OPPORTUNITIES IN OPEN INNOVATION AND COMMUNITY APPLICATIONS

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Open Innovation

NASA's network of scientists, decision-makers, stakeholders

• **Crowdsourcing**
  Solicits products, services, ideas, or content contributions from many people for distributed problem solving

• **Challenges**
  Use focused problem statement to competitively obtain solutions and/or stimulate innovation from broad public

• **Prizes**
  Competitively award prizes to stimulate innovation with potential to advance NASA’s mission

• **Citizen Science**
  Public participating voluntarily in scientific process

Ideas for Internal R&D

New Uses and New Markets

New Uses and New Markets
“discover and demonstrate innovative and practical uses of Earth observations”

Enable near-term uses of EOs:
- formulating new applications
- integrating EOs and related products in practitioners’ decision making
- transition the applications for sustainable use

Complete the integration and transition of use of Earth science products for sustained use

Develop and prototype capability of Earth science product to enhance decision-making

Establish information content, characterize decision support need, and assess proof of concept of application idea
Information Gathering

Are you interested in identifying existing data or technology?

Collect insights, resources, and ideas FOR FREE on internal challenge platform.

Are you trying to gather new data?

Is data collection straightforward, can be accomplished on existing platforms?

Launch challenges for curated communities through NASA Tournament lab or on challenge.gov. Partner with external organizations for technical, financial, other support.

Are you trying to develop new data gathering platform?

Prototype and Integration

Would you like to develop a software application, an algorithm for data analyses, or a hardware tool?

Microtasks or repetitive tasks?

Run micro-purchase challenges from $200+ to obtain solution within weeks!

Logo designs, user dashboards?

Do you have more targeted tasks?
Community Applications
Identifying new communities and partnerships to test applications of data products

Opportunities for Commercialization
Sharing new capabilities and identifying new markets to develop sustainable solutions
Open Innovation tools can complement current efforts to discover and demonstrate innovative and practical uses of Earth science data to enhance decision-making, improve quality of life, and strengthen the economy.
**GOAL:** Create better algorithm for sequence annotation than established methods such as BLAST

**COMPETITION:** Ran 2 week prize competition on Topcoder with pot of $6000
GOAL: Create a 2-3 minute animation/video from storyboard for REALM project, based on RFID technology

PRIZE: $3000 on freelancer.com
Annual Hackathon in over 200 locations in around the world

October 18-20, 2019

Virtual Participation Options Available!

Integrate NASA Earth science data and citizen science data to learn more about the connections between human, animal, and environmental health.

Build a tool for beach-goers to monitor for hazards including sun exposure and presence of harmful algal blooms and to alert them of precautionary measures for protection on their swim- and surf-filled adventures!

Develop an app or platform to crowd-source information for comparing changes in environmental factors, such as temperature, relative humidity, air pollution, with occurrence of symptoms of allergies and respiratory diseases.
THANK YOU

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Sue Estes

Helena Chapman

NASA Prizes and Challenges

Amy Kaminski

Karen James

Lynn Buquo

Steve Rader

Applied Sciences Program

Health and Air Quality Team

Center of Excellence for Collaborative Innovation
QUESTIONS?