History

'pathogenesis' added in Sept 2000

'host' added July 2001

'host-pathogen interaction' added in Oct 2001

virus-specific terms added in Dec 2002

Problem I: intelligibility

Meaning of 'pathogenesis' unclear from name

- should only be used for pathogen annotations
- But, from AmiGO:
 - 5 human gene products
 - 5 mouse
 - 1 rat

Problem II: true path

Terms specific for viral proteins have incorrect ancestry

Violates true path, and creates odd GO slims

biological_process

☐ ① cellular process
☐ ① cellular physiological process
☐ ① cell growth and/or maintenance
☐ ① transport
☐ ① intracellular transport
☐ ① intracellular protein transport
☐ ① host cell protein transport
☐ ② protein transport
☐ ② protein transport
☐ ① intracellular protein transport
☐ ② protein transport
☐ ② intracellular protein transport
☐ ③ viral intracellular protein transport

Problem III: which organism?

'cytolysis'

- Can occur by multiple mechanisms e.g.
 - as a result of exposure to a exogenous toxin
 - by the immune system to destroy an infected cell
- Two completely different processes would be annotated to the same term
 - univocity terms should mean the same wherever they're used.
- Need to be able to distinguish mechanisms of interaction between organisms

Problem IV: symbiosis

Not all interactions between symbiont are host destructive to host (parasitism)

may also be mutualistic or commensalistic

No terms in GO to cover these processes

Biological processes to establish these states often conserved so common terms needed