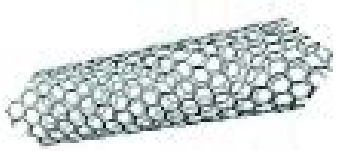
A Joint Workshop 2012



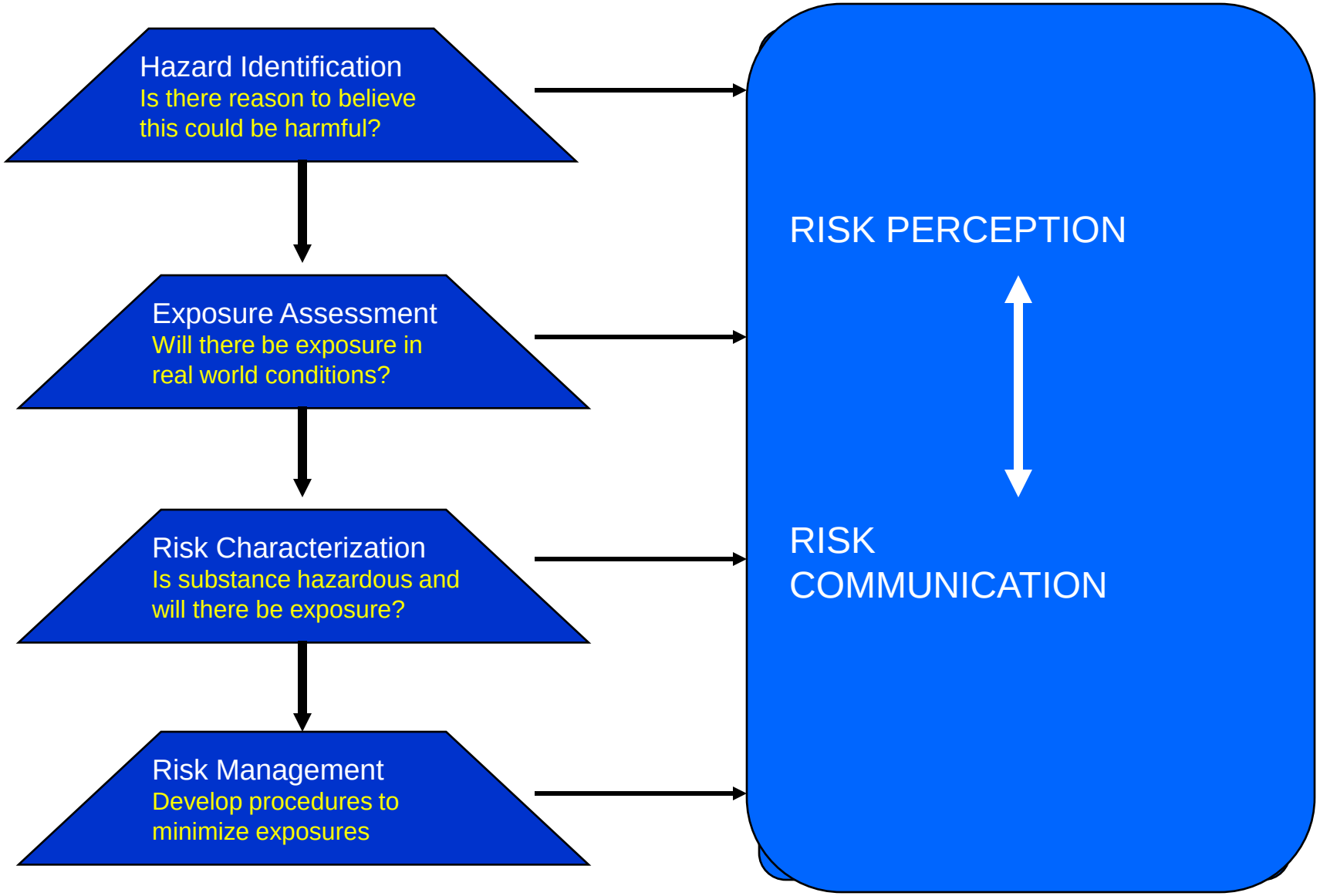
eu-us
bridging nanoEHS research efforts

25-26 OCTOBER 2012, HELSINKI, FINLAND

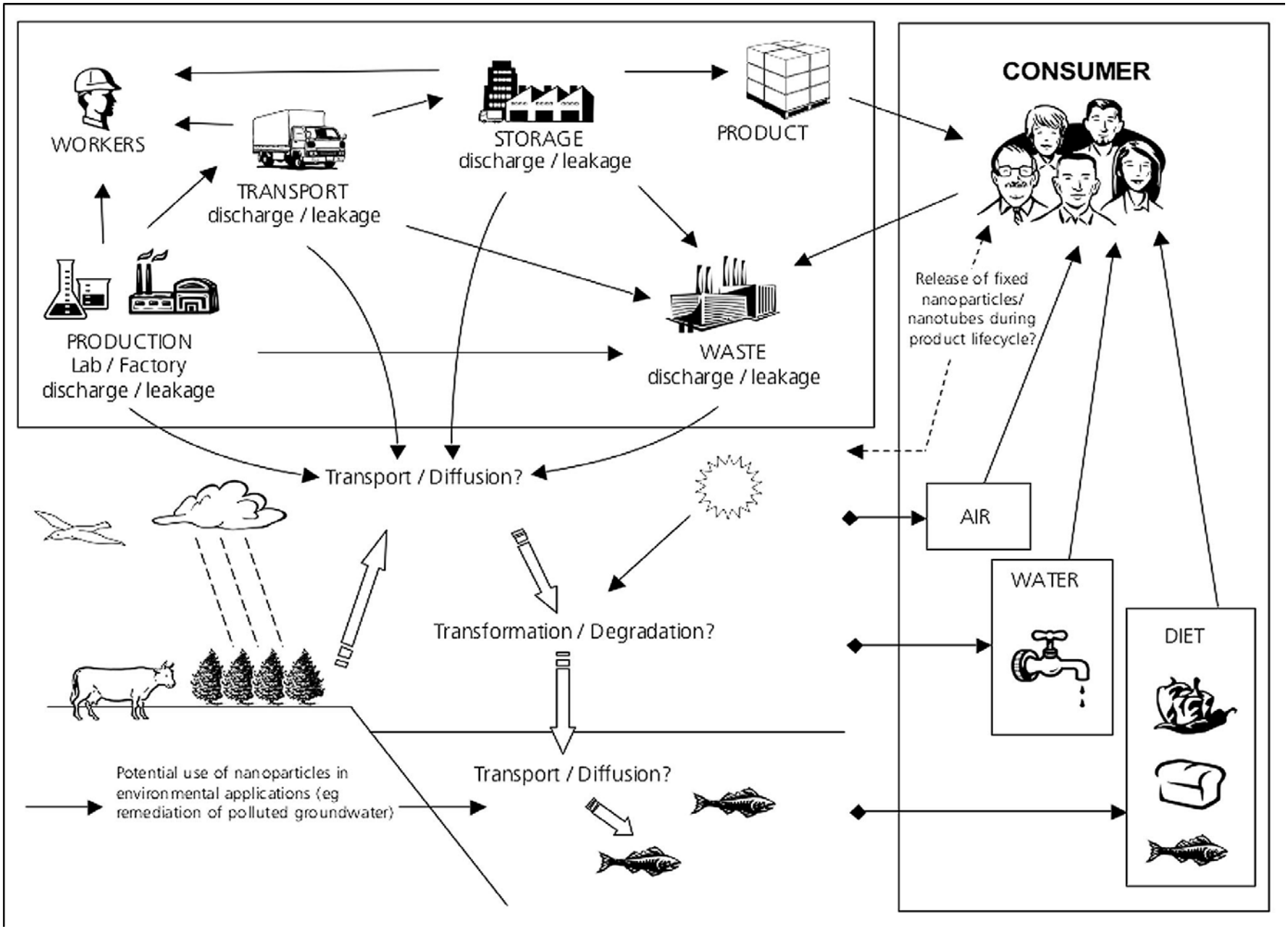
Community of Research Risk Management and Control

Vision

Key Elements of Risk Assessment and Risk Management

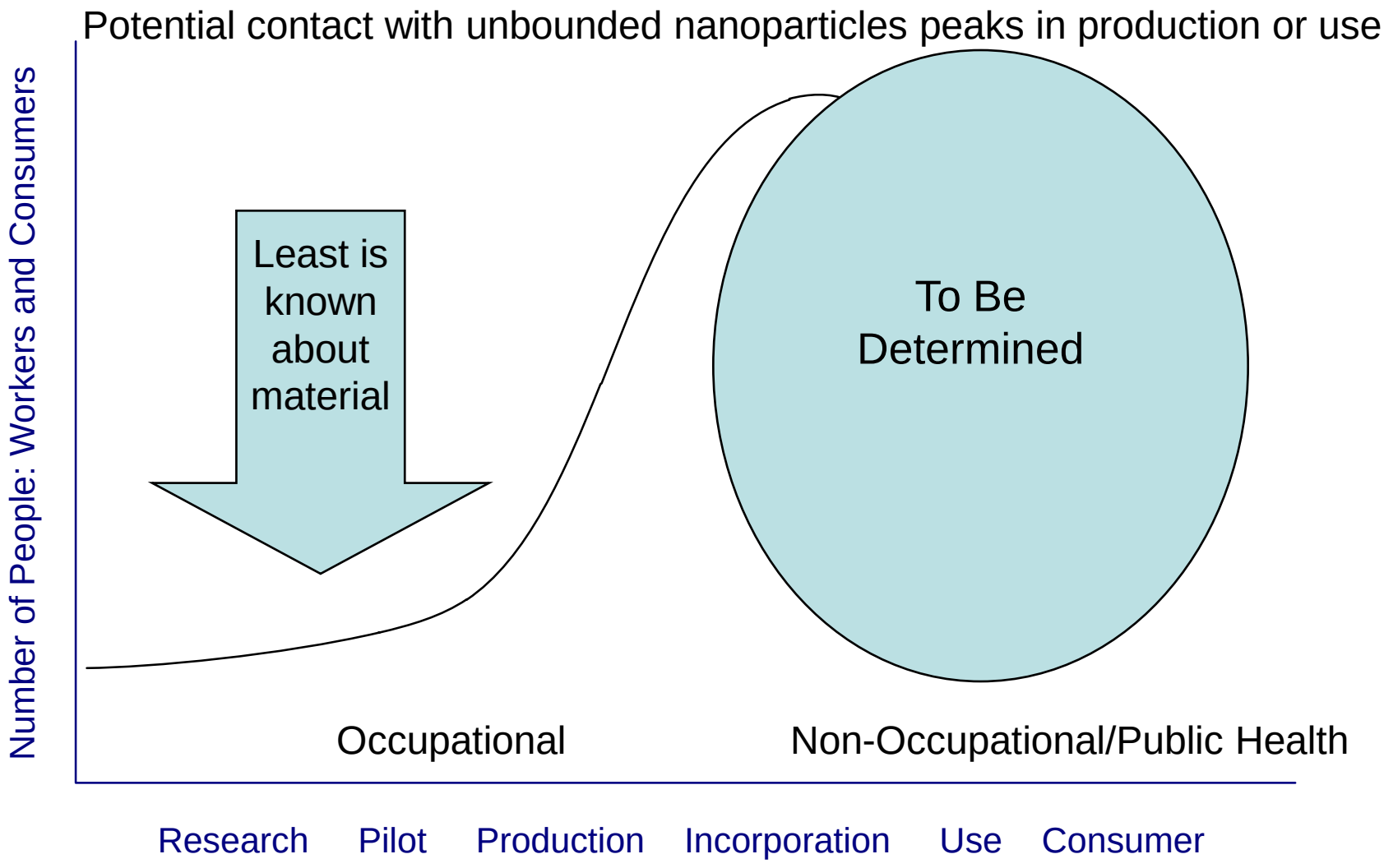


Product-life risk management/control



Royal Society Report July 2004

Where will earliest exposures occur?



"*To know that we know what we know, and that we do not know what we do not know, that is true knowledge*"

(Confucius)

Risk Management of Nanomaterials

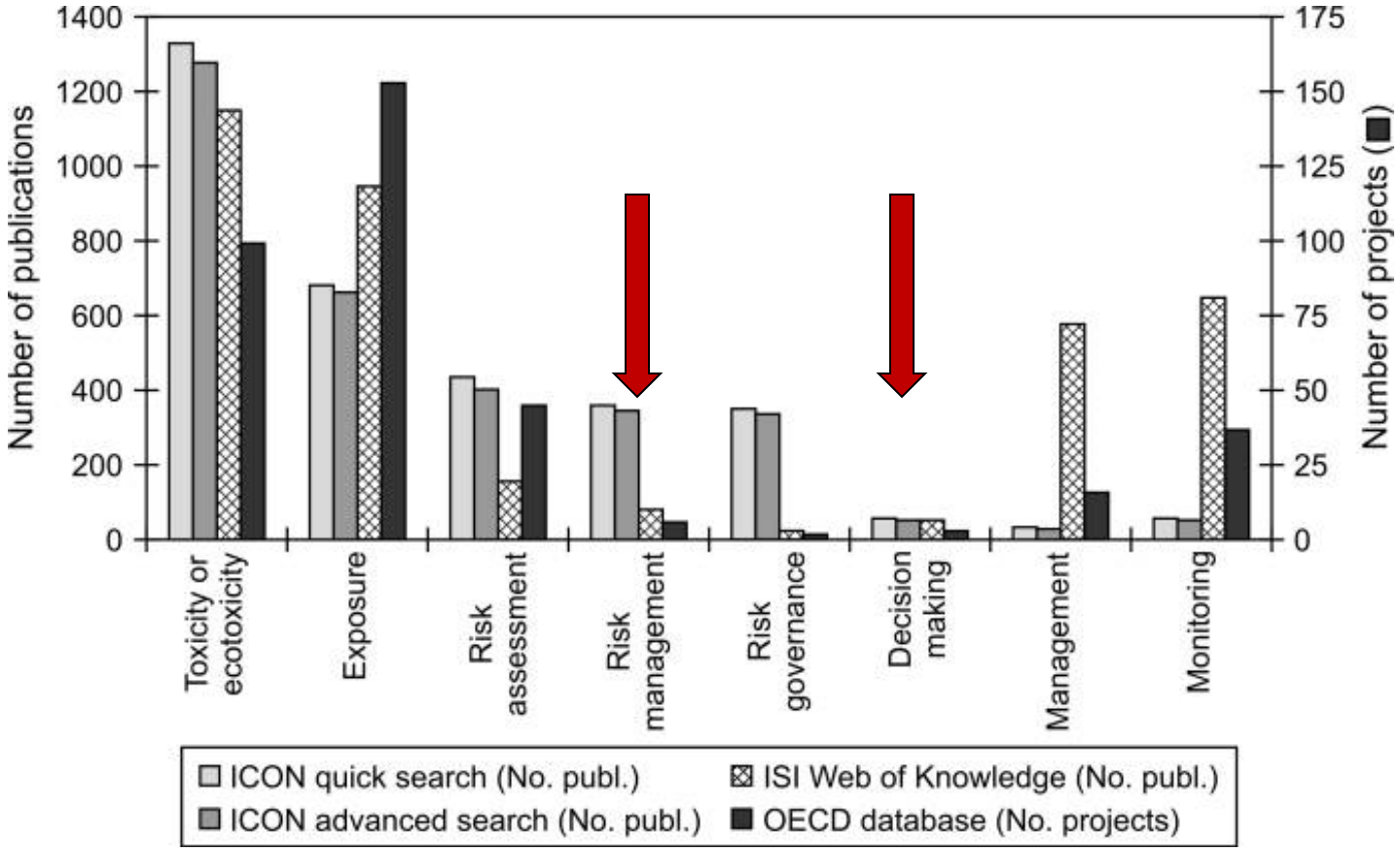
What we know

- Some potential hazard
- Some risk may exist
- Some exposure occurs
- Nanoparticles can be measured
- Nanoparticles can be controlled
- Filters and respirators should protect
- There are no specific exposure limits
- No specific medical tests, but hazard surveillance is prudent

What we don't know

- Nature and extent of hazard?
- Nature and extent of risk?
- Nature and extent of exposure?
- What metrics to use?
- Limitations of controls?
- Limitations of protection?
- What limits are appropriate?
- Content of surveillance?

ENP Risk Management Research



Grieger, K., Baun, R., Owen, R. 2010. Redefining Risk Research Priorities for Nanomaterials. *Journal of Nanoparticle Research,2(2): 383–392.*

Majority of on-going research is within RA paradigm - Very little research directly addressing near or long-term decision support

Goal of CoR-6: Risk Mananagement and Controls

•engage scientists and nanosafety professionals in identifying and sharing methodologies, control strategies and demonstrated effective solutions for the common purpose of reducing and preventing adverse health, safety and environmental exposures to nanomaterials. Through participation in active exchange of interested and knowledgeable scientists and professionals, identify or develop best practices that can be widely shared. Also, the CoR will identify specific research needs to improve risk management decision-making where gaps are found in the fundamental risk management variables.

Objectives of CoR-6: Risk Mananagement and Controls

- identify strategies to address and manage potential nanosafety-related risks
- standardize a range of approaches to better inform and understand potential risk factors
- integrate approaches into an effective risk management and control schema

Process

- Identify and incorporate relevant risk characterization information, hazard identification, exposure science, and risk modeling and methods into the safety evaluation of nanomaterials
- Understand, characterize, and control workplace exposure to nanomaterials; apply effective concepts and learning to other environments?
- Integrate risk and exposure assessments into decision-making frameworks for risk management, including possible regulatory activity
- Integrate and standardize risk communication within the risk management framework

Cor-6 Focus

- Engage EU and US scientists and practicing nanosafety professionals in identifying and sharing methodologies, control strategies and demonstrated effective solutions for reducing and preventing adverse health, safety and environmental exposures to nanomaterials.
- Create an active exchange of interested and knowledgeable scientists and nanosafety professionals
- Identify and share best practices for exposure controls
- Where gaps in fundamental risk management variables are found, identify specific research needs to improve risk management decision-making

Workplan for CoR-6:

- Expand list of individuals interested in CoR-6
- Identify three priority areas for follow up
  - Near term: focus on control of exposure
- Identify and engage individuals involved with research/practice in specified priority areas
- Convene two follow up on-line meetings to focus on one of the three top identified priorities (prior to March 2013)
- Report on outcomes of meetings and follow up
- Promote and maintain currency with on www.US-EU.org as the means of CoR-6 communication and records

Discussion

- Does existing vision statement adequately reflect purpose, goals and objectives for CoR-6?
- Identify priority issues that the CoR should focus on relative to nanosafety risk management and control?
- Gaps: What information/data is needed, but not currently available, to be able to better manage and control nanomaterials risk?
- Prioritize the top three major information gap areas
- Identify research and information needed to address these gaps – and other CoRs involved with these issues
- Role and value of 3rd party validation of risk management and controls