



## Innovation Challenge 12

During Innovation Week, teams of students can compete for recognition and a top prize of **\$5,000** in the **1st Innovation Challenge 12** to be held the week of January 23-27, 2012.

### ELIGIBILITY

1. Teams of NDSU students who are engaged in innovative activity are eligible to compete. Students must be enrolled in an NDSU degree program at the time of the competition entry.
2. **Entry forms are due at the Office of the Provost, Old Main 103, before 5:00 p.m. on Wednesday, December 7, 2011.**
3. All **Innovation Challenge 12** competition teams must have a faculty advisor. Other staff, faculty, and external advisors are permitted in a mentorship role, but not as active team members.
4. Entries require the name of the innovation team; student data; identification of the student team leader; a 250-word abstract of the innovative work being done (see topics under Competitive Hints); and signature of the faculty advisor. Use the entry form provided.

### COMPETITION FORMAT

1. The competition will be conducted through both an oral presentation and a poster display.
2. **Innovation Challenge 12** will take place in the Memorial Union on **Wednesday, January 25, 2012.**
  - Oral presentations will be scheduled between 10:00 a.m. and 12:00 p.m. in the Century Theatre.
  - Poster judging will take place between 1:00 p.m. and 3:00 p.m. that same day.
  - The awards ceremony is scheduled for 4:00 p.m. on Thursday, January 26, 2012 in the Great Room.
3. Maximum poster size is 36" x 48" (landscape or portrait format). Smaller sizes are acceptable. All posters must be mounted on a display board not later than 9:00 am on Wednesday, January 25, 2012, in Prairie Rose Room. Display board and mounting materials will be provided by the Innovation Challenge 12 committee. To pick-up your materials, contact Emily Schreier at 499-3600 or via email at [emily@ndsuresearchpark.com](mailto:emily@ndsuresearchpark.com).
4. At least one member of the innovation team will present an oral and illustrated summary of the work to an audience comprised of competition judges and general attendees. Presentations will be not less than 10, nor more than 15, minutes in duration. One or more members of the innovation team must be available at the poster during display and judging hours.

5. Posters will also be on public display on Thursday, January 26, 2012 starting at 3:00 p.m. Posters are to be removed immediately following the awards ceremony on Thursday.

## JUDGING

1. Presentations and poster displays will be judged by an independent panel of judges drawn from the innovative and inventive community, external to NDSU.
2. Both the presentation and poster display will be judged according to the same criteria (see below and separate scoring sheet).

## COMPETITIVE HINTS

In **Innovation Challenge 12**, separate and distinct meanings are attached to the terms *innovation*, *invention*, and *entrepreneurship*.

- An *innovation* is a definable article (product or service, or both) that is **new** and **progressive**. It can, but need not necessarily have to, be inventive or entrepreneurial. The “progressive” aspect means that **Innovation Challenge 12** is looking for innovations that have “impact”.
- An *invention* is a new product or process that does or might fulfill the patenting criteria of new, useful, novel, and non-obvious.
- *Entrepreneurship* is the process whereby an innovation or an invention is incorporated into a commercial business (for profit or non-profit).

**Innovation Challenge 12** is an innovation competition. In keeping with the spirit of that environment, the ability to prepare a quality, rapid response to market opportunities is essential and this competition is no different. Entrants are responsible for defining and explaining what is “new” and “progressive” about their innovation.

The judging criteria are divided into the following four categories: why; what; how; and outcomes. The primary assessments will be **clarity** and **completeness**. Be sure that *both* the oral presentation and poster display present the work of the innovation team **clearly** (so that the audience will easily grasp your ideas) and **completely** (so that all of what you want to say is in the presentation and on the poster as each method of communication should be entirely self-contained).

Also, throughout the judging, factors of *originality*, *creativity* and *skillful presentation* will be considered by the judges. Presentations are expected to be delivered in a thoroughly professional manner which includes attire, speaking skills, illustrations (slides and poster), and demeanor. There will also be a scoring bonus for **style points**, which can be earned for especially innovative presentations and posters. The scoring sheet to be used by the judges is attached for reference.

### Why

Competitors will describe the **purpose** of their work, and the specific **goals** that the team hopes to achieve. Factors that may be used to explain purpose and goals include the following:

- solving a defined socio-economic problem;
- addressing a recognized need of a defined group of people;

- improvement of the quality of life for a defined segment of the population.

Each team is tasked to define their purpose in clear language, understandable to a general audience (i.e. minimize the jargon). Keep in mind that **purpose** is a more lofty statement that includes elements of a long-term vision; whereas **goals** are more specific targets for achievement and/or accomplishment.

### **What**

Competing teams will [a] identify what is innovative about their work, [b] describe and explain the desired and/or anticipated outputs of their work and [c] identify and describe the segment of the population for whom this innovation is important. Identification of what is innovative might include:

- a product designed and produced for extreme affordability;
- applying object-oriented programming to language instruction;
- use of 100 percent post-consumer content in new glass products;
- applying biological heuristics to pharmaceutical development.

Output products and/or services might include:

- a novel device for combating air pollution;
- a new and more effective method for teaching English;
- a procedure for improving the delivery of healthcare;
- lower cost processes for recycling post-consumer materials;
- a new format for blending multiple musical instruments into concertos.

Target users of the innovation might include:

- business establishments in a specific industry;
- primary school children;
- elderly people afflicted with a chronic disease;
- individual home owners.

In all cases, innovation teams should be concise and to-the-point. Use of quantitative measure is always helpful (e.g., how many elderly people are afflicted with the target disease).

### **How**

Posters and presentations will explain the methods being used in the innovative work. Describe the procedures employed, both routinely and occasionally, by the team in pursuing their innovations. Methods that could be presented to explain how the work is being done could include:

- computer and/or physical simulation;
- structured interview techniques;
- computer-aided-design and/or solid modeling;
- laboratory experimentation;
- prototype testing with focus groups.

Innovation teams will also describe how the methods used in their work are being applied in an innovative fashion.

### **Outcomes**

Under this criterion, competitors will first describe the product and/or service that is/are being produced or is/are expected to be produced by the innovation. This will be a more specific and detailed description that is called for under the **what** criterion. Secondly, how and how well the output(s) address the purpose (defined under **why**) will be described. Finally, the competitors will describe the socio-economic viability or impact of the innovation. The **impact** of the innovation could be artistic, humanitarian, financial, educational, philanthropic, commercial or measured in other ways. It is left to each competitive team to demonstrate this aspect of their innovation.

### **PRIZES**

#### **FIRST PRIZE**

\$5,000

#### **SECOND PRIZE**

\$2,500

#### **THIRD PRIZE**

\$1,000

Prizes will be awarded by President Dean Bresciani and Provost Bruce Rafert at a ceremony in the Great Room of the Memorial Union at 4:00 p.m. on Thursday, January 26, 2012.

### **INTELLECTUAL PROPERTY**

Participating in the **Innovation Challenge 12** presentation may be considered a public disclosure under U.S. patent law and may affect your ability to seek patent protection for your idea. We suggest you seek the advice of an intellectual property expert before you present if you have any concerns in this regard.

Students who have done work for their projects either through the use of NDSU resources or the resources of a private employer should be aware of the intellectual property policies of those institutions and how those policies may affect the ownership of the intellectual property created.

### **QUESTIONS**

For questions regarding Innovation Challenge 12, please contact any of the following individuals:

#### **Dr. David Wells**

**College of Engineering and Architecture**

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#### **Brenda Wyland or Jan Sobolik**

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