What is ISAP?

- International
- Society for
- Antiinfective
- Pharmacology
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
- postantibiotic effect
- en β-lactam infusion
- once-daily dosing of aminoglycosides

AUIC and fluoroquinolones

Stockholm, 1989 ...
The story of ISAP…

- thought about in 1989 in Stockholm, Sweden
- various names suggested (AIDA, OTELLO, ...) but eventually ISAP chosen 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 worldwide (40% US, 40% Europe, 20% elsewhere)
  - academy
  - industry
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
  - announcements
  - 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:
  - 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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