INTERDISCIPLINARY PROJECT TITLE: Food and Water Nexus

PLANNING TEAM:

Sean Cash: Agriculture Food and Environment, Friedman School.
Avery Cohn: Fletcher School
Linda Abriola: Tufts Institute for the Environment, and School of Engineering
Shafik Islam: School of Engineering
Colin Orians: Environmental Studies Program, and Biology Department, School of Arts and Sciences
Janet Forrester: School of Medicine
Mary Jane Schultz: Chemistry Department, School of Arts and Sciences
Ujjyant Chakrobart: Economics Department, School of Arts and Sciences
Kyle Emerick: Economics Department, School of Arts and Sciences

Chairperson:

Timothy Griffin (Chair): Division Chair, Agriculture Food and Environment, Friedman School

Additional Planning Team members:

Christian Peters: Friedman School (potential member)
Elena Naumova: Friedman School (potential member)
Jonathan Lamontaigne: School of Engineering (potential member)
MISSION AND GOALS (1 page)

Research Priority Area Mission:

Tufts University will be the leader, in the U.S. and globally, in defining the critical intersections of Food and Water, and developing innovative solutions at this intersection.

Three-Year Vision:

By the end of 3 years of work, we will have 1) established a core faculty across schools focused on Food and Water, 2) developed and implemented funded research on the Food-Water nexus, 3) developed curricular plan to expand courses across schools and programs that integrate food and water; and 4) identified funding streams to provide specific incentives to faculty and students to support scholarship and education at this nexus.

These short-term goals are critical to meet the long-term goal noted above: Tufts University will be the leader, in the U.S. and globally, in defining the critical intersections of Food and Water, and developing innovative solutions at this intersection. This will: expand the impact of Tufts University’s significant expertise on food, water and their interaction, engaging faculty and students in research that explores the complex nexus of food and water security in the U.S. and globally; develop innovative solutions at multiple scales to jointly meet food and water security goals; and strengthen interdisciplinary education and training focused on food and water across Tufts University.

Specific Goals and Metrics for Phase II Funding (1 Year):

- Refine focus of food and water research at Tufts
  o Metric: Convene faculty and students to assess current research foci, and map linkages between food and water.
- Establish a research area footprint within Tufts
  o Metric: Host two workshops to formulate and draft plan that leverages current expertise and identifies specific opportunities for additional collaboration.
- Develop and begin to implement plans to engage a broad spectrum of faculty
  o Metric: Host two Food and Water events with external speakers, to bring together students and faculty from across Tufts.
  o Metric: Faculty/student dinners to explore collaborations (potentially in conjunction with Climate and Energy RSSP, and the Boston Water Group).
• Metric: Draft plan outlining specific incentives that could be provided to faculty and students for developing and implementing cross-school Food and Water efforts.

• Develop plans for student engagement in subsequent years
  o Metric: Develop ideas for new courses and student research and professional opportunities.

• Draft an external funding strategy with specific funding targets
  o Metric: Identify potential corporate, foundation, and government funders

• Establish a multi-disciplinary leadership team for subsequent efforts
  o Metric: Recruit from faculty beyond the current leadership team.
  o Metric: Establish advisory board.
A. Overall Approach and Rationale

Tufts University is already a leader in scholarship and education on food, food systems, and water, and also has a nascent effort working at the nexus. In the first year, our primary goals are to map the current expertise and projects, in order to refine opportunities for future efforts. This will be accomplished through assessment of current expertise and projects, workshops, and events focused on Food and Water. Additional insight will be gained via formation of a leadership team and advisory board.

B. Activities and Expected Outcomes

Our major activities proposed to achieve year 1 goals include:

- Research assessment and mapping is a critical first step, clarifying areas of current expertise and identifying promising areas to link food and water.
  - This will result in an inventory of current projects, and a map of connections between Tufts faculty and students and external collaborators and funders. These will be used as the starting point for refining specific ideas for future work.
- The Food and Water events (and less formal dinners, etc) bring together faculty currently working in food and water.
  - This allows for the exchange of ideas for future collaborations, and also to recruit new faculty (and students) to the food and water nexus.
- Formation of an Advisory Board.
  - This board will provide strategic direction for food and water research, and will be comprised on faculty leaders, external collaborators and (potentially) Tufts Board of Advisors members.
- Two workshops will be held during the first year, that include faculty and students (when appropriate).
  - These workshops will produce the plan or roadmap for the future efforts on Food and Water, including; research emphases and funding potential, curriculum, and networks.
- Quarterly meetings with OVPR
  - These meetings ensure that progress to milestones is sufficient, and also to address structural barriers (incentives, cross-school collaborations, submissions).
- Submission of progress report and application for Phase I funding.
### C. Timeline of Proposed Activities with Milestones

<table>
<thead>
<tr>
<th>Year 1</th>
<th>sept</th>
<th>oct</th>
<th>nov</th>
<th>dec</th>
<th>jan</th>
<th>feb</th>
<th>mar</th>
<th>apr</th>
<th>may</th>
<th>jun</th>
<th>jul</th>
<th>aug</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research inventory and mapping</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food and Water Events</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty dinners</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advisory Board formation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meetings with OVPR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Writing of Phase I application</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Submission of Phase I funding application</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The Chair, with logistical support from faculty coordinator at the Friedman School, will develop and implement timeline for research mapping, workshops and meetings, and dinners. These will then be conducted by all faculty affiliated with Food and Water RSSP.

The research inventory and mapping will build on preliminary work done by Food and Water RSSP (and earlier Water Thematic Working Group), in consultation with team members. Mapping will be done by Friedman faculty coordinator (Jen Zahradnick). Scoping of potential funding will be jointly done by team members and research assistant.

Communication within the team will be via email, with bi-monthly meetings (in person or virtual). Additional communication is the function of events, dinners, and the workshops.

Advisory board nominations (which may include speakers from events and also Board of Advisors members) come from team members.

The Phase I proposal will be drafted by the Chair (with assistance from faculty coordinator and research assistant), and edited by team members.