

Crowdfunding: A Potentially Effective Channel to Raise Money for Lignocellulosic Research

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It is becoming more and more important for researchers to find financing for their research projects and studies. Traditionally, they rely on grants and universities to fund sustained academic research progress. With grants becoming increasingly hard to secure, researchers have to turn to other sources of finance to support their research. Crowdfunding has provided a potentially effective financial tool to raise money from the public for their work. Unlike the traditional peer-review grant systems, which often have a complicated and time-consuming application and evaluation process, the crowdfunding process is generally simple and fast, and it has a high fundraising efficiency. Besides raising money to conduct research, crowdfunding also provides an opportunity for public outreach and science education engendered by this type of funding model. This editorial will give a brief discussion on crowdfunding and its use in lignocellulosic research.

Keywords: Crowdfunding; Raise money; Lignocellulosic research

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Crowdfunding: A New Financial Tool to Raise Fund for Scientific Research

For a scientific researcher, finding financial support has become an indispensable part of his or her research life. Researchers spend more and more time and energy in fund and grant application processes to secure financing for their research projects and studies. To some extent, what researchers can study largely depends on what they are able to get funding for. Traditionally, researchers have received financial support for their sustained academic research progress from the governments, enterprises, and non-profit funding organizations. At present, the funds and grants from these traditional funding agencies are becoming increasingly difficult to secure, and researchers have to find new channels to raise money for their research work. Crowdfunding has provided a potentially effective financial tool to solve this problem.

Crowdfunding is an internet-based fundraising approach in which researchers solicit contributions from the general public for their research projects, using specialized crowdfunding websites. Each transaction involves the crowdfunder, the investor, and the crowdfunding platform. Compared with the traditional peer-review grant systems, crowdfunding is a completely new fundraising model, and it has several key advantages:

1) Unlike the traditional peer-review grant application, which often has high requirements on the research content, research basis, qualification of researchers, and feasibility of the project, it has no special requirements with respect to the researcher's

experience and the fundraising project. Crowdfunding has opened the door for researchers who would not be able to participate in the traditional grant funding mechanism;

2) It has a high fundraising efficiency without the complicated and time-consuming application and evaluation process;

3) The raised funds can be used for the research project according to its progress without special restrictions;

4) Apart from raising funds, it provides an opportunity for public outreach and science education to clear up the mistrust and misunderstanding of science among the general public.

Due to these advantages, researchers are increasingly considering crowdfunding to support their work. In recent years, some researchers have used crowdfunding as both a supplement and a substitute to traditional grants.

Use of Crowdfunding for Lignocellulosic Research

Lignocellulosic research focuses on the science and engineering of lignocellulosic materials, chemicals, and their applications for new uses and new capabilities. It is of great importance in improving the environment and ecology around us. It is also closely related to our daily life and can easily arouse widespread interest among the general public. This means that lignocellulosic research projects have potential to attract large numbers of fans and easily succeed in crowdfunding. In order to improve one's chances of successfully crowdfunding for a lignocellulosic research project, some nuts and bolts of running a crowdfunding campaign are as follows:

1) Choosing an appropriate crowdfunding platform: In order to reach fundraising goals, it is particularly critical to choose an appropriate crowdfunding platform. Different crowdfunding platforms have different fundraising models and expenses. There are quite a lot of crowdfunding platforms, such as Experiment, Petridish, Kickstarter, Indiegogo and SciFund Challenge, which can be chosen to launch a crowdfunding campaign for a lignocellulosic research project;

2) Choosing a suitable fundraising model: Based on different crowdfunding platforms, there are two fundraising models from which to choose. These are the "all-or-nothing" and "keep what you raise" models. In general, the crowdfunding campaign lasts one to two months;

3) Pitching the project to public: For a successful crowdfunding campaign, it is necessary to establish a large number of fans and translate them into the investors. In order to arouse the public interest to our project, it is important to outline one's research as simply as possible, keep jargon to a minimum, use the video and photographs, and employ creativity and passion during marketing of the project. The crowdfunding platform, social media outlets (*e.g.*, Twitter, Facebook, blogs, QQ, Weixin) and traditional media all can be used to market our project and attract more fans to support the research.

4) Rewarding the investors: For a lignocellulosic research project, the most common rewards to the investors include "early access to news about research progress and findings, research-related souvenirs, acknowledgements in published journals and naming rights for new discoveries";

5) Keeping long-term relationships with the investors: After completing the first round of crowdfunding, it will be greatly helpful in the next round of a fundraising campaign to maintain good relationships with the investors and foster new fans.

At present, use of the crowdfunding for lignocellulosic research is still in its infancy. With the traditional funding sources for lignocellulosic research contracting, crowdfunding is becoming increasingly attractive to lignocellulosic researchers. Some of them have taken the crowdfunding as a supplement or a substitute to traditional grants. In either case, crowdfunding provides a new fundraising model to support the research. If you are facing difficulty in getting funds from traditional funding sources and are interested in crowdfunding, you can initiate a crowdfunding campaign today.

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