IPAW’06 is a follow-up to workshops in Chicago in October 2002 (www-fp.mcs.anl.gov/~foster/provenance/) and in Edinburgh in December 2003 (www.nesc.ac.uk/esi/events/304/). It will further investigate the issues of data provenance, process documentation, data derivation, and data annotation.

In scientific, engineering and business workflows, typically data is repeatedly copied, corrected, and transformed as it passes through numerous databases or services. Understanding where data has come from and how it arrived in a database or filestore is of crucial importance to the trust a user will put in that data, yet this information is seldom captured properly.

The importance of provenance goes well beyond verification; it is closely related to archiving and annotation, also important in the context of scientific, engineering and business data. Moreover, it may be used in data discovery. Knowing the provenance of a data item may help a user to make connections with other useful data. Alternatively, a user may want to understand a derivation in order to repeat it with modified parameters, and being able to describe a derivation may help a user to discover whether a particular kind of analysis has already been performed.

Annotation is closely related to provenance. End users do more than produce and consume data: they comment on it and refer to it, and to the results of queries upon it. Annotation is therefore an important aspect of communication. One user may want to highlight a point in data space for another to investigate further. They may wish to annotate the result of a query such that similar queries show the annotation.

Topics of interest to IPAW’06 include but are not limited to:
- models of provenance and annotation
- authenticity metadata (assertions made by the data creator)
- integrity metadata (assertions managed by a preservation environment)
- annotations (assertions made by users)
- curation metadata
- applications requiring provenance, use cases, methodologies
- provenance systems, functionality, protocols, implementation
- relationship between provenance, annotation and metadata
- provenance-based reasoning and Semantic Web technologies
- relationship between workflows, processes and provenance
- security considerations for provenance
- scalability issues
- granularity of provenance
- (design) intent capturing through provenance
- legal issues relating to provenance
- provenance, business processes and compliance