

# Crowdsourcing Innovation at an Academic Institution with UCSF Open Proposals

## **Submitter's Information:**

Oksana Gologorskaya, Sr Product Manager, Research Technology Program, CTSI  
[oksana.gologorskaya@ucsf.edu](mailto:oksana.gologorskaya@ucsf.edu)  
415-514-8318

## **Project leader and team members' names**

Cynthia Piontkowski – Sr. Web Producer  
Brad Bulger – Drupal Developer  
Anirvan Chatterjee – Director, Data Strategy  
Eric Meeks, Chief Technology Officer  
Brian Turner – Product Director  
Moisey Gruzman - Applications Programmer  
Zeanid Noor - Program Manager  
Nooshin Latour – Sr. Communications and Marketing Manager  
Melissa Telli - Senior Director, Communications  
Leslie Yuan – Director, Research Technology Program

## **SUMMARY**

UCSF Open Proposals (OP) is an online platform for open innovation, designed for an academic environment and developed by the Clinical and Translational Science Institute (CTSI) at UCSF. The platform was born out of an ongoing need to stimulate and garner innovative ideas from the biomedical research community at UCSF in order to maintain and grow the university's research infrastructure. From the outset, CTSI recognized that traditional ways of harvesting ideas at a large, distributed organization like UCSF had limitations. The standard "black-box" proposal submission process with subsequent review by small groups of stakeholders yielded less than ideal results, including lost opportunities to form teams or connect collaborators, project redundancy, low efficiency and poor communication between project stakeholders. The OP platform changes this approach. It allows researchers, administrators, students and other academic community members to share and discuss proposals and projects through an open, online forum before submitting them for final review. Comments and suggestions are invited from a broad, multidisciplinary audience, which facilitates:

- improvement of proposals
- elimination of redundant proposals
- formation of teams around similar proposals
- expression of community support

After successful implementation of several internal initiatives, the Open Proposals product and process quickly gained traction in other UCSF departments, including the UCSF Medical Center. Almost all UCSF programs that piloted the Open Proposals approach have recognized its advantages and become ongoing champions of the platform.

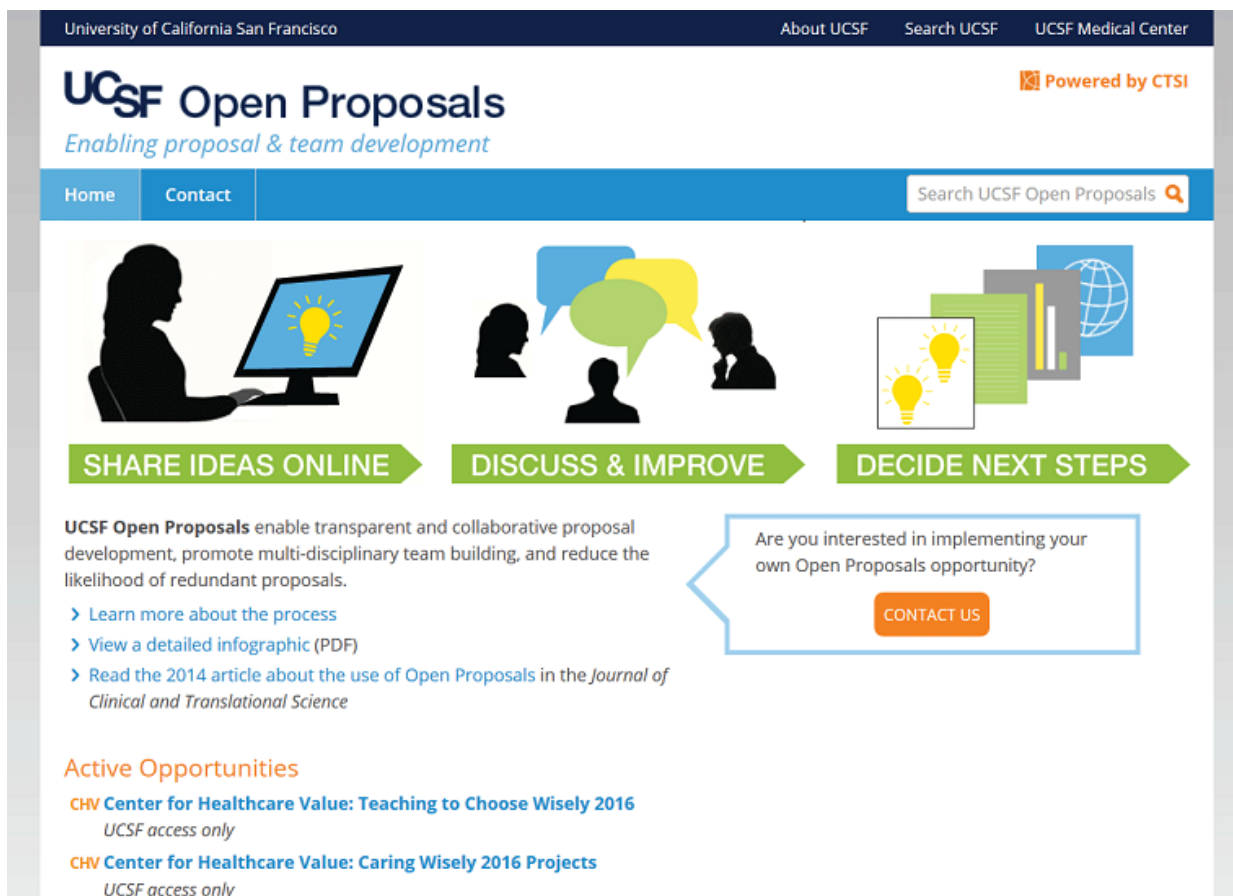


Figure 1. UCSF Open Proposals Home Page

## PROJECT DESCRIPTION

UCSF CTSI operates under constant pressure to innovate and provide adequate infrastructure and resources to support the ever-growing needs of the UCSF clinical research enterprise. Inspired by the recent explosion of crowdsourcing and social media technologies, CTSI leadership came up with the idea of creating an open, collaborative online space for the UCSF research community to improve and strengthen ideas before selecting them for implementation or funding. The team's initial assumption was that existing commercial or open source crowdsourcing platforms would successfully support this need. However, after careful analysis and test-drives of major online innovation management tools, it was discovered that none fully supported the innovation process typical at an academic institution. The unmet requirements ranged from the need to brand and present each initiative or opportunity separately, to multi-phase workflows where ideas go through certain states requiring different actions from proposers and reviewers. CTSI decided to design and build its own solution, and the OP platform was born.

Initially, OP was exclusively used by CTSI and it became the primary way for the UCSF community to weigh in on CTSI's strategic direction. As the UCSF community became familiar with this new approach, interest in using the tool by groups outside of CTSI grew. As of the spring of 2016, 40 discussion forums have been hosted on UCSF Open Proposals. The platform has also been used externally by UC Merced, Harvard and has received interest from academic institutions and nonprofits across the country.

The OP platform is built on the popular, open source *Drupal Content Management System (CMS)* with its own source code available on *GitHub*. OP has recently been re-architected to allow for even easier, lower cost setup of discussion groups and process configurations.

Use of the platform has now expanded beyond intramural funding and innovation contests to projects about support processes, quality improvement, community-engaged research, team science and staff engagement.

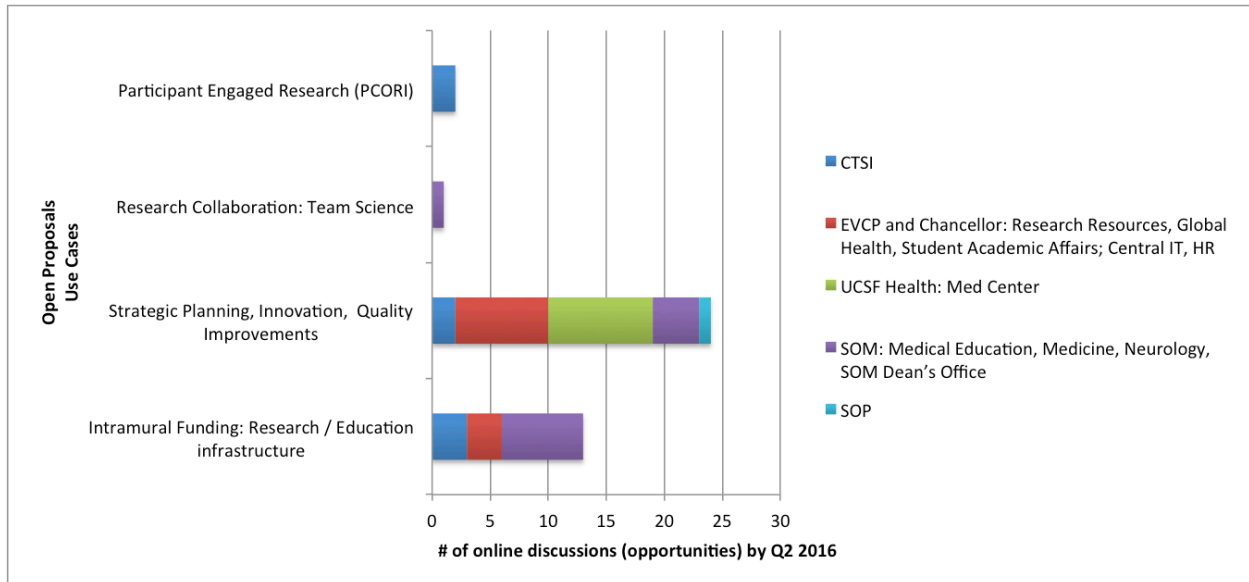


Figure 2. UCSF Open Proposals Use Cases by Departments

## HOW DOES OPEN PROPOSALS WORK?

UCSF Open Proposals is a winning combination of well-designed process, elegant technology and professional service.

The OP process is timeline driven and can be customized for each community's project or opportunity. Customizations include look and feel, structure of input collected, access levels (for instance, UCSF only or reviewer only), ability to vote, timeline and results presentation. Our team developed a standard forum template that supports most use cases and allows our team to launch new forums within one day of the first contact with the customer. A forum manager actively monitors the forum, moderates comments, seeds the forum with initial ideas, and promotes the opportunity through various communication channels. The forum managers are members of the sponsoring community, know the audience they seek to engage, and need no technical skills. The OP team provides forum managers with specific strategies and best practices to engage their audience. Indeed, these best practices are considered to be the secret sauce to making the Open Proposals mechanism so successful.

## HOW DID OPEN PROPOSALS IMPACT UCSF?

We believe that the Open Proposals platform not only provided the UCSF community with an efficient and useful collaboration tool. It disrupted traditional processes and introduced a new, open and transparent way to work together, regardless of location, position in organization or personal schedule. Some programs that implemented the OP process have added so much value that news of the novel

method quickly spread to other institutions (Vanderbilt, University of Michigan, UCLA, Stanford, University of Melbourne, to name a few) that in turn approached our team for possible collaboration.

Our community has become accustomed to a new, more collaborative and open way of interacting. In a recent survey of Open Proposals users across seven innovation opportunities, users were asked how the OP process affected their proposals and 65% of respondents said their proposal improved as a result of the process. 70% of respondents reported that they interacted with someone they had not worked with before while 21% of respondents found a potential collaborator(s) and/or advisor(s).

## HOW DO WE MEASURE SUCCESS ON THE FORUMS?

We use Google Analytics to tell us the number of hits to the forum site. The platform provides summary statistics for every discussion forum that shows # of proposals submitted, # of comments, likes and followers.



Figure 3. Google Analytics Summary: OP Usage April'13- April'16

End users who participated in forums are also surveyed annually and survey results are provided to forum managers and used by OP staff for product development and planning. We monitor repeat customers and new customers as well as interest beyond UCSF. Below are quotes from some of our users in recent OP survey as well as overall satisfaction rating.

### Selected User Feedback

- \* "I just really liked the open forum. As a member of the UCSF community [it] makes me feel like I can actually make change"
- \* [Open Proposals] "allows people the flexibility to participate according to their schedule and to view and comment on the opinions and ideas of their colleagues. The DOM [Department of Medicine] is so large that it is one of the few ways we can get large groups of faculty to participate"
- \* "The system was easy to use and quite clear. Excellent work"
- \* "User friendly interface great way to learn about other ideas, receive public comments on your own and others' ideas"
- \* "Loved the diverse ideas and discourse"
- \* "Helped to have all proposals in one place, and easy process to add comments"
- \* "It was great to receive feedback; I enjoyed giving others feedback and reading the range of interesting projects that were being submitted"

### Overall Satisfaction with Open Proposals (from 2015 user survey)

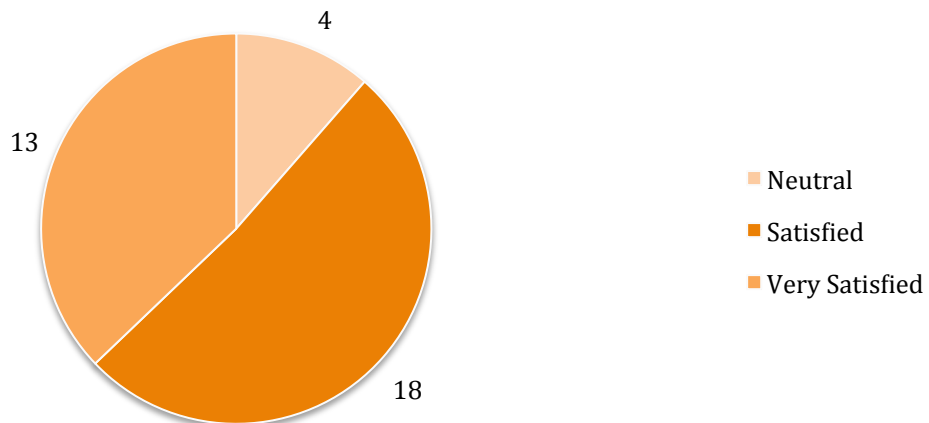


Figure 4. Overall Satisfaction with Open Proposals measured by 2015 User Survey; N=35.

### LINKS AND REFERENCES

1. UCSF Open Proposals Website  
<https://open-proposals.ucsf.edu/>
2. Some of the most remarkable UCSF forums
  - a. Department of Medicine Tech Challenge  
<https://open-proposals.ucsf.edu/dom-tech-challenge/2016>
  - b. Caring Wisely – UCSF Medical Center – Initiative to Reduce Costs of Care  
<https://open-proposals.ucsf.edu/caring-wisely-2015-projects-contest>
  - c. Innovations Funding for Education  
<https://open-proposals.ucsf.edu/edinnovations/2016>
3. Implementation of Open Proposals for PCORI (Patient Centered Research Outcomes Institute) Community Engaged Network for All – Mosaic Project  
<http://mosaic.ucsf.edu/celiac-research>
4. Article on Open Proposals in the Clinical and Translational Science journal  
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4006293/>