

# How to Apply for a U.S. EPA P3 Grant

17<sup>th</sup> Annual P3 Awards: A National Student Design Competition Focusing on People, Prosperity and the Planet



EPA P3 Team (Angela Page, Rich Callan, Jacquelyn Bell) October 15<sup>th</sup>, 2019



#### **Webinar Information**

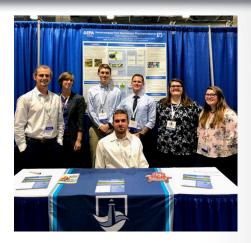
- We have set aside time at the end of the webinar for questions. You can submit them to the IM/Conversation box on left.
- You can listen to the webinar through Skype for Business, have Skype call your phone or call in separately.
- You can also connect your audio via your phone:
  - Conference Number: +1 (202) 991-0477 or find a local number
  - Access Code: 2293766#



#### **Webinar Information**







- Webinar is for informational purposes
- Solicitation should be the official source of information
- Webinar slides, summary and answers to questions will be posted on P3 website <a href="https://www.epa.gov/P3">https://www.epa.gov/P3</a>



#### **Outline**

- Request for Applications/Solicitation
- What is the P3 Program?
- Items to note
- Research Areas
- Eligibility
- Application Evaluation and Selection
- Criteria for Reviews
- P3 Success Stories
- Contacts for Further Information
- Questions







#### Request for Applications (RFA)/Solicitation





RFA – 17th Annual P3 Awards: A National Student Design Competition for Sustainability Focusing on People, Prosperity and the Planet

https://www.epa.gov/research-grants/17th-annual-p3-awards-national-student-design-competition-focusing-people-0

- Open through November 19<sup>th</sup> 2019, 11:59:59 p.m. Eastern Time
  - Apply now through Grants.gov!



#### What is the P3 Program?

- Two-phase grants competition
- Teams of undergraduate and/or graduate students to design projects for sustainability
- Support innovative research on project designs
- Developed by an interdisciplinary team of students to:
  - improve quality of life for **people**
  - promote prosperity by developing local economies, and
  - protect the **planet** by conserving resources and minimizing pollution
- This is the "P3 Approach"









### P3 Program Goals



- Engage and educate the next generation of students and communities with the P3 Approach
- Support innovative projects that implement the P3 Approach, especially in communities with the greatest needs
- Demonstrate the technologies to prove their effectiveness and value
- Foster development of enterprises to disseminate the technologies in the target communities and elsewhere



#### **Two-Phase Program**

- Phase I: Research projects and designs (up to \$25,000) – 1 Year
  - Teams bring their projects to the National Student Design Expo in Spring, 2021 (typically in an East Coast City)
    - Participation required for Phase I awardees
    - Great opportunity to network with other teams and professionals in the field
- Phase II: Further develop project (up to \$100,000) – 2 Years
  - Demonstrate work in the field or develop science leading to implementation





### **Beginning the Process**



ERVIEW INFORMATION

vironmental Protection Agency Research and Development d Program

ANNUAL P3 AWARDS: A NATIONAL STUDENT ESIGN COMPETITION FOCUSING ON PEOPLE, PROSPERITY AND THE PLANET

This is the initial announcement of this funding opportunity.

Funding Opportunity Numbers (FONs) and Associated Research Areas:

EPA-G2020-P3-Q1 - Air Quality

EPA-G2020-P3-Q2 - Safe and Sustainable Water Resources

EPA-G2020-P3-Q3 - Sustainable and Healthy Communities

EPA-G2020-P3-Q4 - Chemical Safety

- Read the RFA completely
- Highlight sections/phrases that are critical for success



#### Items to Note

 Revised Specific Areas of Interest (Section I.D.)

Must choose a topic area

- Relevancy review criteria
   Research should primarily be performed in the U.S. and primarily benefit the U.S.
- Consider addressing needs of small, rural, tribal and disadvantaged communities
- Encourage partnerships with industry, non-governmental organizations (NGOs) and other educational and research institutions







#### FON/Specific Area of Interest

 Applicants should address one of the research areas – Each application must be submitted using a single Funding Opportunity Number (FON)

#### Funding Opportunity Numbers (FONs) and Associated Research Areas:

EPA-G2020-P3-Q1 – Air Quality
EPA-G2020-P3-Q2 – Safe and Sustainable Water Resources
EPA-G2020-P3-Q3 – Sustainable and Healthy Communities
EPA-G2020-P3-O4 – Chemical Safety

- Within a specific area of interest, select one of the listed topics to be the focus of the project
- If you propose a project that does not address one of these topics, the application may not be evaluated as highly during the relevancy review, and therefore may not be recommended for an award



### **Specific Areas of Interest**

## Address one of the research areas **Section I.D.** of solicitation

- Air Quality (Q1) includes:
  - Emissions reduction strategies; prevent and reduce multipollutants and emissions from mobile sources; reduce air toxics
- Safe and Sustainable Water Resources (Q2)
  - Drinking water treatment, wastewater infrastructure needs; remove PFOA, lead, waterborne pathogens, microplastics
- Sustainable and Healthy Communities (Q3)
  - Remediation of PFAS contaminated soil, less toxic building materials, reduction of food waste, less toxic and recyclable electronics
- Chemical Safety (Q4)
  - Non-toxic chemicals and materials, including paints, coatings and plastics; non-toxic dyes and inks; reduction of ozone-depleting chemicals

P3 Team demonstrations at Expos









#### **Expected Outputs and Outcomes**

Output: A report, product, invention
 Example: a filter to purify drinking water

 Outcome: What results from the output Example: The filter could help maintain human health and well-being by preventing 300 cases of waterborne illness per year in the local community (quantitative outcome)







### Eligibility



- Eligible to apply:
  - Public & Private non-profit, degree-granting institutions of higher education located in the U.S.
  - Includes Community Colleges
  - Collaboration with colleges and universities outside the U.S. is permitted, can be subawardee
- No individual applications (not a fellowship)
- No private companies (but allowed roles for private companies in the project)



### **Other Requirements**

- Check compliance with submission instructions, check page limits, excess pages not reviewed
- No letters of support or intent from EPA employees
- Institutions may submit more than one application, but they can not be inter-dependent.
- Faculty can participate in other peer reviews for other RFAs, but not P3









#### **FAC Membership**

- Current members of EPA Federal Advisory Committees (FACs) cannot receive assistance agreements, either as principal investigator or co-investigator, including P3 grants
- See the <u>directive</u> (10/31/2017) on FAC membership and receiving EPA grants
- EPA Administrator's Memo:
   https://www.epa.gov/sites/production/files/201
   7-10/documents/final draft fac memo 10.30.2017.pdf



#### **Application Evaluation and Selection**











External Peer Review **Award** 





### Your Target Audience?

#### (1) External Peer Reviewers

- Provide technical review of the science
- See criteria in Section V.A.2. of RFA

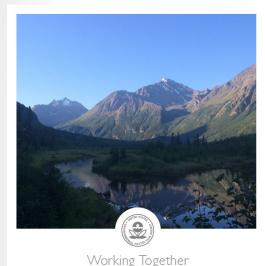


#### (2) Internal EPA Relevancy Reviewers

- EPA priorities in Section V.A.3. of RFA
- Research should primarily be performed in the U.S. and should primarily benefit the U.S.
- Relevance to FY2018-2022 Strategic Plan



#### **US EPA Strategic Plan**



FY 2018-2022 U.S. EPA Strategic Plan

FY2018-2022 US EPA Strategic Plan:

https://www.epa.gov/planandbudget/ strategicplan

The P3 program is supported under

Goal 3: Greater Certainty, Compliance and Effectiveness – Objective 3.3: Prioritize Robust Science

Objective 3.3 Prioritize Robust Science

Included in Relevancy Review

Refocus the EPA's robust research and scientific analysis to inform policy making.



#### **Phase I Review Criteria**

- Criteria for External Peer Review (Section V.A.2.), Four equally-weighted categories of evaluation
  - 1. Application Quality
  - 2. Relationship of Challenge to P3 Approach
  - 3. Educational and Interdisciplinary Aspects of Research
  - 4. Budget and Project Management
  - → Only applications scoring "Highly Recommend" or "Recommend" are eligible for the internal Relevancy Review.
- Criteria for Internal Relevancy Review (Section V.A.3.)
  - 1. Relevance to EPA's Research Priorities
  - 2. Degree to which research is performed in U.S. and benefits to U.S.
  - 3. Degree of focus on topics listed in RFA
- Past Performance of Principal Investigator





### **Human Subjects**

- Institutional Review Board (IRB) clearance required for research with human subjects, including surveys.
- IRB clearance can be obtained after proposal submission
- If it is determined to be human subjects research, must include Human Subjects Research Statement (HSRS, 4 pages)
- If not HS, include statement that it does not involve human subjects



#### Scientific Data Management Plan

- \*NEW\* Section IV. C. 7. c.
   Scientific Data Management Plan (SDMP) required (up to 2 pages)
- Long-term preservation of, and public access to, the scientific research data and metadata created and/or collected under the award
- Grant recipients must make accessible scientific data and associated metadata for journal publications
- SDMP must be deemed acceptable to receive award (can be revised during funding process)



#### **P3 Successes**







- Since P3's inception in 2004, the program has:
  - Supported more than 4000 students from 234 institutions across all 50 states and Puerto Rico
  - Awarded more than 726 grants totaling more than \$15.5 million
  - Resulted in:
    - More than 200 publications
    - 15 patents
    - 28 small businesses and nonprofits formed

## **P3 Success Stories**

#### Disclaimer of Endorsement:

Mention of or referral to commercial products or services, and/or links to non-EPA sites does not imply official EPA endorsement of or responsibility for the opinions, ideas, data, or products presented at those locations, or guarantee the validity of the information provided. Mention of commercial products/services on non-EPA websites is provided solely as a pointer to information on topics related to environmental protection that may be useful to EPA staff and the public.

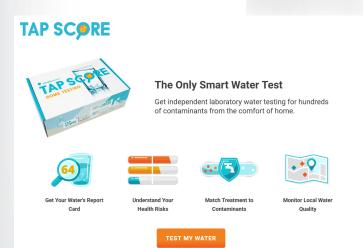


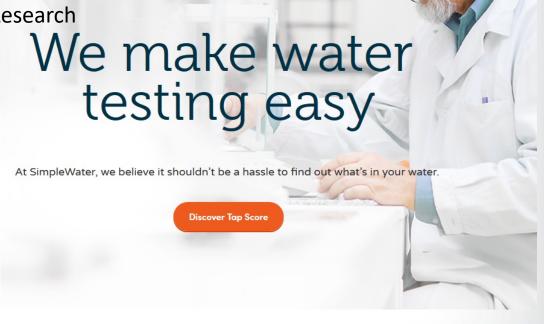
### **SimpleWater**



#### **simple**water

- P3 Award to team of students at UC Berkeley
- Electrochemical remediation for arsenic in drinking water
- Led to Small Business Innovation Research
   (SBIR) Award





https://www.simplewater.us/





#### **One Earth Designs**



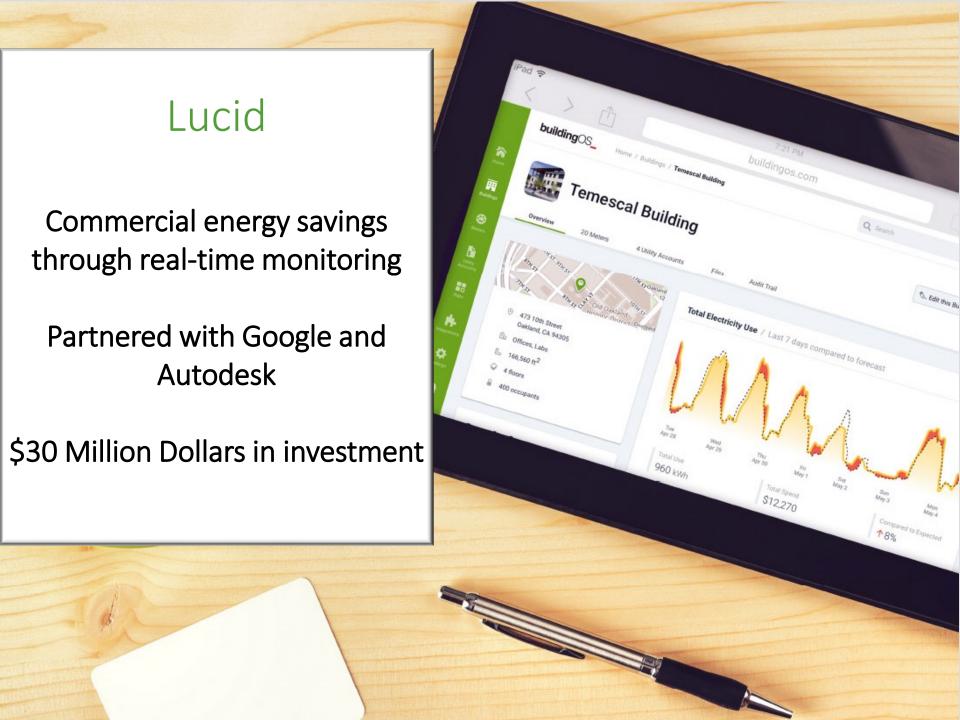


Solar, parabolic cookers/stoves

- B Corp Best for the World List
- Featured on "Top Chef" and "Shark Tank"
- Found in 60+ countries



https://www.oneearthdesigns.com/



#### **RFA Contacts**

- Questions regarding Eligibility:
   Ron Josephson josephson.ron@epa.gov
- Questions on Technical Issues:
   Rich Callan <u>callan.richard@epa.gov</u>



Questions on Program Information:

Angela Page page.angelad@epa.gov

Applications due in Grants.gov by Tuesday, November 19th, 2019, 11:59:59 p.m. EST Allow time for technical issues

Apply now!

We look forward to seeing your application.

Good Luck!

## **Questions?**

