Proposed Graphical Representations of the US-EU Communities of Research: An Information-to-Action Continuum

The following graphics are intended to illustrate how the CoRs can ideally link and feed one another through an idealized information-to-action continuum.

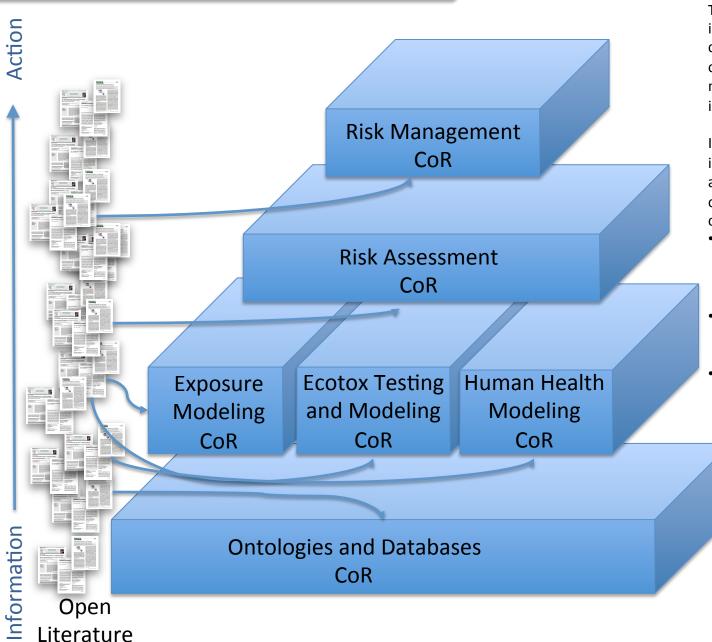
Although a number of simplifications are in play, notably the role of "ontologies and databases" as the supporting and unifying foundation of an "information pyramid", it is hoped that these images of the proposed continuum will help clarify and guide the cohesive development and implementation of comprehensive and effective CoR activities.

The proposed graphics were created, in particular, to help define the role of the Risk Assessment CoR. Using the concept that "exposure x hazard = risk", the Risk Assessment CoR is working to determine the best ways to organize and analyze exposure and hazard data to create meaningful risk forecasts that will support sound decision-making.

Idealized Information-to-Action Continuum Use risk assessment input to weigh trade-offs in context of alternatives and take action to minimize risks. Risk Management CoR Synthesize hazard and exposure research, filter and interpret to arrive at risk forecasts of ENMs. Risk Assessment CoR Draw on emerging and increasingly organized data sources to model potential exposure, transformation, **Human Health** Exposure **Ecotox Testing** biouptake, and ecological and Modeling Modeling and human health impacts. Modeling CoR CoR CoR Subsume and organize all emerging nanomaterial data **Ontologies and Databases** and metadata to provide hazard and exposure CoR modelers with rich, integrated data sets. Information **Open Literature**

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Current Information-to-Action Continuum



The current horizontal information-to-action continuum fails to efficiently organize and deliver emerging nanotechnology data and information among the CoRs.

Implementation of the idealized information-to-action continuum will optimize CoR roles and communication pathways to:

- support the development of relevant models of exposure and hazard potential,
- synthesize exposure and hazard potentials into assessments of risk, and
 - translate the results of assessments into effective decision-making for risk management.