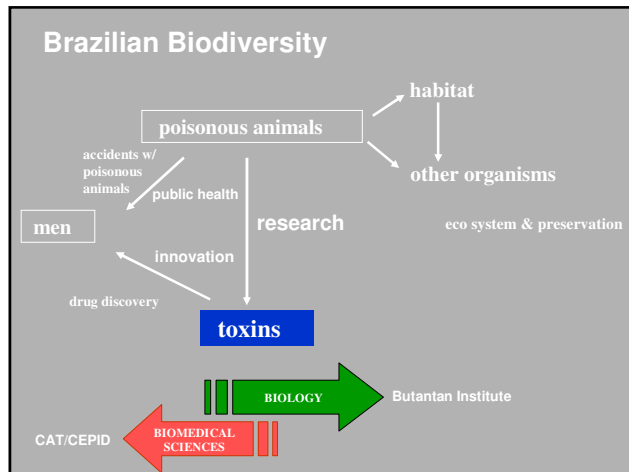


CAT CEPID
Dosis facit venenum

INOVAÇÃO FARMACÊUTICA NO BRASIL: REALIDADE OU FICÇÃO?

ANTONIO CARLOS MARTINS DE CAMARGO
 (Médico, Professor Titular de Farmacologia, USP)
 Centro de Toxinologia Aplicada – CAT-CEPID/FAPESP

Instituto Butantan
www.butantan.gov.br/cat



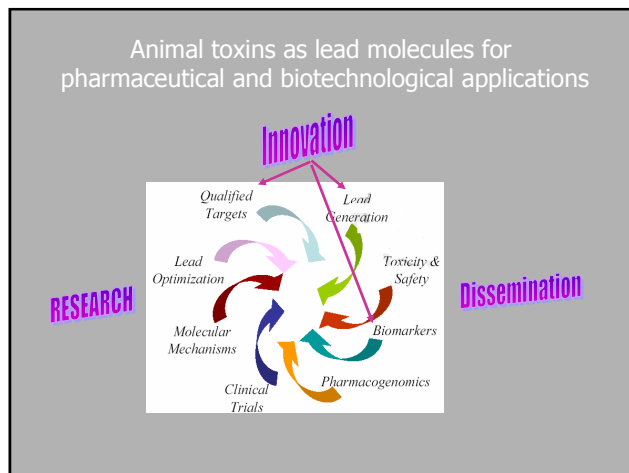
Center for Applied Toxinology CAT/CEPID

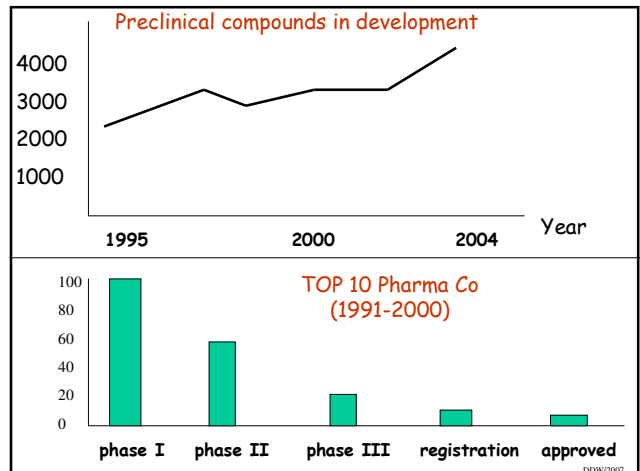
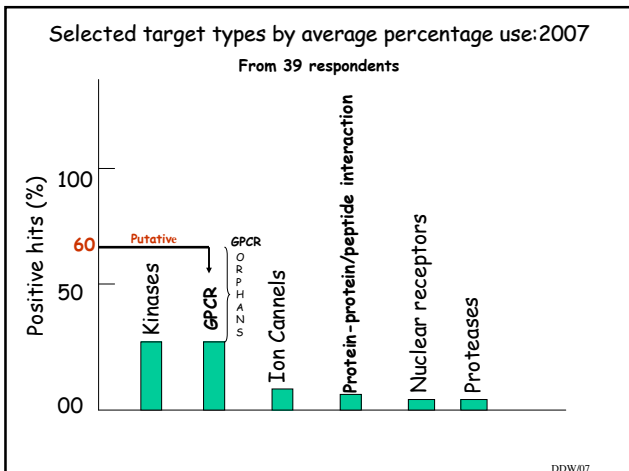
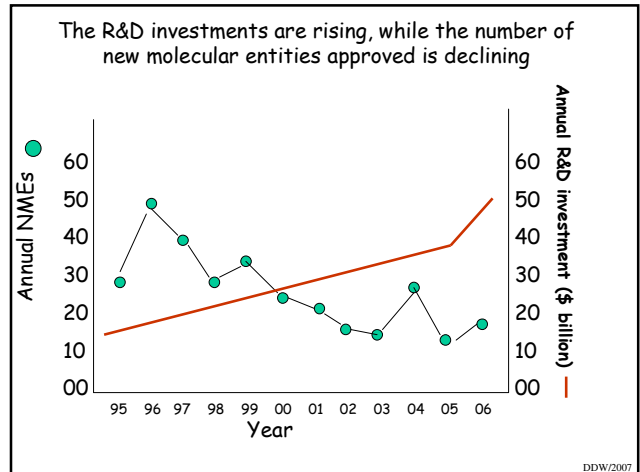
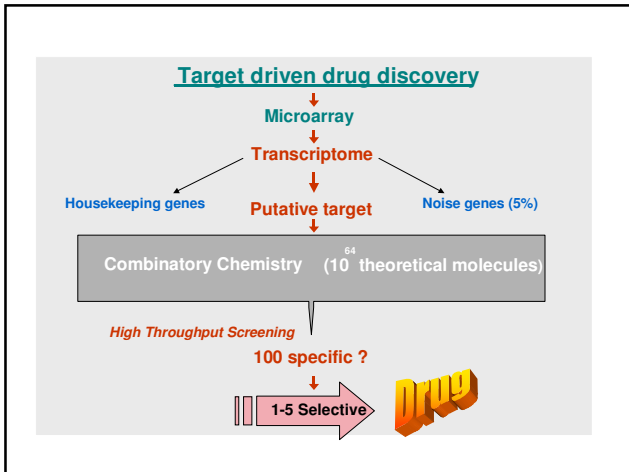
Butantan Institute + State Universities

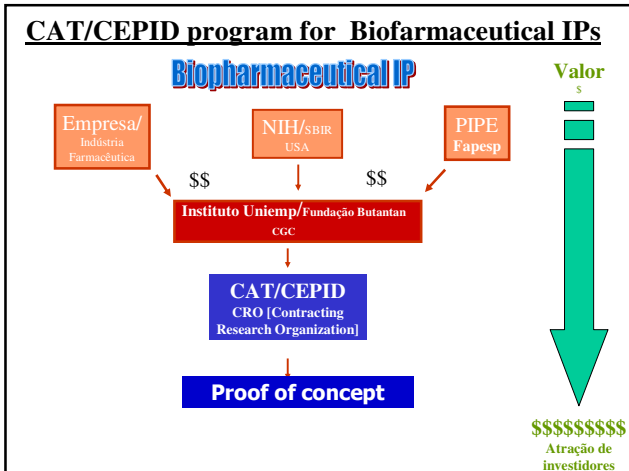
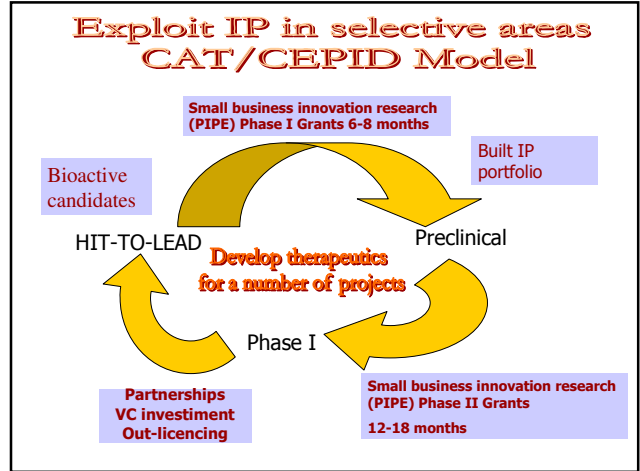
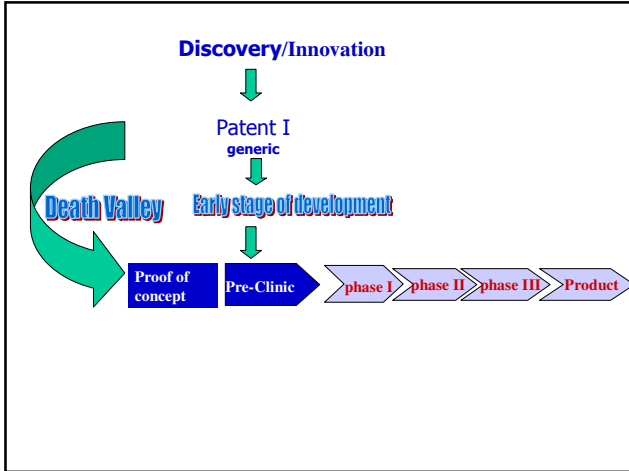
75 researchers, pos-doctors, students,
 technicians, administrative personnel

MAIN FINANCIAL SUPPORT

Fapesp (1 million dollars/year) Brazilian Pharmaceutical Industries (0.1 million dollars/year)

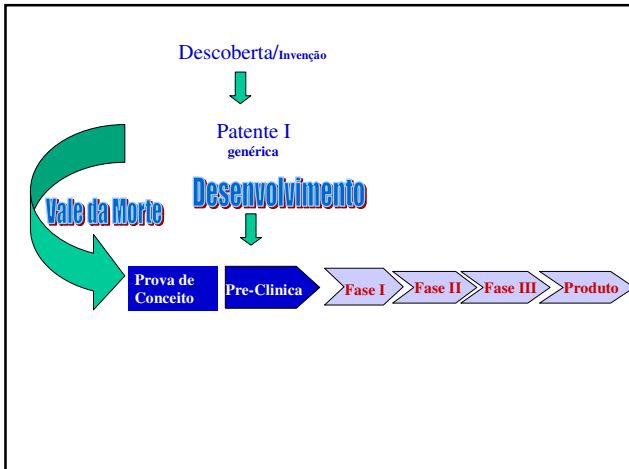
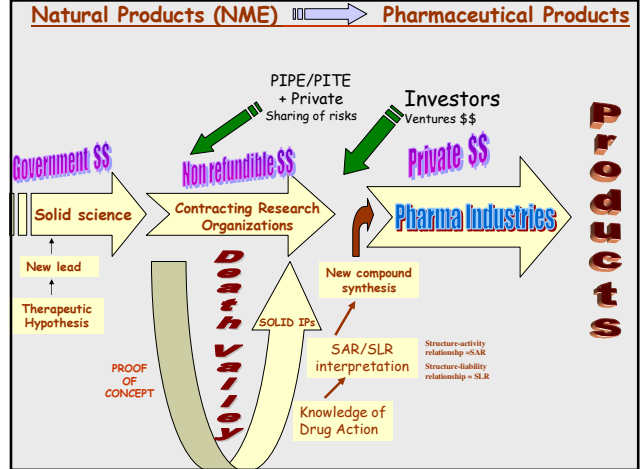






Patents filed by CAT/CEPID (2001-2006)

Main therapeutic application	Patent No	Animal	Date	Licensed to
Cardiovascular	PI 01/01088-3	<i>B. jararaca</i>	2001	Consortium of Brazilian Pharma Industries
	PI 02/03449-3	" "	2002	
	PI 04/00192-3	" "	2004	
	PI 06/00331-1	" "	2006	-----
Analgesia	PI 04/04489	<i>C. durissimus</i>	2004	-----
Antitumoral	PI 04/009381	<i>A. cajennense</i>	2004	Consortium of Brazilian Pharma Industries
Coagulopathies	PI 02/00269	<i>L. obliqua</i>	2002	
	PI 04/08574	" "	2004	
	PI 05/04199-6	" "	2005	
Vaccine Adjuvant	PI 05/03817-0		2006	Cristalia Laboratory
Cell Penetrating Peptide	PCT 06/000052	<i>C. durissimus</i>	2006	-----
Anti-nociceptive	PI 06/02853	<i>T. natteeri</i>	2006	Cristalia Laboratory
SNC disorders	PCT 03/00189	mammalian brain	2003	Chemicon/Millipore



Science Driven Drug Discovery: an alternative for a developing country

The diagram shows a circular flow of interconnected components in drug discovery:

- Qualified Targets** and **Lead Generation**
- Lead Optimization** and **Toxicity & Safety**
- Molecular Mechanisms** and **Biomarkers**
- Clinical Trials** and **Pharmacogenomics**

CENTER FOR APPLIED TOXINOLOGY (CAT) /CEPID-Fapesp
 São Paulo - Brasil
 Antonio C.M. Camargo- Director

EXPOFAR/2007

Center for Applied Toxinology
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