

CONTRIBUTE:

Ontologies, vocabularies, workflows, and related applications...

If you're a developer and would like to contribute relevant materials for collective design, assembly, and building of the **Semantic Web of Food, Health, and Sustainability**,

Email: developer@ic-foods.org

PARTNER:

If you're an organization and would like to coordinate efforts via the IC-FOODS Consortium,

Email: consortium@ic-foods.org

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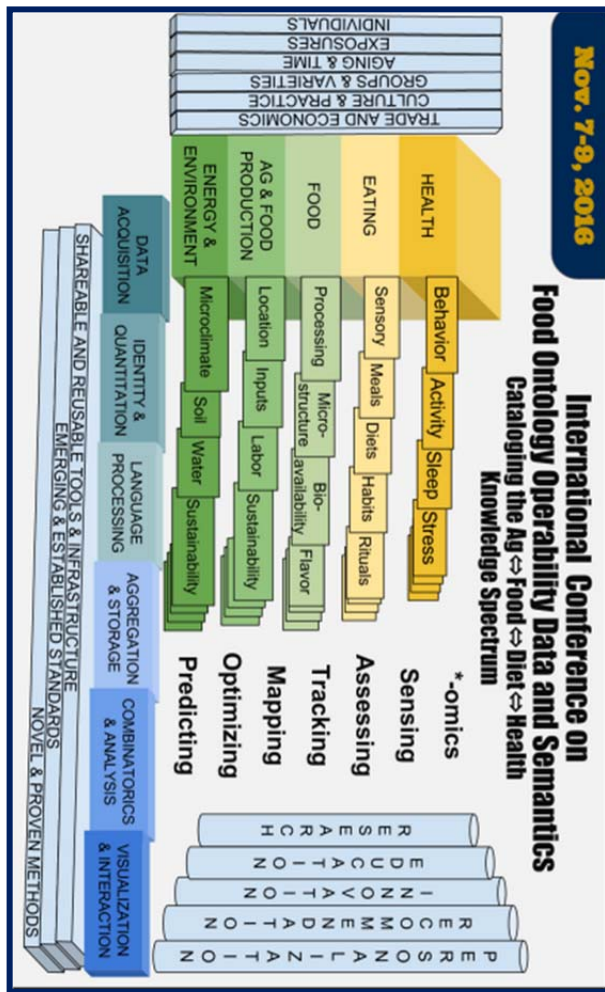
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To submit a poster:
www.ic-foods.org/poster

More information & registration:
www.ic-foods.org/conference

Location:
University of California Davis
Conference Center
Davis, California, USA

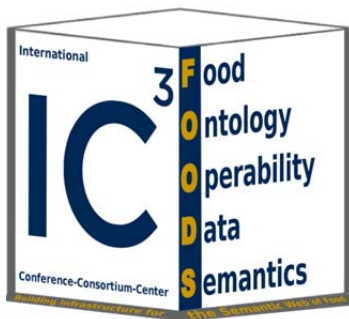


IC³-FOODS: International Conference on Food Ontology Operability, Data and Semantics

University of California, Davis
Nov. 7-9, 2016

WELCOME

IC³-FOODS is the new **International Conference + Consortium + Center for Food Ontology, Operability, Data and Semantics**.



Headquartered at the University of California, Davis, IC³-FOODS is collaborating with partners around the world to coordinate and build the ontological and semantic infrastructure for next gen internet of food & health.

IC³-FOODS comprises 3 specific endpoints:

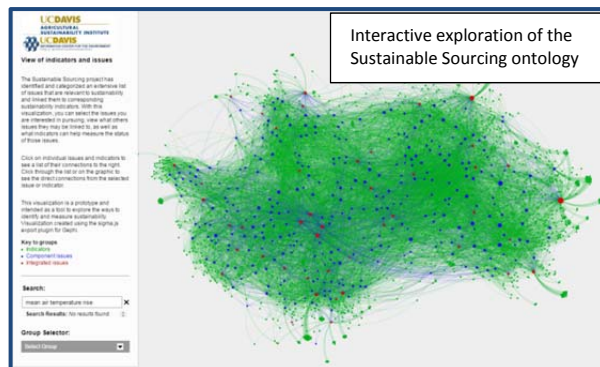
1. The **International Conference for Food Ontology, Operability, Data and Semantics** will assemble stakeholders who desire to integrate and expand informatics systems currently residing along the **Environment ⇔ Ag ⇔ Food ⇔ Diet ⇔ Health** knowledge spectrum.

2. The **International Consortium of FOODS** will maintain membership of representative stakeholders and partners from academia, industry, and (non-)governmental organizations to guide research priorities and development trajectories. These research priorities will be carried out by grants to external entities and through funding.

3. The **International Center for FOODS** is a newly funded entity with mission of hosting the I-Conference-FOODS, administering the I-Consortium of FOODS, and assembling, designing, and building ontological underpinnings for the emerging semantic web of agriculture, food, diet, and health. The **I-Center** also seeks funding from sources external to the consortium in order to expand capacity.

PURPOSE

- At IC³-FOODS, we're laying foundations and promoting the burgeoning fields of Food Systems, Food, and Health Informatics, ushering in a new era of intelligent, eco-friendly food growing, processing, and precise personalized recommendations and robotics.
- We're designing and building pre-competitive informatics platforms to enable ecosystems of open and proprietary technologies underpinning decision support and automation, as well as appropriate levels of traceability and transparency.
- We are building infrastructure for the **Semantic Web of Food, Health, and Sustainability**.



CORE ACTIVITIES

1. **ONTOLOGIES:** Coordinated development of standardized ontologies for unambiguous characterization of domains of inquiry.
 - ✓ **Ontology of Sustainability:** To include all major classes of known sustainability issues, along with methods used to measure specific sustainability goals.
 - ✓ **Ontology of Food Production:** To include all major classes of food production and agricultural methods.
 - ✓ **Ontology of Food Processing:** To include all major classes of food production and processing

methods (e.g. energy/mass transfer, fermentations, etc.), as well as mappings into relevant ontologies like Food Structures and Food Bioactive Molecules.

- ✓ **Ontology of Food Production & Processing Environments:** To include all major classes of known environments where food is produced and processed, along with known chemical and microbiological compositions and inputs.
 - ✓ **Ontology of Food Bioactive Molecules:** To include all major classes of bioactive molecules, the foods known to contain them, as well as mappings to Food Structures.
 - ✓ **Ontology of Eating:** To include all identifications and classifications of eating behaviors.
 - ✓ **Ontology of Sensation:** To include all major classes of sensory descriptive terms that would be used to describe the sensory qualities of any particular event.
 - ✓ **Ontologies of Physical Activity, Behavior, Nutrition and Health:** To include all major classes of physical activity, behavior, stress, and nutrition descriptors/metrics, and the ways in which these interact to characterize, reflect and produce health outcomes.
2. **WORKFLOWS:** Development and aggregation of standardized scientific and production workflows for ontology development and use.
 - ✓ **Standardized Block-Chain Workflows:** Development of standardized block-chain workflows capable of incorporating standardized ontology identifiers sequentially, as foods and ingredients proceed through food production and processing workflows.
 - ✓ **Interfaces for Assigning Identifiers:** Development of easy to use interfaces for assigning identifiers into the block-chain.
 3. **DATA STRUCTURES AND APPLICATION INTERFACES:** Development and aggregation of standardized data structures and application programming interfaces for incorporating representations from above ontologies into sensor, automation, reporting software.

Visit: <http://www.ic-foods.org> to learn more about how YOU can join us in building the Semantic Web of Food!