
I PRO 321: ESTABLISHING AN UNDERGRADUATE RESEARCH JOURNAL

Project Plan Fall 2010

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Sapna Desai

Major: Molecular Biochemistry and Biophysics

Minor: Business

Year: Senior

As a student of both the College of Science and Letters and the Stuart School of Business, Sapna hopes to effectively communicate with a variety of professors and identify research projects that could potentially lead to publication. Sapna has good public speaking and Microsoft PowerPoint skills. She would like to gather some experience in Web designing and interacting with faculty. From this IPRO, Sapna is hoping to understand the financial planning leading up to a publication. She will be acting as time-keeper during meetings.



Mike Dvorscak

Major: Computer Science

Year: Senior

Mike has experience in both programming and leadership. Involvement in various organizations, such as the Association for Computing Machinery and Atheist and Allies, has given him strong leadership and communication skills. Mike has experience with Ruby, Ruby on Rails, Java, git, and vim. He would like to use his strong Web development skills in the creation of an undergraduate research journal. He will be acting as a minute-taker.



Scott Mochinski

Major: Psychology

Year: Senior

Scott has been a member of Dr. Tamara Goldman Sher's research lab since January 2010. As a founding member of Psi Alpa, the IIT psychology-based student organization, he keeps up-to-date with various research projects being conducted by Psychology professors. Scott also has significant leadership experience that includes completing the Toastmasters Leadership Program and involvement in the International Brotherhood of Teamsters.



Saul Moreno

Major: Architecture

Year: Senior

Saul is a fifth-year Architecture student with a specialization in landscaping architecture. He is familiar with software such as Adobe Dreamweaver, Illustrator, Photoshop, InDesign, and CAD. Saul would like to improve his speaking and writing skills in this IPRO and will be acting as a minute-taker. In addition, he expects that participation in this IPRO will give him a better understanding as to how publications work. Saul hopes that the skills he obtains in this IPRO will help him in his endeavours.



Sophia Pilipchuk

Major: Biomedical Engineering

Year: Junior

Sophia is involved in on-campus research in the Department of Biomedical Engineering. Having had previous experience as a staff writer, section editor, and Editor-in-Chief of a math and science journal, she hopes to use her knowledge of editorial organization and structure to assist with the development of an undergraduate research publication at IIT. Sophia believes this experience will provide her with the opportunity to build networking skills and learn about the inner workings of an interdisciplinary team.

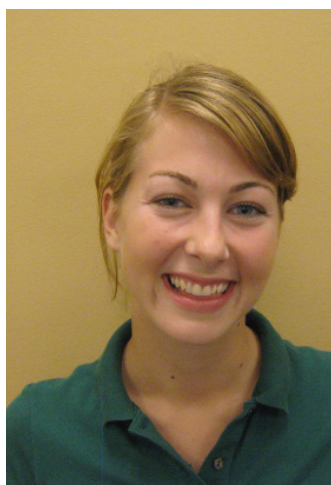


Chris Roberts

Major: Journalism of Technology, Science, and Business

Year: Senior

Chris has been involved in college publications for several years. He has had experience in writing, editing, layout creation, marketing, and management. His work at the IIT Student Government Association has provided him with the opportunity to serve on several special committees and to write proposals. His skills include layout design, desktop publishing, digital photography, interviewing, research, and HTML. He sees his major as being particularly suited for both the technical and creative aspects of this IPRO.



Meagan sarratt

Major: Psychology

Year: Senior

Meagan Sarratt is one of the team leaders for this IPRO. She has experience in proof-reading, editing, leadership, delegation, and public speaking. She is the president and founder of Feminists United. In addition to this, she works as a lab manager in a Psychology research lab. She hopes to use her knowledge in both leadership and research to benefit the team.



Ciaran Shaughnessy

Major: Chemistry

Year: Senior

Ciaran is one of the team leaders for this IPRO. His skills include public speaking, leadership, Adobe Creative Suite, and organization. He has held many leadership roles. Although he currently studies Chemistry, he began his studies in Architecture. This has provided him with an eye for design, with which he hopes to contribute. He would like to get experience working in a cross-discipline group on a professional project from this IPRO.



Donald Taylor

Major: Computer Science

Year: Senior

Donald is a Web site developer. He has strong graphic design, programming, and English skills, as well as experience working with clients. He has used Adobe Photoshop, PHP, SQL, HTML, CSS, JavaScript, jQuery, git, C, C++, Java, and other technologies. He has also prepared himself to use Ruby on Rails in order to contribute to the work done in previous incarnations of this IPRO.



Bertha Vandegrift

Major: Molecular Biochemistry & Biophysics

Year: Senior

Bertha has had research experience in various disciplines. Her skills include organization, mathematics, and Microsoft PowerPoint. She will be acting as the iGroups moderator. Bertha hopes to work on her communication skills during this IPRO. This includes both giving presentations and learning how to approach individuals on a professional basis.



Andrew Yates

Major: Computer Science

Year: Senior

Andrew hopes to contribute his knowledge in programming and research to this IPRO. He has programming experience with Ruby, Java, C, XHTML, CSS, and Erlang. He is also familiar with Adobe Photoshop, emacs, git, and Subversion. He has research experience working for the Information Retrieval lab. During this IPRO he hopes to improve his communication skills.

¹ see Appendix for contact information

Team Information

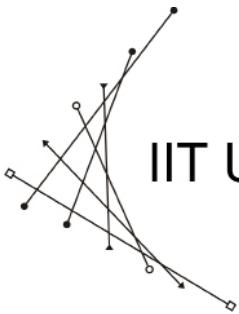
[Team Identity]

Undergraduate Research Journal

Motto

Shining A Light On Undergraduate Research

Logo²



IIT Undergraduate Research Journal

² adopted from IPRO 321, Spring 2010

Team Purpose and Objectives

[Team Vision]

By encouraging and rewarding research across all undergraduate disciplines at the university, a distinctive and enriching educational environment will be developed for undergraduate students to become leaders and innovators.

[Team Mission/Goals]

This IPRO will develop a comprehensive plan for the founding of an IIT undergraduate research journal and its implementation in Spring 2011. The project focuses on the development of a(n):

- Editorial Plan; development of standards specific to the scope of content, review process, and distribution of the editorial process.
- Organizational Plan; development of foundation for an editorial board, sustaining participation and ensuring a pool of high-quality article submissions.
- Presentation to IIT administration requesting approval and support of the journal.
- Recruitment of an editorial board and faculty advisors.
- Solicitation and development of pilot articles.
- Online publication of the journal.

[Team Objectives]

By establishing a team purpose and team objectives, our group will operate more efficiently throughout the semester. The list below describes our identified purpose and objectives.

- Create a vision and mission statement for the journal, upholding the distinctiveness of an IIT education and the needs of specific IIT stakeholders.
- Receive IIT stakeholder support and commitment to the journal.
- Develop a faculty advisory board in order to establish a connection with the university faculty.
- Develop an editorial board to set up standards, scope of content, and specifics to the review process.
- Identify sources and student leaders for potential manuscript submissions.
- Find the means to sustain participation.
- Design a web component which will display information on journal and online publications, as well as allowing for online submissions of work.
- Receive official sanction and adoption of the above from IIT administration .

Background Information

[Previous Research]

Previous IPRO 321 teams have focused on creating a website containing information about undergraduate research opportunities on campus, which led to the development of ResearchWeb. The current incarnation of ResearchWeb was launched in April 2010, with the cooperation of the Office of Undergraduate Research (OUR). It expanded upon and replaced a tool that the OUR created and serves the same purpose: connecting undergraduates with research opportunities. Despite having existed for only one semester, ResearchWeb has already had seen much success.

[Continuing IPRO]

This semester, our team's vision is to complement ResearchWeb, by further encouraging undergraduate research, laying the groundwork for the founding of a student-run undergraduate research journal. While there are a number of departmental newsletters, there is no widely-supported, university publication or website that highlights the diverse undergraduate research being conducted at IIT. The establishment of a more comprehensive journal will ensure more widespread exposure of the IIT student body and community to the the best examples of our undergraduate research.

Some early research found that many of our peer institutions have established undergraduate research journals, some even with a partnered resource much like ResearchWeb. As many of these other journals are still in their founding years, our university is in an advantageous position to establish our own. While we can learn much from studying these other journals, we also have an outstanding opportunity for innovation in the relatively new field of undergraduate research journals.

The journal we envision will consist of a printed magazine, published annually, and an accompanying website. Each will similarly incorporate the ResearchWeb resource, but will offer unique and valuable services to a range of varying stakeholders.

[Stakeholders]

The primary audience for this project will be current and prospective undergraduate students of IIT, as they are tomorrow's innovators. However, this project will incorporate stakeholders from every corner of the IIT community. These stakeholders include Eric Brey, Assistant Dean of Undergraduate Research; Gerald Doyle, Vice Provost of Undergraduate Admission and Financial Aid; Natacha DePaola, Dean of the Armour College of Engineering; Donna Robertson, Dean of the College of Architecture; Ellen Mitchell, Dean of the Institute of Psychology; Russell Betts, Dean of the College of Science and Letters and Harvey Kahalas, Dean of the Stuart School of Business. Numerous other offices within IIT as well as Alumni and donors would also have a stake in the creation of an official undergraduate research journal. There are currently no sponsors associated with this IPRO, although the team has not ruled out acquiring outside support later.

Background Information

[Ethical Dilemmas in Research]

Ethical concerns of the IPRO include using appropriate techniques regarding human surveying, practicing fair judgement and respectful communication with stakeholders and ensuring an appropriate editing and publishing process of the journal.

[Project Challenges]

Though the most challenging pieces of this project will be the those that are unanticipated, the list below includes some identified challenges.

- Spreading general undergraduate awareness of and enthusiasm for the journal.
- Creating comprehensive editorial policies which address the specific standards and needs of the diverse and unique academic disciplines of IIT.
- Finding appropriate incentives for editorial board members, to ensure involvement and quality of work, as well as undergraduate writers, to ensure interesting and relevant content.
- Designing an attractive and usable Web site.

[Potential Solutions]

The following is a list of potential solutions as identified by our IPRO team:

- Our primary research will be on effective policies, designs, and formatting employed in existing research journals at other universities.
- Designing and publishing the printed journal can be aided by the IIT Office of Communications & Marketing, which prints the journals and newsletters of numerous departments and organizations on campus.
- Design a user interface assistance for the website could be found at the IIT Usability Testing & Evaluation Center.
- Integration of the journal's website with IIT departments and organizations, as well as with ResearchWeb, to further improve awareness of research news and opportunities for students.

Team Values

[Team Ethics]

As an interdisciplinary team, the members of IPRO 321 will strive to combine their skills and talents to bring to fruition the vision of this project. In the process, the team believes that following its core team values will assist in accomplishing its goals with unity, diligence, and an effective leadership style.

[Team Core Values]

The IPRO has identified the following core values for our team:

- Respect and acknowledge the presence of all team members.
- Encourage unity and uphold effective communication through active listening.
- Share knowledge and experience for the benefit of accomplishing a common goal.
- Exhibit ethical decision-making and integrity, ensuring team standards are upheld
- Strive to learn from previous challenges or mistakes to make future improvements.
- Keep a positive attitude and encourage productivity.
- Make key decisions as a team and acknowledge the possibility of differing opinions.
- Assume responsibility for helping other team members develop necessary skills.
- Remain committed to the project and strive to perform to optimum potential

[Expectations of Team Members]

The following is an agreed upon list of the expectations for the members of our team:

- Arrive promptly to team meetings.
- Actively engage in team activities and efforts.
- Complete all assigned tasks with punctuality and diligence
- Communicate regularly with team members via iGroups and check for updates from team leaders.
- Submit documentation of progress as required by the IPRO faculty.
- Team members who are designated as team or sub-team leaders are expected to:
 - facilitate progress, open communication, and collaboration
 - provide encouragement and motivational support to team members
 - ensure proper and timely preparation of deliverables
 - develop and maintain the agenda, including meeting minutes
 - delegate assignments and responsibilities
 - help maintain team focus and productivity
 - assist in conflict resolution

Team Values

[Conflict Resolution]

The interdisciplinary nature of our team strengthens our capacity for creativity and insight, while encouraging collaboration and divergent problem solving. However, as with any interdisciplinary team, there is potential for conflict due to factors such as personality style differences. Effective conflict management is therefore necessary to ensure that any concerns or potential conflicts are given attention and quickly addressed, without hindering team productivity or cooperation. In the event that a strategy for conflict management needs to be implemented, the team leaders will follow these necessary steps to ensure proper conflict resolution:

- Maintain a professional attitude, establishing a respectful and courteous atmosphere
- Seek to understand the concerns or problems that arise
- Remain assertive, yet flexible, avoiding obsequiousness or aggression
- Discuss the problem and possible solutions
- Seek the opinion of IPRO faculty and/or the help of fellow team members

Work Breakdown Structure

[Team Structure]

The team's main focus is to garner IIT approval and endorsement of a new IIT undergraduate research journal. The team is divided into two sub-teams defined as the Editing and Design team and the Stakeholder and Support team.

While each sub-team will be responsible for its own documentation and progress, the sub-teams will work closely with each other to ensure proper communication, thus preventing wasted or duplicated efforts. Sub-team leaders are responsible for managing the progress of their respective sub-teams. Inadequate progress will be addressed by the entire team, as well as the project advisor, to create a productive solution to the problem.

The Editing and Design sub-team is responsible for researching and determining editorial policy, creating a design for the journal, and developing a website. The Stakeholder and Support sub-team is responsible for communicating with university stakeholders in order to incorporate their input and secure their support.

[Meeting Times]

For the Fall 2010 semester, the team is scheduled to meet every Tuesday and Thursday afternoon. Meetings are structured so that members of the team may present recent developments, address any obstacles within sub-teams, and discuss progress towards the team's goals. Solutions to any problems will be generated via brainstorming during the week's meetings. Class time will also be utilized reviewing and revising the schedule of tasks in order to ensure that goals are realistic and attainable based on the group's progress.

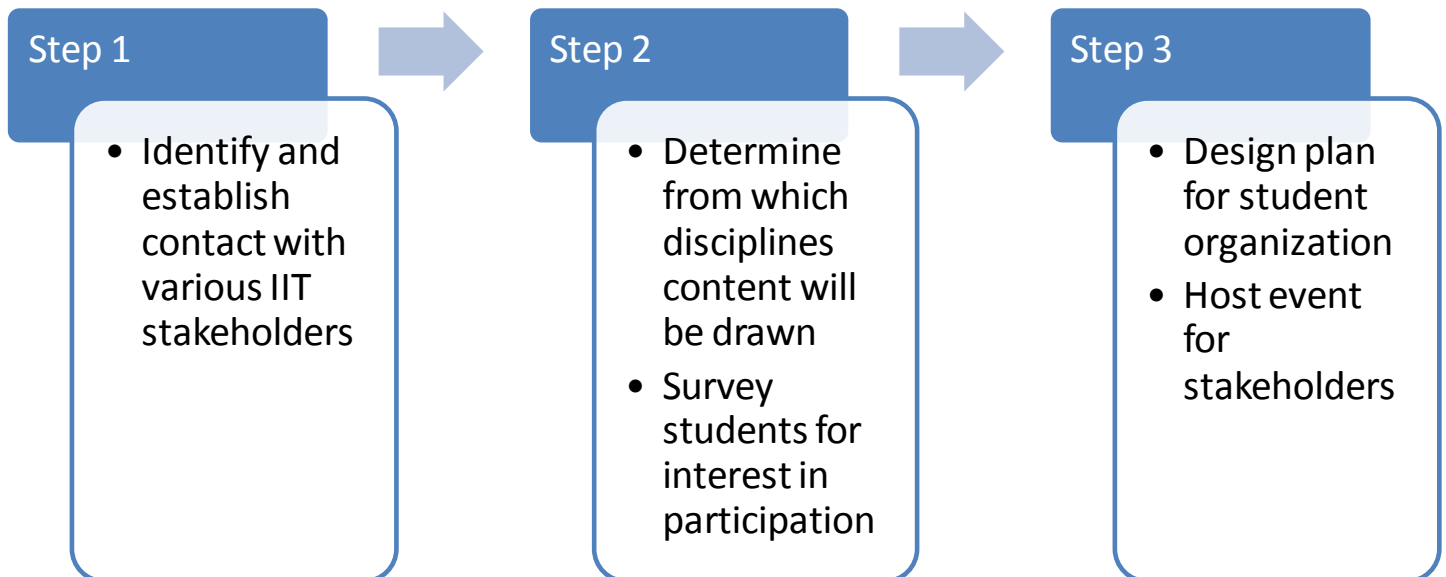
Work Breakdown Structure

[Problem Solving Process]

Editing and Design Team



Stakeholder and Support Team



Expected Results

[Expected Activities]

Our obvious goal is to present the journal proposal to IIT administration and receive their support and commitment to the publishing a this journal. In doing so, the team is expecting to simultaneously work on communicating to potential stakeholders at IIT, as well as designing and developing a foundation for the journal. Due to the nature of this project, the team will have to work on two very different concepts simultaneously.

Stakeholders and Support Team

The Stakeholders sub-team team will actively stay in contact with important IIT stakeholders, such as the deans of the undergraduate colleges and other significant IIT faculty researchers. All undergraduate colleges-Armour College of Engineering, College of Science and Letters, College of Architecture, Institute of Psychology, and Stuart School of Business-will be represented in the journal, so this team will be responsible for establishing a connection with faculty from those colleges and developing a potential faculty advisory board.

Additionally, this group will observe various labs and classes on campus to locate potential sources for articles, while determining how to properly publish the unique projects and presentation styles in which IIT students are participating. This group will also communicate with the student body in order to identify student leaders and significant projects on campus. This sub-team will be responsible for conducting a comprehensive survey of faculty and students regarding the journal. Finally, this sub-team will work to establish this the undergraduate research journal as a student

Editing and Design Team

The Editorial/Design sub-team will work to design the Web site and create guidelines for submission of manuscripts. It is important that a system be created which will encourage students to submit their projects as well as allow the staff to easily translate material to the online journal. They will run tests of the Web site to examine usability. The design team will not only focus on the organization and production of the actual product but will help establish a board to ensure that the journal will carry on for years to come. In order to do so, an organizational structure for a student editorial board will be designed which will later develop into a student organization.

Expected Results

[Expected Data]

The core of this project will not focus on yielding data and information, but instead the emphasis will be placed on the development of a tool. Energy will be placed into developing methods and procedures in order to ensure the augmentation of a research journal for the university. In the development of the research journal, the team hopes to receive not only input from faculty but students, especially in how the journal could better suit their needs.

In order to establish a successful journal, the team will also have to look into journals from peer and aspirant universities. Data will thereby be generated on editorial techniques, organizational structures, and interviews with editors from other universities.

Finally, the team anticipates generating data on how to market this journal to students. The team hopes to find data on the percentage of graduate school applicants who participated in research while an undergraduate, as well as their level of involvement.

[Potential Products]

The focus of this IPRO will be placed on hosting an undergraduate research journal online and in print. The team will therefore establish an online research suite of information and resources, as well as form principles that will ensure its progression.

[Outputs Produced From Task]

This semester's IPRO 321 hopes to use the background research and stakeholder meetings to design the foundation for publishing an undergraduate research journal for next semester. The team also plans to become a student organization at IIT so that the project goes beyond an IPRO this semester. Another primary output is to find sufficient funding to publish a journal and ensure its prolongation.

[Deliverables]

The team anticipates creating the following deliverables for the project:

- Online journal containing information on research projects.
- Electronic submission form allowing students to submit their projects and research.
- Guideline document containing information on how the journal should be regulated and maintained.
- Presentation which will then be presented to the IIT administration in order to receive their approval.

Expected Results

[Potential Challenges, Risks, and Assumptions]

The team has thus far identified several challenges and risks. Most of the challenges and risks that it has faced partly have to do with time, community, and technicality. Below is a list with further descriptions:

Challenges

- **Survivability of project:** One of the major concerns is that the journal may not endure beyond this semester's IPRO. The teams has had to considered how to work towards establishing permanence for the journal.
- **Comprehension of material to Community:** It is difficult to design a journal with comprehensible and interesting material for the IIT community as well as the public. It will therefore be important that the team create guidelines for the level of detail in the submitted manuscripts.
- **Faculty Research Involvement:** Faculty usually tend to work on research projects in order to get published in a peer-reviewed journal. It will be difficult to get their permission or other journals permission to republish research.
- **Significance of the Journal:** This journal will serve as a source which students will be able to reference. It is important that the journal have a strong backbone, yet still be presentable and formidable.

Risks

- **Student Body's Involvement:** As the team moves forward with this project, it is assuming that students involved in research would be interested in submitting papers to the journal. However, there is still the risk that students will not have the motivation to write a paper. The team will need to find ways to encourage undergraduates to submit papers and projects.
- **Upkeep of Web Site:** A risk that the team runs into is that once it has established some guidelines for the online journal, it believes that it will be able to maintain itself without much upkeep. The team is still not sure how exactly the journal will be maintained nor how it will continue to persist once this IPRO has ended, whether it be a student organization or another IPRO group.
- **Faculty support for submissions:** Because of copyright issues associated with publication, it is possible that faculty may not be willing to encourage students to submit manuscripts to this journal. It will be important for the team to communicate effectively with faculty members involved in research in order to ensure that they will support students to write a journal article.

[Devising A Solution]

Information gathered from the interviews with IIT stakeholders and current undergraduate research journals will contribute to the journal's development. All of the information gathered from the research, design, and support elements will be compiled together into a presentation. The project will then be presented to the IIT administration before the end of the semester in order to receive its approval.

Project Budget

The following table details the estimated expenses for proper completion of this project. Printing other journals as references will be vital to developing the research journal.

ITEM	DESCRIPTION	COST
Research Printing	Printing for research and development	\$150
Team Building Event	Light event to promote fellowship. Event includes food and activities	\$150
Stakeholders Event	Light event for stakeholders. Event includes food and activities	\$150
SSL Certificate	Certificate for hosting online journal	\$200
Marketing	Printing flyers and sample journals	\$100
Anti Plagiarism Budget	Software in order to prevent plagiarism of articles	\$100

Designation of Roles

Team Leaders: *Meagan Sarratt and Ciaran Shaughnessy*

The team leaders are responsible for managing the project, leading discussions, delegating tasks, and contributing to overall team cohesiveness. They will ensure that project deadlines are met by keeping team members on tasks and resolving any issues that may arise.

Minute Takers: *Michael Dvorscak and Saul Moreno*

The minute takers are responsible for accurately recording what is discussed during team meetings. They are responsible for recording these minutes in the group's Google Doc shortly after each meeting so that the group may refer to them.

Agenda Makers: *Meagan Sarratt and Ciaran Shaughnessy*

The agenda makers are responsible for creating an agenda for each team meeting. They must confirm that all outstanding issues from previous meetings have been covered. They must make sure all important points are discussed during the meetings.

iGroups Moderator: *Bertha Vandegrift*

The iGroups moderator is responsible for ensuring the proper placement of files and cleaning up file and folder redundancies in iGroups. She is also responsible for making sure IPRO deliverables are completed in an orderly fashion and on time.

Time Keeper: *Sapna Desai*

The time keeper is responsible for ensuring that team discussions follow the agenda's prescribed timetable.

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Appendix

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