

# Why don't we get any (self) respect?

## Panelists:

Frank Anger, National Science Foundation

Barry W. Boehm, University of Southern California

Volker Gruhn, University of Dortmund

Jeff Kramer, Imperial College

Edward F. Miller, Jr., Software Research, Inc.

Leon J. Osterweil, University of Massachusetts (Chair)

An ICSE 2000 Panel Session

6 June 2000

# Limerick 2000

To begin, let me be quite direct

Software folks ought to get more respect

We spur broad productivity gains

Get sneers and scorn for our pains

Is this what we ought to expect?

# Some Myths

- Software engineering research has had minimal impact on practice
- Software engineering research results have effected minimal increases in productivity
- Software engineering research has been a poor investment, giving little return
- Industry leads, research follows
  - (Industry cleans up; research sweeps up)

(Some myths are false, some are not)

# Some Consequences for Software Engineering Research

- Negative self-image
- Low academic status
- Apologetic Attitude
- Funding difficulties

Are these fair and warranted?

# Some Facts

(Some “facts” are false, some are not)

- Theory:
  - Software engineering research problems are hard, fundamental, and enduring
  - The research community has an increasingly strong grip on these problems
- Practice:
  - The software practice community has achieved orders of magnitude productivity increases
  - Research results have driven much of this

The basis for a sound and thriving discipline

# More “Facts”

- Negativity persists
- Negativity hurts
- We can be our own worst enemies
- We don't know what the truth really is
- We really need to find out.....

# Some recent history

- Basili Workshop and Report
  - September 1998
- Boehm Workshop
  - August 1999
- NSF Panel and Briefing
  - September 1999
- This Panel
- The Impact Project

# The Impact Project

- Provide scientific scholarly answers to:
  - What are the hard and fundamental problems?
  - What impact has research really had?
  - What future impacts should be expected?
  - What future directions will software research take?
- How?
  - Sigsoft project (international)
  - NSF/EU funding
- What forms?
  - Reports and summaries of different sizes
  - Panels, talks, briefings



# This Panel

- Some early views of the impact of software engineering research
- Four presentations relating practice to earlier research in four different areas
  - Barry Boehm: Metrics and measurement
  - Volker Gruhn: Process and workflow
  - Jeff Kramer: Specification and design
  - Edward F. Miller, Jr.: Testing and analysis
  - Other possible areas: Requirements, CM components, reuse
- The funding agency view
  - Frank Anger (and Mike Evangelist)