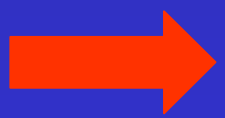
# What is ISAP ?


- **I** nternational
- **S** ociety for
- **A** ntiinfective
- **P** harmacology

# Why did ISAP started ?

**Our thinking in the late 80's:**

- **anti-infective drug usage has long been irrational or not scientifically based on a pharmacodynamic point of view**
  - **search for low doses for fear of toxicity**
  - **"errors" in drug dosages at registration**
  - **misunderstanding of "optimal schedules"**
- **pharmacokinetics was mostly used to establish "drug presence" rather than to make correlation with efficacy**



**pharmacodynamics of antiinfective drugs was largely "terra ingognita"**

# How did it start ?

population pharmacokinetics

tissue concentrations

efficacy/toxicity ratios

AUIC and fluoroquinolones

postantibiotic effect en β-lactam infusion

once-daily dosing of aminoglycosides

**Stockholm, 1989 ...**

# The story of ISAP…

- **thought about in 1989 in Stockholm, Sweden**
- **various names suggested (AIDA, OTELLO, …) but eventually ISAP choosen in Atlanta, GA, in 1990**
- **officially founded in 1991 in Berlin, Germany**
- **incorporated in 1993 (in South Wales, Australia; now in CA, USA)**
- **108 members wordwide (40% US, 40% Europe, 20% elsewhere)**
  - academy
  - industry

# ISAP scientific activities …

**Over the last 10 years, a series of key concepts have emerged from our discussions and work:**

- **dose-effect relationships are not the same for all anti-infectives**
  - **beta-lactams vs aminoglycosides, e.g.**
- **some anti-infectives are time-dependent, others not**
- **subinhibitory effects, post-antibiotic effects, cooperation with host defenses modulate the activity of antiinfective drugs**
- **integration of PK/PD allows to fairly predict success or failure, and even emergence of resistance**

# ISAP in action in science and clinics

**Some achievements:**

- **once-daily dosing of aminoglycosides registration or reregistration in several countries**
  - **amikacin, netilmicin (from bid to qd)**
  - **isepamicin (registered essentially for qd dosing)**
- **AUIC / MIC and Cmax / MIC ratios used as guides for phase II / III trials, for treatment optimization and for registration of fluoroquinolones**
  - **trovafloxacin**
  - **moxifloxacin**
- **beta-lactam continuous infusion brought to clinical trials**

# ISAP in action with the Regulatory

- FDA (CDER) workshop in 1999
- EMEA (CPMP) Discussion meeting in 1999

# ISAP in action for scientific meetings

- **8 independent symposia**
- **8 co-sponsored symposia (ICAAC, ECCMID, ICC, ASM General Meeting, …)**

# ISAP in action in education

- **4 educational workshops**
- **A WEB site with**
  - **annoucements**
  - **slides of main meetings and workshops**

**http://www.isap.org**

# Who is ISAP (in 2001) ?

- President: George L. Drusano (NY, 2000-2002)
- Président-elect: Johan W. Mouton (The Netherlands)
- Past-presidents:
  - W.A. Craig (WI; founding president (1991-1994)
  - O. Cars (Sweden; 1994-1996)
  - M.N. Duley (CA; 1996-1998)
  - P.M. Tulkens (Belgium; 1998-2000)
- Secretary: J. Mouton (The Netherlands)
- Treasurer: J. Scott (CA)

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