



БОЛОВСРОЛ,  
СОЁЛ, ШИНЖЛЭХ УХААН,  
СПОРТЫН ЯАМ



## **Mongolia: Higher Education Reform Project**

**ADB Project No. 43007-023**

Project Code: HERP MON Loan No. 2766

### **Consulting Services for Higher Education Reform**

# **Merit Based Scholarships and Alternative Funding Sources for Mongolian HEIs**

## **Governance Team**

Dr. S. Peter Horn, Ph.D., LL.M.  
Team Leader

Dr. J. Sukhbaatar, Ph.D.  
Deputy Team Leader



**PT.TRANS INTRA ASIA**

**November 2016  
Ulaanbaatar**



## Table of Contents

<b>1.0</b>	<b>Merit Based Scholarships</b>	<b>1</b>
1.1	Athletic Scholarships	1
1.2	Eligibility Requirements	2
1.3	Application Dates	2
1.4	Thank You Letter Requirement	2
<b>2.0</b>	<b>Funding Sources for Higher Education</b>	<b>3</b>
2.1	Financial Aid and HEIs	5
2.2	Creative Funding Strategies for Undergraduate Research	6
2.3	Leveraging Work-Study Programs to Support Undergraduate Research	7
2.4	Implementing a Successful Undergraduate Research Assistantships Program	9
2.5	The Need for Committed Faculty Mentors	10
2.6	Crowdfunding Undergraduate Research Projects	10

## List of Figures

<b>Figure 1:</b>	<b>Share of Revenue of Public 4 Year American Institutions</b>	<b>3</b>
<b>Figure 2:</b>	<b>Aggregate Spending in the US On Undergraduate Education (2009-2010)</b>	<b>4</b>
<b>Figure 3:</b>	<b>Sources of Financial Aid for Undergraduate Students in the USA</b>	<b>5</b>
<b>Figure 4:</b>	<b>Scaffolding of Students as Scholars Initiative</b>	<b>6</b>

## **1.1 Merit Based Scholarships**

Higher education culture intrinsically recognizes excellence; helping high achievers realize their dreams through a variety of merit scholarships. Merit based scholarships provide financial assistance to applicants on the basis of outstanding academic and extracurricular achievement, demonstrated leadership, and commitment to their communities. Merit awards should be determined by a Faculty Committee and the Office of Admissions without consideration of financial need, and should be guaranteed for four years of undergraduate study. All students should automatically be considered for merit scholarships; no additional merit scholarship application should be required. Separate funding mechanisms for merit awards may however be established for incoming first year freshman students, continuing students, graduate students, and adult students.

Most merit-based scholarships were traditionally awarded for academics, some for specific areas of study. But since not all accomplishments can be measured in grades and test scores; HEIs are now giving recognition awards for outstanding athletes, performers, artists, and leaders. All should be renewable for four years of study when certain criteria are met. For a variety of reasons, some scholarships should require a nomination process but the majority should be initiated by application. A small number of scholarships recipients should be selected directly from the quality of their academic records with no need for any additional submission. Merit based scholarships recipients should also be encouraged to review the requirements of needs based aid if they may need aid beyond the merit award. The percentage of incoming students who receive non-needs based aid will vary with each HEI but traditionally in the US have been as high as 60%.

Institutional merit-based scholarships are generally given in honor of the institution's leadership; i.e., President's Scholarship(s), Board of Trustees Scholarship(s), University Senate Scholarship(s), Alumni Association Scholarship(s), etc. In addition, merit-based scholarships may also be awarded in the name of the funding donor. Each will probably have different qualifying criteria.

## **1.2 Athletic Scholarships**

Athletic awards are also a mechanism for recognizing excellence. If institutions are not currently recognizing athletic accomplishments, consideration should be given to implementing should a program. This can be an additional source of funds from supporters of athletic activities – both from private individuals as well as amateur and professional athletic organizations. Athletic scholarship programs should provide for the awarding of a number of athletic scholarship each year to several outstanding

undergraduate athletes with strong academic potential. Awards could range from partial to full tuition scholarships.

Athletic faculty or coaches should review the pool of potential scholars and select the students to be offered athletic scholarship awards. For Mongolian HEIs athletic awards could be offered in a variety of sports, such as: archery, wrestling, equestrian, basketball, ice hockey, football, skiing, swimming and track.

### **1.3 Eligibility Requirements**

Merit-based scholarship programs should require that applications be enrolled full time and maintain a minimum GPA. In addition to Freshman students, Merit awards should also be made available to transfer students. Enrolled students who did not receive a merit award as an entering student should also be consider for subsequent year merit awards. Merit awards should be renewed automatically, for up to three additional years of undergraduate study, provided that the student continues to meet the scholarship qualification requirements. Eligibility for institutional, merit based scholarship renewal should be checked at the end of the spring semester. A student who falls short of meeting the requirements for the renewal of his or her scholarship should be required to meet with a financial aid counselor. This student should be allowed to make up deficiencies in a summer semester, if available. However, at the start of the fall semester, if the student fails to meet all scholarship renewal criteria, the award should be cancelled and no longer made available to that student.

### **1.4 Application Dates**

All merit based scholarship awards should have application deadlines which are strictly enforced. Honor awards, which required more time to validate and process may have application deadlines around April 1 of each year; while other merit based awards may have applications deadlines around August 1. Acceptance deadlines should also be established and enforced.

### **1.5 Thank You Letter Requirement**

Merit based scholarship recipients should be required to submit a thank you letter to their scholarship donor(s) which should:

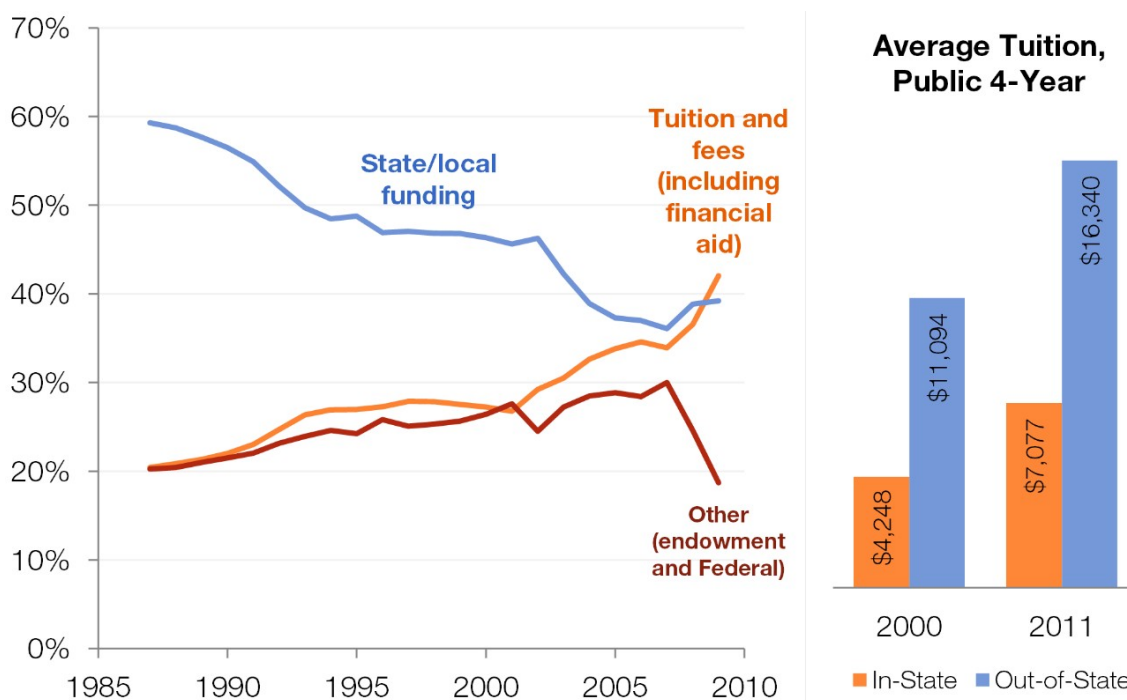
- Use a formal salutation including the appropriate prefixes and suffixes.
- Include a personal thank you referring to the specific scholarship received.
- Include information about the recipient's interests and activities, what the scholarship means to them, and their educational and career goals.

These letters are greatly appreciated by the donors. Institutions have found that student thank you letters have a great influence on the future generosity of scholarship donors

## 2.1 Funding Sources for Higher Education

Higher education is a critical mechanism for socioeconomic advancement among aspiring individuals and an important driver of economic mobility in our society. In addition, a well-educated workforce is vital to Mongolia’s future economic growth. Domestic and international companies and businesses require a highly skilled workforce to meet the demands of today’s increasingly competitive global economy. To meet this demand, the government of Mongolia facilitates the development of higher education programs through a complex public-private market arrangement, with many different individuals and institutions participating. As postsecondary education has become increasingly more important in developing the lives of Mongolian citizens, there have also been growing concerns about the cost and affordability of higher education.

**Figure 1: Share of Revenue of Public 4 Year American Institutions<sup>1</sup>**



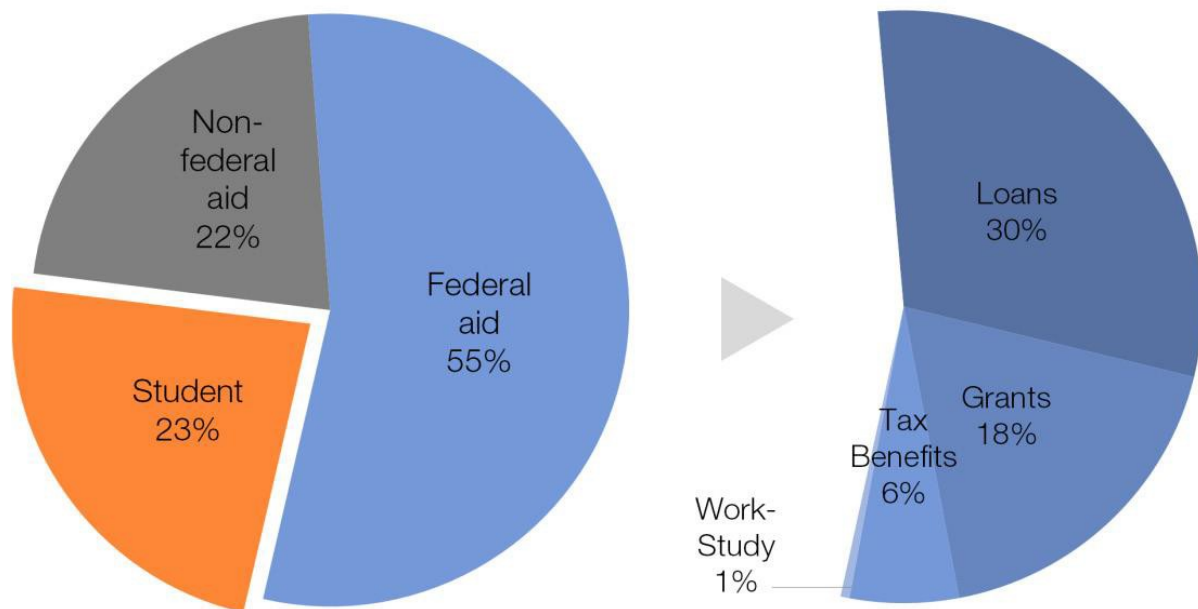
The economic returns to higher education remain high. And high quality, affordable higher education programs provide a pathway for individual economic mobility. While

<sup>1</sup> Based on data from IPEDS and the Delta Cost Project. Total revenue decreased in recent years in part due to falling endowments. As a result, even though government support became less generous during this period, it increased slightly as a proportion of total revenues. The right panel is measured in 2011 dollars.

public institutions educate the vast majority of a nation’s students, private, for-profit schools are growing the most rapidly. Historically, society provided a significant subsidy to higher education students through the widespread availability of inexpensive public higher education programs. However, over the past several decades, there has been a substantial shift in the overall funding of higher education worldwide from state assistance, in the forms of grants and subsidies, to increased tuition paid by students. Public and private institutions have become increasingly reliant on student tuition as a primary source of funding. This has put a greater onus on students and their families to fund higher education.

Figure 1 above highlights this alarming trend in funding American institutions of higher education, which is also indicative of what is happening internationally. As a result, both public and private HEIs are becoming increasingly aware that they must develop funding mechanisms to help students and their families cover the cost of higher education. Figure 2 below shows the aggregate spending on undergraduate education in the US for 2009-2010.

**Figure 2: Aggregate Spending in the US On Undergraduate Education (2009-2010)<sup>2</sup>**

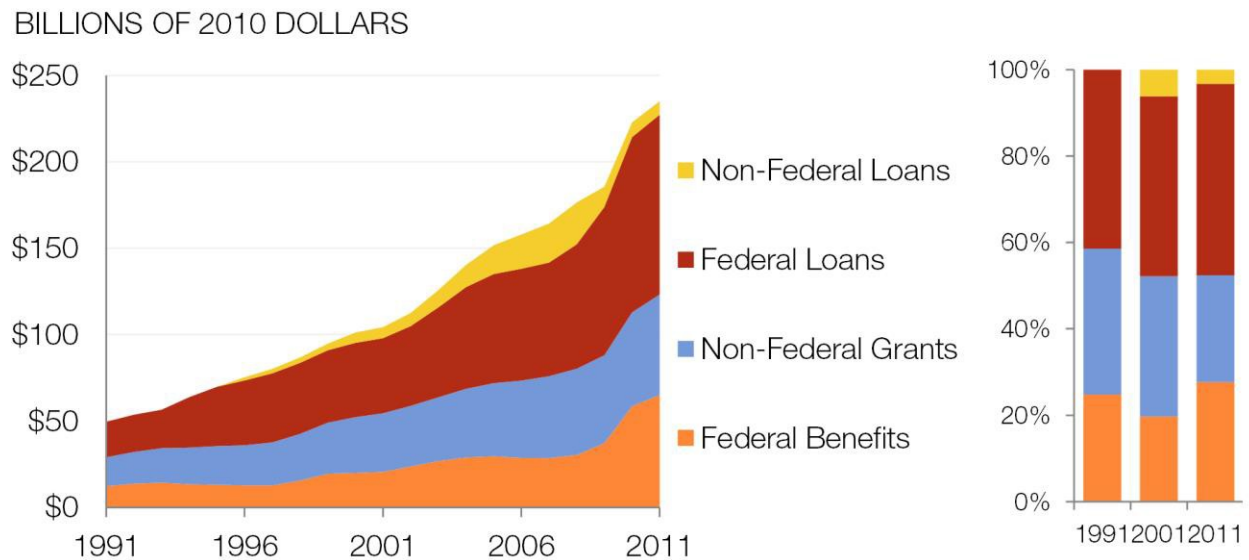


<sup>2</sup> From Table 1A of Trends in Student Aid 2012 (Baum & Payea, 2012). Average tuition plus room and board for full-time students in 2009-2010 was \$17,464. There were 13 million (full-time equivalent) undergraduates in 2009-2010, so estimated aggregate spending for undergraduate education was \$227 billion.

## 2.2 Financial Aid and HEIs

The combat the rising cost of higher education tuition and decreased government budgets for education, HEIs internationally have been forced to developed financial aid policies for students. Sources of this financial aid can include grants, work-study programs, loans, scholarships, or tax benefits. Figure 3 below shows the increasing trend in the amount of financial aid provided to undergraduate students in the US.

**Figure 3: Sources of Financial Aid for Undergraduate Students in the USA<sup>3</sup>**



Grants from various sources are funds for college that do not have to be repaid after graduation. Work-study programs pay students for part-time work while they are enrolled in school. Unlike grants, loans are liabilities accumulated by students to fund their own education. While grants can be thought of as an intergenerational transfer in the sense that current taxpayers or private foundations and charities are subsidizing the current student's education, loans can be thought of as a generation financing its own education through pledged future earnings. Loans have to be paid back after graduation. Tax-based incentives for higher education have become an increasingly important component of the overall financial aid landscape. Unlike grants and loans, education credits and deductions are received after taxes are filed, not when schooling expenses are due.

<sup>3</sup> From Figure 1 of Trends in Student Aid 2012 (Baum & Payea, 2012). Rightmost graph shows financial aid shares as a percentage of that year's total aid. "Federal benefits" includes federal grants, work-study, and tax benefits. State and institutional grants are combined under "non-federal grants." Includes financial aid to both undergraduates and graduate students.

## **2.3 Creative Funding Strategies for Undergraduate Research**

For undergraduate students, involvement in a faculty-mentored research program concerned with authentic, real-world questions, issues, or ideas can be a transformative experience. Given that fact, international HEIs have developed a range of programs to facilitate the engagement of these students in scholarly research and creative activities, usually via an academic unit such as The Office of Undergraduate Research. This scholarly research and creative work can encompass an array of academic activities, the mix of which varies by disciplinary area. In the biological sciences, where understanding the natural world is the focus, undergraduates can work in the laboratory and/or in the field, and generally conduct experiments or other data-gathering activities, followed by statistical analysis of results and the preparation of research results and conclusions for public presentation. In contrast, in engineering, where the primary goal is creation of “cost-effective solutions to practical problems by applying scientific knowledge to building things” student work could involve the development and prototyping of a solution, with the laboratory being used as a locale to gather experimental data needed for the validation and improvement of the solution, prior to communicating project outcomes to relevant stakeholders.

Finally, in the social sciences, where understanding the human experience is the focus, students could engage in a wide range of qualitative and quantitative methods of data gathering, from conducting surveys to performing database searches, prior to the analysis of their research findings and the formulation of potential societal implications or recommendations for dissemination.

To support the undergraduate research, HEIs have been forced to explore a number of nontraditional mechanisms for gaining external support – such as cultivating partnerships with industry to support labs, leveraging interest in special events to raise funds, and engaging in contract work to provide students with practical experiences. Cultivating industry partnerships offers the advantage of Involving students in academic work that embodies scientific integrity while meeting specific real world needs. This is a tremendous learning opportunity for everyone concerned. But, there is generally a need to clarify for all parties the expectations about intellectual property and, where appropriate, include nondisclosure agreements in project requirements.

It is also important to clarify circumstances under in which external sponsors may have access to use institutional facilities, as well as when and how faculty members and students will have access to the facilities of sponsors. In short, agreements between HEIs and industry must spell out as clearly as possible the rights and responsibilities of all parties to promote a productive partnership.



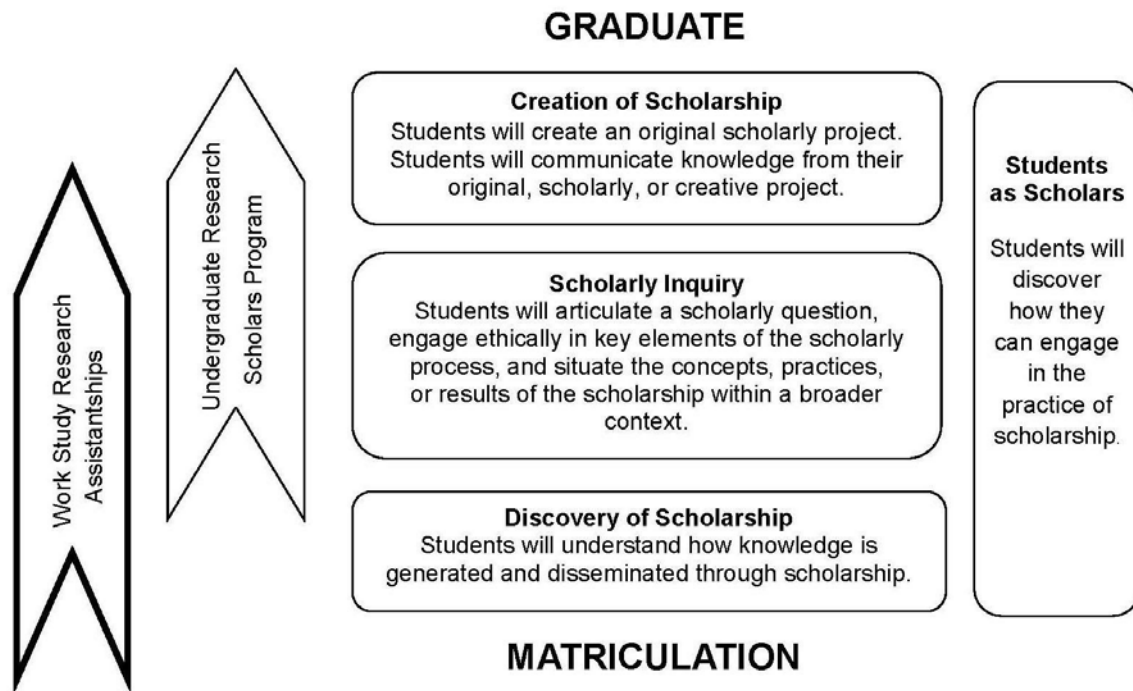
To facilitate these corporate alliances, HEIs usually identify an internal administrative unit charged with this responsibility – for example an “Office of Corporate and Foundation Relations” which is charged with identifying and developing non-traditional fundraising efforts. This office should encourage a wide-range of collaborations that could include traditional philanthropic giving opportunities (such as for scholarships and capital improvements) and also assist with research alliances. Personnel should strive to identify partnership opportunities and introducing corporate and foundation personnel to university faculty members and leaders. Also, nothing replaces the personal knowledge and networks of faculty members. Their engagement with alumni, with business firms and agencies, with trends in their fields, and with the kinds of learning projects that benefit the institution’s students are the factors that most guarantee successful support for students. These interactions with faculty and supporters should be coordinated by this administrative unit charged with fundraising.

#### **2.4 Leveraging Work-Study Programs to Support Undergraduate Research**

Institutional work study programs should be designed to give undergraduate students an opportunity to participate in research and creative activities within and beyond the classroom. To expand support to more students, HEIs should be innovative in seeking funding sources for undergraduate research and expanding opportunities for students to be introduced to the concept of scholarship and to learn the research or scholarly methods applicable in their fields while keeping them engaged on campus. Faculty members could be given “free” research assistance, with the understanding that they involve students in research discussions and regularly evaluate them.

A successful work-study program could transform the undergraduate experience by connecting students to the research and Mission of the university and to faculty members. It could support individual research opportunities, support student travel to report on their research, promote curricular integration of research projects, and sponsor celebrations of undergraduate research. Under such a program, students would be exposed to increasing levels of engagement, beginning with the discovery of scholarship, moving through scholarly inquiry, and culminating with the creation of a scholarly or creative project. Figure 3 below is a graphical representation of the undergraduate student research process.

**Figure 4: Scaffolding of Students as Scholars Initiative**



In their report, *Developing Undergraduate Research and Inquiry*, Healey and Jenkins (2009) suggest that some form of research exposure should be made available to all undergraduate students and that special experiential opportunities be offered to select students. Research demonstrates that involving undergraduates in scholarship better prepares them for their career goals and advanced study<sup>4</sup>.

Undergraduate Research Programs at the University of Michigan and University of Delaware in the USA have shown positive retention and academic achievement for students participating in undergraduate research for either academic credit or for work-study pay. Other universities (including Harvard University, Northwestern University, the University of Virginia, and the University of Southern Florida) offer students the opportunity to use work-study to support research projects, and have specific programs to recruit, support, and assess their research-focused work-study programs.

Their research assistantships expanded opportunities for students to be introduced to the concept of scholarship at lower levels of engagement (discovery and inquiry); to learn the

<sup>4</sup> Hart Research Associates 2015, <http://hartresearch.com/>

research or scholarly methods in their fields; and to keep them engaged on campus. They provided benefits for both students and faculty members in that:

1. Students were given the opportunity to be involved in the research environment and gain insight into the process of research while learning skills that make them more successful as students, and later as professionals, and
2. At no cost to the faculty member or department, faculty were given “free” research assistance, with the understanding that they fully involve students in their research teams and regularly evaluate them.

Students eligible for work-study programs are allotted an award in their financial aid packet for the academic year that may only be earned through employment on campus or in approved positions off-campus.

## **2.5 Implementing a Successful Undergraduate Research Assistantships Program**

The following ideas are offered as guidelines for the development and implementation of a successful undergraduate research assistantship program in Mongolian HEIs:

1. Work-study programs should be implemented locally, and may vary by university and discipline. A close relationship should be established with the Financial Aid office as their expertise could be very useful in implementing a successful program.
2. Faculty and students are generally more inclined to be involved (and recruit others) when the process is easy. Institutions should identify a single point-of-contact in the undergraduate research office who can handle the administrative aspects and mediate among other campus units, including those dealing with financial aid and human resources.
3. Faculty members traditionally appreciate being able to hire students they believe fit their positions. Institutions should pre-screen applications for students’ eligibility for work-study and other basic qualifications, and then they should allow faculty to interview and select their own research assistants.
4. For some students, their Research Assistantship position may prove to be their first work experience, and while they may be intellectually well-prepared for the work itself, they may be unprepared for the “work culture.” This presents opportunity for institutions to provide instruction on professionalism in both an academic and work environment, which can come in the form of one-on-one meetings with the work-study coordinator, an orientation session, and/or a

handbook. Institutions can use these as opportunities to discuss professional attire, timeliness, and communication with colleagues and faculty. Developing these skills in students will complement their academic learning and better prepare them for the employment market.

5. Institutions may find that research assistants need some extra training and support before they can be productive. They should help faculty find or provide the training needed (on health and safety issues, work with human subjects, software and hardware, etc.). Students should be paid for the hours they devote to this training.
6. As with any other job, occasionally a research assistant will have to be terminated. Institutions should enforce expectations for students to maintain the professionalism of the program.
7. After the initial exposure to research at an introductory level, students usually begin to look for additional opportunities to participate in projects. Institutions should regularly communicate with them about other on-campus research programs, and encourage them to apply for off-campus summer research opportunities.

## **2.6 The Need for Committed Faculty Mentors**

Success with such research assistantships ultimately normally relies on the relationship between the student and the faculty mentor. Faculty members may need guidance about their roles in the endeavor so research staff members should work one-on-one with faculty in writing a position description that is accessible to undergraduate students and descriptive of the activities expected. Writing a student-focused description helps faculty define the student research activities and the capacity of students to do the work, and helps ensure that the experience will be valuable for both the student and mentor.

A faculty-orientation session should be held each semester to set expectations about the roles of the research assistants and their mentors, including important but not entirely obvious advice about incorporating their research assistants into their research teams (including paying them for attending lab/team meetings and training), regular meetings with research assistants, communicating goals for the research project, and setting clear expectations about work hours and locations

## **2.7 Crowdfunding Undergraduate Research Projects**

Undergraduate research costs money. Supplies, travel, conference presentations, and student stipends have to be paid for somehow. Internal institutional funds may not always be available to fund undergraduate research. Alternatively, there are grants; but this

involves long, hard, and the too-often fruitless process of writing grant proposals. Perhaps, then, it is no surprise that the alternative funding mechanism “crowdfunding” has been gaining in popularity. According to Wikipedia, crowdfunding “is the practice of funding a project or venture by raising monetary contributions from a large number of people, typically via the internet<sup>5</sup>.” Made popular by sites such as Kickstarter and Indegogo, crowdfunding<sup>6</sup> has raised millions of dollars for start-up companies, charities, artists, scientists, and a host of others - even including college students raising funds for college tuition. With limitations on institutional funds and increasing competition for funding dollars, crowdfunding has become an attractive mechanism for funding academic research, particularly for projects requiring small amounts quickly.

### **2.6.1 Crowdfunding Platforms**

Crowdfunding, just like any fundraising activity, asks people to part with their hard-earned money, which is never an easy task. As an initial first step, it is important to pick an appropriate electronic platform<sup>7</sup>. Platforms appropriate for undergraduate research tend to operate on two basic models: all-or-nothing (AON) or keep-it-all (KIA). AON campaigns require a stated financial target. If the target is reached, all the money donated (including any excess amount) is collected. If the target is not reached, however, no money is collected, and credit cards are not charged. For these types of campaigns, it is advisable to set the fund-raising target as low as possible. KIA campaigns, as the name implies, allow you to keep any money donated regardless of the amount eventually raised.

A disadvantage of KIA platforms is that donors are likely to question what will happen to the funds raised if they are not adequate to complete the project. Also, be aware that platforms typically charge a fee of from three to nine percent of the amount raised for successful campaigns, in addition to a credit card processing fee (usually 2.9 percent, plus 30 cents per transaction). There are numerous platforms available for crowdfunding. Those appropriate for undergraduate research can be divided into four groups:

### **2.6.2 Big-Name Sites** - Some of the larger sites include:

- Kickstarter ([www.kickstarter.com](http://www.kickstarter.com)),
- Indegogo ([www.indegogo.com](http://www.indegogo.com)),
- GoFundMe ([www.gofundme.com](http://www.gofundme.com)), and
- Rockethub ([www.rockethub.com](http://www.rockethub.com)).

---

<sup>5</sup> <https://en.wikipedia.org/wiki/Crowdfunding>

<sup>6</sup> <http://www.crowdfunding.com/>

<sup>7</sup> [https://www.researchgate.net/publication/286250051\\_Crowdfunding\\_Undergraduate\\_Research\\_Projects](https://www.researchgate.net/publication/286250051_Crowdfunding_Undergraduate_Research_Projects)

The main advantage of posting to a larger site is greater site traffic and the potential to attract a larger number of donors. With sites continually popping up and disappearing, there is an incentive to use a well-established site. While these sites contain campaigns involving a wide diversity of topics, they can have definite flavors. For example, Kickstarter has gained a reputation as a site for launching new products and businesses, while GoFundMe is used more for charitable causes.

**2.6.3 Targeted Sites** - In addition to the big-name sites, there are some that are targeted at specific topics. For example, Experiment ([www.experiment.com](http://www.experiment.com)) and Petridish ([www.petridish.org](http://www.petridish.org)) are both well-established sites focusing on scientific research. Crowd4art ([www.crowd4art.com](http://www.crowd4art.com)) is dedicated to the arts, and WorthWild ([www.worthwild.com](http://www.worthwild.com)) concentrates on environmental projects. There are many other targeted sites. Their advantage is in attracting a like-minded audience, but be careful of the less well established sites with a poor track record of successful campaigns. They may not exist for long. Some sites may post statistics to help you make a decision. For example, Experiment claims over 800 launched projects since 2012 with a success rate of close to 45 percent.

**2.6.4 Institutional Sites** - A number of colleges and universities have set up their own crowdfunding platforms, typically to solicit funds for projects originating in their own institutions. For example, the following universities have such platforms:

- The Marquette University (<http://www.marquette.edu/crowdfunding/>)
- The University of Virginia (<https://uva.useed.net/>)
- Oklahoma State University ([www.philanthoPete.org](http://www.philanthoPete.org))

## **2.6.5 Crowdfunding Pros and Cons**

There are some particularities concerning crowdfunding that HEIs should consider.

**2.6.5.1 Positive Lessons** - Crowdfunding campaigns are quick and easy to set up and can bridge the financial gap between institutional funds and grants. Grant applications can be extremely time-consuming and complex to produce, and crowdfunding campaigns are significantly easier to put together. Crowdfunding does not replace the need for grants, but sometimes seeking grants just doesn't make sense. If you are looking for a relatively small amount of money for a particular project in the short-term (as is typical for undergraduate research), spending a lot of time writing a complex application that may take months to go through the review process and then have a low chance of success is not a sensible approach. Further, institutional funds may well be insufficient or unavailable. Thus in many situations, crowdfunding may be the only viable method to fund an undergraduate research project.

**2.6.5.2 Negative Lessons** – Unfortunately, there is a generally complete lack of oversight of crowdfunding campaigns. Seldom do sites check to see if projects are legitimate; nor do they generally evaluate the quality of the campaign or check to see if the credentials or facilities to perform the work of those trying to raise the funds are adequate. Another drawback is the fee. In addition to taking valuable funds away from your project, institutions may be reluctant to use a service that is making a profit for research conducted at a nonprofit organization. The institution may well have other concerns, depending on whether it treats the funds as a grant or as a series of donations. Not all platforms are set up to allow tax-exempt donations.

**2.6.6 Conducting a Successful Campaign** - Many campaigns are launched on crowdfunding sites with the expectation that money will just start flowing in. Unfortunately, it isn't that simple, and the majority of campaigns are unsuccessful. The advantage compared to grants, though, is that you have more control over whether your project receives funding after your proposal has been posted on a crowdfunding site. So what can you do to push the balance in your favor? The following strategies may help:

- **Develop an Engaging Idea** - Just like a grant proposal, your idea needs to be worthwhile, achievable, and planned well. Perhaps unlike a grant, it should also be understandable and attractive to the general public. It is no coincidence that successful campaigns often concentrate on accessible topics. Anything involving animals seems to be particularly appealing. If you want members of the general public to donate, they need to easily understand what you want to do and what the benefits might be.
- **Be Prepared to Work Hard** – You may find that most funds came from family, friends, colleagues, and other people personally contacted. This is fundraising, and fundraising is hard work. After all, why would a complete stranger give his or her hard-earned money to your campaign? Email friends and family. Contact organizations with which you are involved. Send a mass email to people throughout your institution. Promote the project repeatedly on your social media accounts and make sure your students are also doing so.
- **Don't be greedy** - An all-or-nothing crowdfunding platform means just that: if you don't reach your target, you get nothing. You do, however, keep additional funds raised beyond your targeted amount. Thus, I would suggest setting your sights low. What is the minimum amount that will allow you to do the research? Alternatively, use a platform with a keep-it-all model, although donors could legitimately question what you plan to do with the money if you don't raise enough to perform the project.

- **Develop a community** - Ideally, before your campaign is even accepting donations, you should have started raising public awareness through publicizing your project. Set up and regularly update a Facebook page, website, twitter account, blog, etc. You typically need a large following to raise even a small amount of money.
- **Think About Timing** - Starting a campaign that includes a holiday period is probably not the best idea. Similarly, if you expect most of your donations to come from students, faculty, and staff at your institution, it may be wise to avoid the summer months.
- **Make a Video** - Human beings are visually oriented. To attract people who may be viewing dozens of proposals, you will need to have visually appealing photos and videos. Videos are particularly effective but keep them short (a couple of minutes), informative, and attractive. Five minutes of watching a professor talking in front of a blackboard will probably not attract many donors. If you have access to professional photographers and videographers, make use of them.
- **Offer rewards** - Many sites have a reward system, such as “Donate \$50 and get a t-shirt.” Think about what would be attractive to your audience and at what funding level. T-shirts and other gifts are popular, but they cost money, leaving less for your project. For research projects, maybe a copy of any previous publication or report on the general topic, a personal tour of your facilities, or a presentation by the President might attract funds from potential donors.
- **Donate to Your Own Campaign** - If you don't, why should anyone else?

As noted above, there are clear advantages and a huge potential for crowdfunding as a mechanism to support undergraduate research; there are also significant issues to consider. While there is a demand for such a model, HEIs have mixed reactions as to its suitability for academic work. But, crowdfunding appears to be here to stay as an alternative academic funding mechanism. It's not for everyone or every situation and it certainly doesn't replace the need for grants or institutional support, but it is an option that undergraduate research advisors should be aware of and consider.



## References

1. **2015 – 2016 Scholarship Guide**, The University of Denver, 2199 S. University Blvd., Denver, CO 80208, USA. <http://www.ucdenver.edu/student-services/resources/CostsAndFinancing/FASO/Learn/FAQs/Types/Scholarships/Documents/ScholGuide.pdf>
2. **2016 – 2017 Scholarship Programs**, University of Memphis, 3720 Alumni Ave, Memphis, TN 38152, USA. [http://www.memphis.edu/scholarships/pdfs/2015\\_2016\\_comprehensiveacademic\\_scholarshipinformation.pdf](http://www.memphis.edu/scholarships/pdfs/2015_2016_comprehensiveacademic_scholarshipinformation.pdf)
3. **Beyond Grants - Creative Funding Sources for Undergraduate Research**, Council on Undergraduate Research Quarterly, Winter 2015, Volume 36, Number 2. [https://www.uwlax.edu/uploadedFiles/Offices/Financial\\_aid/Quarterly.pdf](https://www.uwlax.edu/uploadedFiles/Offices/Financial_aid/Quarterly.pdf)
4. Conraths, Bernadette; Smidt, Hanne; **The Funding of University Based Research and Innovation in Europe**, European University Association, 2005. [http://www.eua.be/eua/jsp/en/upload/Financing\\_research\\_study.1113839794855.pdf](http://www.eua.be/eua/jsp/en/upload/Financing_research_study.1113839794855.pdf)
5. **Diversified Funding Streams for University-Based Research**, European Commission, Directorate-General for Research, November 2008. [http://ec.europa.eu/invest-in-research/pdf/download\\_en/eg\\_external\\_research\\_funding\\_final\\_repor\\_with\\_cover.pdf](http://ec.europa.eu/invest-in-research/pdf/download_en/eg_external_research_funding_final_repor_with_cover.pdf)
6. Dominicis, Laura de; Pérez, Susana Elena; Fernández-Zubieta, Ana; **European University Funding and Financial Autonomy**, JRC Scientific and Technical Reports, ISBN 978-92-79-19716-1, European Union, 2011. <http://ftp.jrc.es/EURdoc/JRC63682.pdf>
7. **Financial Assistance – Guide to Merit Award, 2016-2018**, Boston University, One Silber Way, Boston, MA 02215, USA. <http://www.bu.edu/finaid/>  
**Freshman Scholarships for Students Entering in 2016**, The University of Oklahoma, 660 Parrington Oval, Norman, OK 73019-0390, USA. <http://www.ou.edu/content/financialaid.html>
8. **Funding Higher Education – A View Across Europe**, European Center for Strategic Management of Universities, Rue Montoyer 31, 1000 Brussels, 2008. [https://www.utwente.nl/bms/cheps/publications/Publications%202010/MODERN\\_Funding\\_Report.pdf](https://www.utwente.nl/bms/cheps/publications/Publications%202010/MODERN_Funding_Report.pdf)

9. **Guide to Searching for Postgraduate Funding**, University of Bath, Claverton Down Rd, Bath BA2 7AY, UK., 2015. <http://www.bath.ac.uk/hss/pdf/guide-to-searching-for-postgraduate-funding.pdf>
10. Hartwig, Lydia; **Funding Systems and Their Effects on Higher Education Systems – Country Study, Germany**, OECD, Bavarian State Institute for Higher Education Research and Planning, 2006. <https://www.oecd.org/germany/38308008.pdf>
11. Manasan, G. Rosario; Revilla, D. Laarni; **Assessment of Sources and Utilization of Funding of State Universities and Colleges**, Philippine Institute for Development Studies, Department of Budget and Management, April 2015. <http://dirp3.pids.gov.ph/websitcems/CDN/PUBLICATIONS/pidsdps1550.pdf>
12. **Merit Scholarship Opportunities at Vanderbilt**, Vanderbilt University, 2201 West End Ave, Nashville, TN 37235, USA. [http://www.vanderbilt.edu/scholarships/files/merit\\_scholarships\\_2016.pdf](http://www.vanderbilt.edu/scholarships/files/merit_scholarships_2016.pdf)
13. **Money Matters – Scholarships and Financial Aid for 2015-16 Academic Year**, University of South Carolina, Columbia, SC 29208, USA. <https://www.sc.edu/admissions/admissionspdfs/moneymatters2014.pdf>
14. **Public Research Universities: Understanding the Financial Model**, American Academy of Arts and Sciences, 136 Irving Street, Cambridge, MA 02138-1996, USA, isbn: 0-87724-107-4, 2016. [https://www.amacad.org/multimedia/pdfs/publications/researchpapersmonographs/PublicResearchUniv\\_FinancialModel.pdf](https://www.amacad.org/multimedia/pdfs/publications/researchpapersmonographs/PublicResearchUniv_FinancialModel.pdf)
15. **Scholarships and Financial Aid**, Texas Christian University, TCU Box 297012, Fort Worth, Texas, 76129. <http://www.admissions.tcu.edu/pdf/scholafa.pdf>
16. **The Economics of Higher Education**, A Report Prepared by the Department of the Treasury with the Department of Education, USA. [https://www.treasury.gov/connect/blog/Documents/20121212\\_Economics%20of%20Higher%20Ed\\_vFINAL.pdf](https://www.treasury.gov/connect/blog/Documents/20121212_Economics%20of%20Higher%20Ed_vFINAL.pdf)
17. **The Ontario University Funding Model in Context**, Higher Education Quality Council of Ontario, June 2015. <http://www.heqco.ca/SiteCollectionDocuments/Contextual%20Background%20to%20the%20Ontario%20University%20Funding%20Formula-English.pdf>

18. **University Funding Model Reform Consultation Paper**, Ontario, Canada, Ministry of Training, Colleges and Universities, 2015.  
[http://www.tcu.gov.on.ca/pepg/audiences/universities/uff/uff\\_ConsultationPaper.pdf](http://www.tcu.gov.on.ca/pepg/audiences/universities/uff/uff_ConsultationPaper.pdf)
19. **University of the Future**, Ernst and Young, Australia, 2012.  
[http://www.ey.com/Publication/vwLUAssets/University\\_of\\_the\\_future/\\$FILE/University\\_of\\_the\\_future\\_2012.pdf](http://www.ey.com/Publication/vwLUAssets/University_of_the_future/$FILE/University_of_the_future_2012.pdf)
20. **University Scholarships**, California State University at Fullerton, 1900, Associated Rd. Fullerton, CA 92831, USA. <http://www.fullerton.edu/financialaid/>