2008-2009 Summary www.insgc.org

The organization of the Spring 2007 INSGC Directors meeting as well as the record affiliate participation effectively demonstrated INSGC progress with communication and operational processes under "Way Forward," the reorganizational upgrade plan initiated in FY2006. INSGC has continued to expand its reach and effectiveness despite the numerous challenges of FY2007. The INSGC priorities for FY2008 will continue to emphasize four strategic initiatives:

- Increase outreach efforts and synergies with Indiana K-12 schools.
- 2. Identify unique opportunities to create sustainable statewide activities.
- 3. Increase sustainability of INSGC activity by incorporating and integrating previously supported INSGC projects in future INSGC efforts.
- 4. Improve coordination and awareness among academic and state government partners.

INSGC Vision

The Indiana Space Grant Consortium seeks to inspire Indiana residents to value and engage in NASA-related formal and informal education, workforce development, and research activities in science, technology, engineering and mathematics (STEM).

INSGC Mission

The mission of the Indiana Space Grant Consortium is to promote STEM workforce development, formal and informal education, and research by the dissemination of NASA related activities, content, and opportunities to the residents of the State of Indiana.

Funding

| | NASA | Non-federal |
|---------|-----------|--------------|
| 2004-05 | \$300,000 | \$447,061 |
| 2005-06 | \$550,000 | \$411,307 |
| 2006-07 | \$580,000 | \$677,927 |
| 2007-08 | \$590,000 | \$982,000 |
| 2008-09 | \$730,000 | Current Year |
| | | |

INSGC does not receive state government funding. Donations from the public help us to devote more of our funds to scholarships, fellowships, and other outreach programs. Tax-deductible donations can also be directed to the National Space Grant Foundation (www.spacegrant.org) for use in Indiana.

Host -Purdue University, West Lafayette

Academic Affiliates

Ball State University
Indiana State University
Indiana University, Bloomington
Indiana University—Purdue University, Fort Wayne
Indiana University—Purdue University, Indianapolis
Purdue University, Calumet
Purdue University, West Lafayette
Taylor University
University of Evansville
University of Southern Indiana
Valparaiso University

Outreach Affiliates

Brownsburg Challenger Learning Center Challenger Learning Center of Northwest Indiana Imagination Station of Lafayette IMAX Theatre at the Indiana State Museum Indiana State Museum Indianapolis Challenger Learning Center Science Central Terre Haute Children's Museum

Corporate Affiliates

Orbit Frontiers, LLC StratoStar Systems, LLC TMGLabs

The red, blue and green dots on the map are the locations of the INSGC affiliates. Project funding occurs in these areas.



Major 2008-09 Funded Activities

Indiana State Fair—INSGC in cooperation with IMAX spent 12 days at the Indiana State Fair promoting both INSGC and affiliate programs to well over 5,000 attendees to the annual event. In addition to general promotion of all affiliate programs adapted to the individual attendee, featured items within the booth were a ticket promotion for the IMAX *Fly Me to the Moon* Apollo 11 related animated feature (details below), a lunar regolith experiment conducted by a Purdue Undergraduate reduced gravity team at Johnson Space Center, and a poster on remote sensing images of the 2008 Indiana floods in associate with Indiana View.

In association with IMAX and INSGC, TMGLabs (SpacePort Indiana) launched a blimp at the state fair with cameras and Wi-Fi capability. The blimp promoted both INSGC and Space Port Indiana of Columbus Indiana, with giant emblems on its sides. On August 15, 2008, TMGLabs launched a weather balloon from the fairgrounds with payloads constructed by school children. WISH-TV featured the Blimp and balloon launch on their news broadcasts during the fair.

Education / Assessment—INSGC has developed partnerships with both the Purdue University Assessment Research Center (ARC) and Discovery Learning Center (DLC) to provide assessment services and to facilitate the improvement of K-12 partnerships across the state. In the coming year we anticipate growing momentum in the area of evaluation. The strategic selection of programs that are representative of INSGC goals will help maintain our focus on distributed evaluation. Points of contact across the INSGC academic affiliates continue to be identified for increased partnerships in response to Designation Upgrade expansions of project scope.

IMAX Fly Me to the Moon events—IMAX and INSGC hosted the United States' premier of Fly Me to the Moon Apollo 11 related animated feature film at the IMAX Theater at the Indiana State Museum in association with TMGLabs (SpacePort Indiana) on August 8, 2008. Dr. Barrett Caldwell, INSGC Director; David Brown, IMAX Theater Director; and Dr. David Ellis, a NASA Glenn Materials Engineer currently working on the Ares launch program; jointly introduced the film, with Dr. Ellis taking numerous enthusiastic questions about space and NASA from the audience. In association with the joint IMAX / INSGC State Fair booth 2,500 tickets to the movie were given away to school-age children on weekend showings over the next two months so that they could see the 3D animated feature starring Christopher Lloyd, Kelly Ripa, and astronaut Buzz Aldrin as himself.

FIRST Regional—FIRST regional competitions are proving grounds for robots designed and built in only six weeks. High School student teams determine robot functionality by developing a strategy for a pre-determined "game." The Boilermaker Regional, one of 32 FIRST robotics regional competitions across the U.S. and in Israel, was held at the Purdue campus. INSGC was one of the major sponsors for the competition. FIRST Robotics is part of Purdue FIRST Programs which also sponsor the Fall FIRST Lego League (Middle School) Qualifying Tournament hosted at Purdue.

Purdue Space Day—Organized by university students, Purdue Space Day (PSD) is an educational outreach program, which provides grade school students from Grades 3-8, the opportunity to learn about science, technology engineering, and mathematics by participating in age-appropriate activity sessions throughout the day. Since 1996, over 930 university students have taken part in the organizing and running of the event and over 3400 grade school students have participated in PSD. The highlight of 2008 was the participation of Purdue Alumnus Astronaut Mark Polansky. In 2007, over 140 University volunteers provided a full day program to approximately 400 Grade 3-8 students.

NASA Internships--The goal of this project element is to increase the number of undergraduate and graduate students participating in summer and academic year internship opportunities at NASA Centers. Participating INSGC supported students have been actively involved in developing the next generation of U.S. air and space transportation. INSGC has been active in funding interns in the past and is actively working with NASA Centers and the National Space Grant Consortium to further improve internship matching and placement experiences.

Diversity fellowships/scholarships—As part of the INSGC commitment to creating a diverse workforce, and based on collaborations with ITAP, the Purdue Terrestrial Observatory, INSGC, the Purdue Research Opportunities Program (PROP) and Summer Research Opportunity Program (SROP), underrepresented minority undergraduate students at five campuses were selected to receive undergraduate internships for summer 2008. Underrepresented minority graduate students have also received graduate fellowships, and presentations have been made to student participants of the NSF-funded Alliance for Graduate Education for the Professorate program to increase the number of graduate fellowship applications.