IMPACT
Innovative Minds Partnering to Advance Curative Therapies

STUDENT HANDBOOK
2020 Competition
MISSION STATEMENT

The mission of Mayo Clinic is to inspire hope and contribute to health and well-being by providing the best care to every patient through integrated clinical practice, education, and research. The mission of the IMPACT program is to encourage creative solutions to critical health questions through collaboration among undergraduate students, faculty mentors, Mayo Clinic and Mayo Clinic Health System. Through this program, we aim to engage undergraduates in novel hypothesis generation to solve real-world questions alongside Mayo Clinic and Mayo Clinic Health System scientists and physicians. By involving students from traditional science majors as well as non-science backgrounds, this program will forge multidisciplinary partnerships toward the common goal of meeting patient needs.

Beginning in 2017, Mayo Clinic Health System and the University of Wisconsin-Eau Claire began a collaborative research agreement to strengthen opportunities for biomedical education and research in service to improved patient care. The agreement brings together faculty, physicians and students; the IMPACT program is a natural fit with the new collaboration.

UW-Eau Claire and Mayo Clinic Health System are pleased to join with Mayo Clinic to expand the IMPACT program and to welcome more students to participate.

IMPACT 2020 CHALLENGE QUESTION

What is the mechanistic link between binge alcohol drinking, addiction, and the function of the neuroimmune system?

The IMPACT Planning team suggests the following article from *Neuropharmacology*, a peer-reviewed scientific journal in the field of neuroscience, as a resource to assist teams in beginning their research and hypothesis generation for the IMPACT competition:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5493978/
ELIGIBILITY REQUIREMENTS

1. Students must be enrolled in an undergraduate curriculum at the time of IMPACT registration.

2. Submissions will only be accepted from teams of 2-4 undergraduate students.

3. Students from all years of undergraduate education are eligible to participate.

4. Students from all academic majors are eligible to apply.

5. Any number of teams may apply from a single undergraduate institution.

6. Each team must complete one electronic registration form to indicate their participation in the 2020 IMPACT competition by **November 22, 2019**. The registration form can be found at [http://www.uwec.edu/impact-program/](http://www.uwec.edu/impact-program/)

7. At the time of registration, each team must identify a faculty mentor at their undergraduate institution.

8. For full consideration, **at least** one student representative must attend the IMPACT Symposium at Mayo Clinic Health System in Eau Claire, Wisconsin, on **March 7, 2020**. All team members and faculty sponsors are strongly encouraged to attend this event.

ROLES AND RESPONSIBILITIES

**IMPACT Team**

Teams of 2-4 undergraduate students will be required to develop innovative hypotheses that address the following IMPACT question:

*What is the mechanistic link between binge alcohol drinking, addiction, and the function of the neuroimmune system?*

Within the team participants are encouraged to review primary literature to develop a well-supported and novel hypothesis. While collaborative investigation is allowed between IMPACT teams, each submission must be unique. Novelty will be a primary evaluation criterion in the selection of the winning IMPACT submissions. In addition, students are encouraged to work with their team's faculty mentor to the extent that they require guidance accessing and interpreting primary literature.
Faculty Mentor
Each IMPACT team must identify a faculty mentor. This faculty mentor will serve as a sponsor and reviewer for the team’s submission. Responsibilities include:

- Providing guidance to the IMPACT team to the extent they require scientific direction or support in developing a research timeline.
- Reviewing the IMPACT team’s written and poster submissions to ensure high-quality scientific work.

**IMPORTANT DATES & DEADLINES**

- **Registration for IMPACT Teams**  
  Friday, November 22, 2019
- **Written Submissions Due**  
  8:00am on Monday, February 3, 2020
- **Notification of Oral Presentation Selection**  
  Friday, February 14, 2020
- **Poster Submissions Due (for print)**  
  8:00am on Wednesday, February 26, 2020
- **IMPACT Symposium in Eau Claire, Wisconsin**  
  Saturday, March 7, 2020
  - Inclement Weather Back-Up Date  
    Saturday, March 14, 2020
- **Notification of IMPACT Winners**  
  Friday, March 20, 2020

*Italicized dates indicate when IMPACT leadership will make various announcements.*

**SUBMISSION REQUIREMENTS**

**Written Submission Content**
Each submission must include one clearly defined, novel hypothesis that addresses the following question:

*What is the mechanistic link between binge alcohol drinking, addiction, and the function of the neuroimmune system?*

To be considered a complete submission, the following sections must be included:

A. Cover Page (template found at [http://www.uwec.edu/impact-program/](http://www.uwec.edu/impact-program/))
B. Background Information
C. Hypothesis and Rationale
D. Significance and Innovation
E. References
Written Submission Format

Length: Submissions must be no longer than three single-spaced pages, including Background Information, Hypothesis and Rationale, and Significance and Innovation. References must be included but do NOT count toward the page limit (Any citation style is acceptable but should be consistent across the document).

Font: Submissions should be written in Times New Roman, 12-point font.

Margins: One-inch margins should be used across the entire document.

Subheadings: Submissions must identify the content sections via subheadings with the same section names as above.

Figures: Figures can be included but must be referenced if they come from published work. Diagrams and models to illustrate the hypothesis are also encouraged. All figures will count toward the three-page limit.

File Format: Final submissions must be sent as .PDF documents to IMPACT@uwec.edu by 8:00am CST on Monday, February 3, 2020.

POSTER FORMAT

Each IMPACT team will submit a poster for presentation at the IMPACT Symposium on Saturday, March 7, 2020. The poster template can be found at http://www.uwec.edu/impact-program/. This template should be used when preparing the poster presentation to ensure that the final printed size of each poster is uniform (42 inches by 46 inches). Poster sections and font sizes in the template are recommended; however, the relative size of each section will be determined by each team’s unique submission.

IMPACT posters must be emailed as a .pdf document to IMPACT@uwec.edu by 8:00am CST on Wednesday, February 26, 2020 in order to be printed for the IMPACT Symposium. All posters will be printed free of charge prior to students’ arrival at the Symposium.

IMPORTANT: Each poster will be judged by a panel of research and clinical experts at the IMPACT Symposium. There will be a Best Poster Award presented to one team; all teams are eligible for consideration for this award, regardless of selection for an oral presentation.
SELECTION CRITERIA TO DETERMINE ORAL PRESENTERS

Written submissions that fail to adhere to the formatting guidelines above or that are received past the February 3, 2020 deadline will not be considered. Submissions will be evaluated by Mayo Clinic, Mayo Clinic Health System and UW-Eau Claire researchers and clinicians according to the following rubric:

Evaluation Rubric

1. Alignment with Research Mission
   * Does the proposal directly answer the assigned IMPACT question?

2. Hypothesis and Rationale
   * Is the hypothesis well-defined and testable?
   * Is the hypothesis novel?
   * Is the hypothesis supported by clear rationale?
   * Do the authors cite recent and relevant literature sources?

3. Significance and Innovation
   * Do the authors clearly describe the significance of their hypothesis?
   * Does the hypothesis innovatively build upon published literature?
   * Could the hypothesis transform research or clinical practice?

4. Presentation Quality
   * Was the oral presentation clear and engaging?
   * Were the presenters able to respond well to questions from the audience?

Initial evaluation of the submitted hypotheses will be based on the first three categories of the rubric and will identify the top teams, which will be invited to give oral presentations at the IMPACT Symposium and will move forward in consideration for the Gold, Silver, and Bronze IMPACT Awards.

Following the IMPACT Symposium, a panel of IMPACT leadership and senior investigators within relevant research areas will evaluate the top submissions, according to the complete rubric above.
SYMPOSIUM INFORMATION

The 2020 IMPACT Symposium, co-sponsored by Mayo Clinic, Mayo Clinic Health System and UW-Eau Claire, will take place in Eau Claire, Wisconsin, on Saturday, March 7, 2020. All participating students and faculty mentors are invited to attend this event. The symposium will include poster sessions, oral presentations, and a keynote address. Details regarding the symposium schedule will be emailed to participants in February 2020.

Dress Code
Dress code for the IMPACT Symposium is business casual. Please dress appropriately, as photos of all the 2020 IMPACT participants will be taken during the event.

AWARD INFORMATION

The Gold IMPACT Award will include the following:

- A $1,000 cash prize for each student on the team with the most outstanding hypothesis.
- The opportunity to conduct summer research with Mayo Clinic related to the IMPACT question. These paid, summer internship opportunities will be available in addition to the cash prize for students who may be interested in a graduate-level research experience.
- An award plaque to be displayed at the students’ home institution.

The SILVER, BRONZE, and Best Poster IMPACT Awards will include the following:

- An award plaque to be displayed at the students’ home institution.

CONTACT INFORMATION

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http://www.uwec.edu/impact-program/