Research Opportunity Announcement for D2D at the Minnesota State Fair Aug 22 – Sept 2, 2024

Release Date: November 1, 2023
Due Date: January 16, 2024

We invite faculty, students, and staff from the University of Minnesota, other colleges and universities, and public and private institutions, to take advantage of this unique opportunity to quickly and efficiently recruit fairgoers as participants in minimal-risk, human-subjects research at the Driven to Discover Research Facility (D2D) at the Minnesota State Fair from August 22 – September 2, 2024.

D2D APPLICATION INSTRUCTIONS

Apply online by Jan. 16, 2024 at this link: https://redcap.link/8ipmx0tu. You will be prompted to upload the following information as a single PDF or Word document. Please limit your submission to 1-2 pages. Briefly describe:

1. Aims: your research goals and objectives
2. Significance: the potential impact on your field of study
3. Study design: include eligibility criteria and desired sample size
4. Data collection methods: include length of protocol with consent
5. References

PROGRAM OVERVIEW

The primary mission of D2D is to increase the pace, efficiency, and diversity of enrollment in new or ongoing human subjects research at the University, by bringing projects and researchers into closer contact with the Minnesota community. D2D provides access to 2 million fairgoers each year. Many attendees return yearly to the fair, making longitudinal studies possible. Further, the fair attracts individuals from across Minnesota and so offers an efficient means of enrolling a more diverse group of participants from outside the metropolitan area.

D2D established a presence at the 2014 fair and in 2017 a new building was constructed in order to better accommodate more research teams and fairgoers. Since then D2D annually attracts tens of thousands of visitors per year with 2019 setting both fair and D2D attendance records. The COVID-19 pandemic brought changes to the 2021 fair with safety precautions forcing reduced operations and a roughly 40% reduction in overall fair attendance. Post-pandemic fairs are bouncing back, 2022 saw much of a return to normal regarding vendor participation and attendance. The 2023 fair saw only one state fair attendance record (Day 2) and temperatures were hot, humid and oppressive with seven days over 90 degrees and Labor Day approaching triple digits. Overall, approximately one in every three people who enter the D2D building choose to enroll into a study.

<table>
<thead>
<tr>
<th>Year</th>
<th># of Studies</th>
<th>Bldg Foot Traffic</th>
<th># Ppts Enrolled</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>36</td>
<td>60,000</td>
<td>17,900</td>
</tr>
<tr>
<td>2018</td>
<td>57</td>
<td>60,000</td>
<td>21,162</td>
</tr>
<tr>
<td>2019</td>
<td>55</td>
<td>61,600</td>
<td>25,408</td>
</tr>
<tr>
<td>2020</td>
<td>35</td>
<td>36,600</td>
<td>10,879</td>
</tr>
<tr>
<td>2021</td>
<td>44</td>
<td>49,200</td>
<td>16,188</td>
</tr>
<tr>
<td>2022</td>
<td>47</td>
<td>55,000</td>
<td>17,260</td>
</tr>
<tr>
<td>2023</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The COVID-19 pandemic brought changes to the 2021 fair with safety precautions forcing reduced operations and a roughly 40% reduction in overall fair attendance. Post-pandemic fairs are bouncing back, 2022 saw much of a return to normal regarding vendor participation and attendance. The 2023 fair saw only one state fair attendance record (Day 2) and temperatures were hot, humid and oppressive with seven days over 90 degrees and Labor Day approaching triple digits. Overall, approximately one in every three people who enter the D2D building choose to enroll into a study.

D2D@umn.edu
@D2DMNStateFair
In 2023, over **17,000** fairgoers participated in at least one of the 47 on-site studies. Studies enrolling adults averaged **187** participants per shift (5-6.5 hours), with a range of 38-375. Studies enrolling youth averaged **51** participants per shift (range 22-87).

When D2D researchers were surveyed about their experience, 98.7% of respondents from the past five years indicated they were either satisfied or very satisfied with conducting research at D2D, and most expressed interest in future participation. In summary, bringing your study to the Minnesota State Fair affords you the potential to reach a large, geographically diverse population of potential research subjects, facilitating rapid enrollment.

**WHO MAY CONDUCT RESEARCH AT D2D?**

Faculty, students and staff from all UMN campuses, other colleges and universities, and public and private institutions across the state are eligible to apply. Collaboration is encouraged. Projects led by students and staff must have a faculty member as principal investigator or co-principal investigator on the application.

**RESEARCH FOCUS**

There is no specified research focus to which projects must adhere. Research from a broad array of disciplines is encouraged. The focus of the D2D application review is not on the research question, but rather on whether the research project is:

- interactive with the public, involving human subjects by collecting data through surveys, interviews, biospecimens, measurements, tests, or other means,
- appropriate for the state fair environment,
- minimally invasive, posing minimal risk,
- requires no more than 30 minutes of a participant’s time during the fair.

Preference will be given to projects designed for on-site data collection. However, projects recruiting solely for off-site studies are also encouraged to apply. Multiple-year projects are accepted.

**RESOURCES PROVIDED**

The D2D Research Facility can accommodate up to ten studies at a time, in curtained-partitioned bays approximately 10’ wide by 12’ long. Studies are scheduled in two shifts, from 9am-2pm and 2:30pm-9pm, providing a maximum of 240 shifts over the 12 days of the fair. Research space and shifts are assigned after application determinations are made and participation confirmed. The average number of shifts per study in 2023 was 3.6 (mode = 2, range = 1-9).

In addition to research space, the following resources are included in the fee:

- Free admission to the State Fair for researchers and their staff (up to 4 tickets per shift);
- iPads linked to consent forms and survey instruments;
- UMN eduroam high-speed wireless and hardwired internet access;
- Tables and chairs, basic anthropometric equipment, and supplies;
- Refrigerator and freezer space for on-site sample storage;
- Consultation with D2D staff on maximizing your recruitment goals, obtaining IRB approval, determining staffing needs, setting up your research area, recruiting subjects, working in the State Fair setting, and more;
- Compliance with State Fair rules and regulations.
A Facilities Page for inclusion in grant proposals is available for download on the D2D website, under Conducting Research at D2D.

FEES

D2D is a self-supporting Internal Service Organization housed in the SPH’s Division of Epidemiology and Community Health. Fees support rent, facility maintenance, state fair licensing, admission tickets, furnishings, equipment & supplies, and staff support to organize the program. Fees are as follows:

- Studies with a UMN principal investigator: $700 per shift.
- Studies with no UMN principal investigator: $1350 per shift.

LETTER OF SUPPORT

If you plan to apply for funding to cover shift fees, you may send us a letter of intent, including contact information and a few sentences on study aims, methods, enrollment goal, and eligibility requirements. If your project appears appropriate for D2D, we will provide a letter of support for your proposal and reserve space for you at the 2024 fair, given funding is secured by the D2D determination date.

FUNDING OPPORTUNITIES

Eligible UMN researchers may apply for grant funding from the Masonic Cancer Center during the D2D application process. Announcements of any additional funding opportunities will be posted on the D2D website.

Masonic Cancer Center Driven to Discover Grants, 2024

1. Funding amount: $5000.
2. Eligibility: At least one of the principal investigators must be an MCC member.
3. Projects must address one of the MCC Scientific Priorities for Growth:
   a. Expand recent discoveries in immunotherapy and cellular therapeutics to include solid tumors.
   b. Enhance functional genomics strategies to further our understanding of cancer and develop new therapeutic avenues.
   c. Translate new chemoprevention agents into clinical trials for populations at increased risk for cancer including cancer survivors.
   d. Use biomarkers to individualize cancer prevention and personalize treatment.
   e. Establish a new Minnesota-based cohort that includes the collection of biospecimens for investigation of genetics, epigenetics, microbiome, and immunity associated with cancer.
   f. Develop effective methods to disseminate evidence-based cancer prevention and treatment strategies to vulnerable populations with disproportionate cancer burden in MN.
4. Application: Included in the D2D online application. A budget worksheet is provided, and is also available on the D2D website at http://d2d.umn.edu.

Department of Pediatrics Driven to Discover Grants, 2024

1. Funding amount: $6,000, peds will support one or two research studies.
2. Eligibility: At least one of the investigators must be a faculty member in the UMN Pediatrics department. Junior investigators are encouraged to apply. Fellows are eligible to apply, as long as at least one co-investigator is a UMN Pediatrics faculty member. Students are encouraged to apply, but must provide the name and signature of their academic advisor, who must be a faculty member of the UMN Department of Pediatrics.
3. These grants are designed to foster the development of, and provide support for, novel research ideas that aim to assess or improve pediatric health, utilizing the population attending the Minnesota State Fair. Studies funded through this mechanism must enroll and collect data from subjects at the Driven to Discover Research Facility at the 2024 Minnesota State Fair. It is important that funded projects will lead to publishable results and have promise for external grant support to demonstrate return on investment.

4. Application: Included in the D2D online application. A budget worksheet is provided, and is also available on the D2D website at http://d2d.umn.edu.

SHIFT ESTIMATION AND INCENTIVES

Many factors influence enrollment, most notably eligibility criteria, but also incentives (giveaways), protocol (topic, length and methods), staffing, recruitment methods, the mix of studies in the building, and weather can also affect fairgoer traffic through the building.

In 2023, average enrollment per shift for on-site data collection was 187 (range 38-375) for adult studies with no other eligibility exclusions, and 51 (range 22-87) for youth studies with no other eligibility exclusions. To estimate the number of shifts your study needs, use the 2023 ranges, adjusting up or down based on your budget and the factors described above. Alternatively, you may start with the following formula, and then adjust as described:

\[ \text{Number of shifts} = \frac{\text{enrollment goal} \times \text{minutes participants spend engaged with study}}{\text{number of participants (or iPads) your staff can manage at one time} / 300}, \text{ i.e., the number of minutes in a 5-hour shift.} \]

Two staff are required per shift, but most studies use more people (e.g., 3-4) in order to accommodate more participants. We recommend you recruit students as additional staff as students benefit greatly from the research experience! However, keep in mind space limitations.

As mentioned, incentives can affect your enrollment. Your options include:

- Individual incentive: With this option, you are required to give an incentive of equal value, or a choice of incentives, to each participant. It’s a good idea to order extra incentives in the event you overshoot your enrollment goal.
- Prize drawing (e.g., gift card or electronics): This is a good option for those with a large enrollment goal but a limited budget. You will be required to hold the drawing during the fair and report the winner(s) to State Fair administration.
- Prize-wheel giveaways for participation.
- No incentive: Some D2D studies have not given incentives and still reached their enrollment goals. Keep in mind, however, the competition that comes with 10 studies in the building and the giveaway environment at the fair, thus getting people to engage with you will prove to be difficult without an incentive.

REVIEW PROCESS

A review team will evaluate eligible applications using the following considerations:

- Does the study qualify as minimal risk?
- Is the study interactive, engaging to the public?
- Is subject participation kept as brief as possible (no more than 30 minutes)?
- Is the study design appropriate for the Minnesota State Fair venue?
Inclusion and exclusion criteria for a study may be taken into account in the review process. Our aim is to offer something for every fairgoer who walks into the building, as well as have research teams be successful in their recruitment; thus studies with burdensome eligibility criteria may not be approved.

The D2D team will not conduct a full scientific review of your project. It will be expected that research projects have undergone adequate peer review through applicable mechanisms.

Researchers will be responsible for obtaining protocol approval, or exemption from review, from the University of Minnesota Institutional Review Board (or another IRB, for applicants not affiliated with the UMN). The UMN IRB will hold a special session to review D2D applications. Studies with currently-approved IRB applications and studies conducted at D2D in previous years must also be approved. Researchers will be required to submit their applications by the deadline to be set forth by the IRB (on or around May 1, 2024).

FUTURE TRACKING OF SELECTED PROJECTS

Success of the D2D Research Facility is measured by the number of research projects using the space, the number of fairgoers enrolled, and the number of peer-reviewed manuscripts published and grant applications submitted using data collected at the building. If your project is selected for participation, you will be asked to provide this information.

CONTACT US

Thank you for your interest in D2D. Please contact the D2D Manager, Annie Hotop, at d2d@umn.edu with questions regarding this Announcement, or to be placed on our mailing list for future announcements and updates. For more information, go to the D2D website at http://d2d.umn.edu.

D2D DIRECTORS

Ellen Demerath, PhD, School of Public Health
Logan Spector, PhD, Medical School