

OUTREACH OPPORTUNITIES

K-12 and public outreach you conduct must be about CSMS-related research. **CSMS-related outreach done in person with K-12 audiences or the public - see 1), 2), 5), and 6) - are preferable** to CSMS outreach with college audiences - see 3), 4), 7) and 8) and non-CSMS outreach. Outreach you participate in does not need to be CSMS-related (ex: assist with a Robotics competition). Idea 9) is a little different as it's an online option.

- Get permission from the host or other person in charge that you can do your presentation/demonstration, or ask them if there is an opportunity for you to assist them with their event
- After the event, complete and turn in to Kathy Wahlberg, kathleen.wahlberg@ndsu.edu, a completed **Outreach Assessment form** after the event (bring form to event).
 - If more than one CSMS participant is involved, only one person needs to submit the form, remembering to list everyone in CSMS who was involved in the outreach activity.

***** CSMS graduate students: due to the COVID-19 outbreak, if you have not yet completed your Outreach activity for the semester, you will not need to fulfill that requirement Spring 2020.**

Though, if you do come across an opportunity that does not involve face-to-face Outreach activities with the attendees, please contact kathleen.wahlberg@ndsu.edu on the possibility of it counting as your Outreach activity.

One option, you might be involved in an outreach-type project that is online that you are helping with somehow (helping to plan, organize, conduct, etc.); or, due to the switch to online classes due to COVID-19, maybe you helped an instructor translate a lecture class to an online class.

See the Outreach update email sent to you 4/6/2020 on what information is needed if you do find an Outreach opportunity that does not involve face-to-face activities.

SOME CATEGORIES OF IDEAS:

- 1) **[Help a CSMS faculty researcher teach a CSMS-related Sunday Academy lesson](#)**
Target audience: Native American high school students in North Dakota who attend Sunday Academy lessons at the five tribal colleges in North Dakota.
 Ask your CSMS supervisor if he/she would like to be involved in a Sunday Academy lesson the next academic year. Faculty pitch their lesson ideas in June and five to six lessons are chosen for the following academic year. *** 2020-2021 is already scheduled**
 More info on the program at <https://www.ndepscor.ndus.edu/programs/nature-program/sunday-academy/>. Julia Bowsher julia.bowsher@ndsu.edu and Britt Heidinger britt.heidinger@ndsu.edu are co-coordinators for Sunday Academy.
- 2) **[Presentation/demonstration at an event hosted on campus](#)** (check with departments on your campus for events where you could have a CSMS-related presentation/demonstration, or assist them with an event – **see list of links starting on next page for other ideas**)
 - a) **[DADDS](#)** (Dads And Daughters Do Science) – **Spring 2020 CANCELED DUE TO COVID-19 OUTBREAK**
 > NDSU's College of Engineering K-12 Outreach webpage lists many events. Outreach Coordinator Lauren Singelmann, lauren.n.singelmann@ndsu.edu, 231-5798; see list of links starting on next page for more programs
 Location: NDSU – A. Glenn Hill STEM Building
 - b) **[Avenues of Scientific Discovery](#)** (AoSD) – **Friday, February 13, 2020 rescheduled to Wednesday, April 8th CANCELED DUE TO COVID-19 OUTBREAK**
 Workshop proposals for 2020 are due in mid-January. Great event for CSMS-related outreach. Or sign up to **[Become an Event Assistant](#)**.
 Location: NDSU – Memorial Union Ballroom

- c) **Super Science Day – Sunday, April 26, 2020 / 1-4pm (setup 10am-noon) CANCELED DUE TO COVID-19 OUTBREAK**
Hands-on activities for children grades 1-6. Purpur Arena, 1122 7th Ave S, Grand Forks
[Volunteer or be a presenter](#)
* see the [Dakota Science Center](#) site for more opportunities
- 3) **Presentation at UNIV 189 classes that are for CHEM/BIOCH, STEM, or undeclared**
Target audience – UGRAs who may be undecided or who may want to switch major
Check course schedule <https://bulletin.ndsu.edu/>, contact instructor of class to inquire about a CSMS presentation/demonstration (who can give permission?)
- 4) **Presentation at a campus STEM related student organization club meeting**
Target audience - students in the club who may be undecided or who may want to switch major
Ex: Chemistry, Biochemistry, Coatings and Polymeric Materials, Mechanical Engineering, etc.
**Contact advisor of club to inquire about a CSMS presentation/demonstration
- NDSU**
- ✓ Student Organization directory <https://myndsu.ndsu.edu/organizations>
 - ✓ Chemistry Club <https://myndsu.ndsu.edu/organization/chemistryandbiochemistryclub>
- UND**
- ✓ Student Organization directory <https://involvement.und.edu/organizations>
 - ✓ Chemistry Graduate Student Association; advisor information at <https://involvement.und.edu/organization/cgsa>
 - ✓ Undergraduate Chemistry Club; advisor information at <https://involvement.und.edu/organization/chemclub>
 - ✓ American Indian Science and Engineering Society; advisor information at <https://involvement.und.edu/organization/aises/>
- 5) **Presentation to middle or high school students**
Target audience – public middle and high school students to try to increase their interest in STEM related education/careers
- [NDSU College of Engineering STEM Outreach](#) Outreach Coordinator Lauren Singelmann, lauren.n.singelmann@ndsu.edu, 231-5798
- Contact area middle/high schools directly to check on the possibility of doing outreach
- 6) **Presentation at a local library or other public event**
Target audience – general public, could target specific groups, grade school or high school, to try to increase interest in STEM related education/careers
- see list of website links near after this section
- check with your academic department to see if they schedule any Outreach events
- 7) **Staff a table outside the NDSU MU bookstore beginning of Fall or Spring semesters** (might be hard to get a table for our purpose)
Target audience - get CHEM/BIOCH UGRAs and undeclared interested in CPM or CHEM fields
Discuss CSMS research with students, have CSMS logo visible, other visual aids?
[Contact Table Request Form](#)
- 8) **Informational poster about CSMS research** to put in a display case along the EML/MU ramp
Target audience - students and faculty, visitors
[Promotional Reservations Form](#)

9) [Create a series of educational webinets on CSMS research](#)

Target audience - NDSU/UND students, general public, K-12; could maybe send the webpage link to TC and PUI contacts to forward on to relevant students on their campus or to their area K-12 schools.

Post to the CSMS website, then send an email out to specific student listserv/s with a link to the webinet each time a new item is posted (maybe have them on a specific webpage where people can go if interested in learning about CSMS research and the related degree programs at NDSU/UND)

- ✓ **A similar idea is Bison Talks created to address Faculty and Student relationships as well as showcase NDSU.** Bison Talk will start as media-based presentations, similar to a TED Talk. These presentations will be Professors, Students, or Alumni who have something to share about their research, projects, or life lessons. The idea is to have speakers from each college share their advancements or advice to past, present, or even future students. Having 10-12min presentations will allow our NDSU community to grow stronger as we learn more about what makes NDSU the college we know and love. Bison Talk will also highlight the values of our University and allow us to see what it means to be a part of a Student focused, Land Grant, Research University. If you are interested in speaking click [HERE](#) or follow us on social media @bisontalk to learn more!

*** Some of the items listed below might not work for conducting a CSMS outreach activity (ex: Entomology or Animal Sciences fields of study) but you could participate in outreach they host and your participation would count towards the 'participate in an outreach activity' objective rather than the 'conduct an activity' objective.**

Links for Fargo-Moorhead area that might be helpful to find events where you can complete either CSMS related or non-CSMS related Outreach:

- [NDSU Bison Talks](#)
Created to address Faculty and Student relationships as well as showcase NDSU, Bison Talk will start as media-based presentations, similar to a TED Talk. These presentations will be Professors, Students, or Alumni who have something to share about their research, projects, or life lessons. The idea is to have speakers from each college share their advancements or advice to past, present, or even future students. Having 10-12min presentations will allow our NDSU community to grow stronger as we learn more about what makes NDSU the college we know and love. Bison Talk will also highlight the values of our University and allow us to see what it means to be a part of a Student focused, Land Grant, Research University. If you are interested in speaking click [HERE](#) or follow us on social media @bisontalk to learn more!
- [NDSU Chemistry and Biochemistry](#) news and outreach page <https://www.ndsu.edu/chemistry/news.html>
- [NDSU College of Engineering](#) has lots of Outreach information at <https://www.ndsu.edu/coe/outreach/>
Interested in volunteering in CoE Outreach programs? [Click here](#) to get matched to opportunities.
 - ✓ [DADDS](#) (Dads and Daughters Do Science) – **Spring 2020 CANCELED DUE TO COVID-19 OUTBREAK**
 - ✓ [TechKids](#) 9 week program – **meets Mondays 5-6:30pm, Monday, 1/27/2020 - 4/6/2020**
** Note: Class will NOT meet on February 17, 2020 or March 16, 2020.*
 - ✓ [TechGYRLS](#) (10-week program – **no information available right now**)
 - ✓ [TechBOYZ](#) (10-week program – **no information available right now**)
 - ✓ [Tech Teens](#) – **Saturday, April 4, 2020 / 9am to Noon CANCELED DUE TO COVID-19 OUTBREAK**
 - ✓ [Bison Robotics](#) – contact bisonrobotics@gmail.com for possible Outreach opportunities
 - ✓ [FIRST LEGO League](#) Fargo qualifying – **Saturday, January 25, 2020 / 2 tournaments run simultaneously 8am-4pm** Location: NDSU Bentson Bunker Fieldhouse [Sign up to volunteer \(change state to ND\)](#)
- [NDSU Office of Teaching and Learning](#) (OTL):
 - ✓ [Avenues of Scientific Discovery](#) (AoSD) – **Friday, February 13, 2020 rescheduled to Wednesday, April 8th CANCELED DUE TO COVID-19 OUTBREAK**
Workshop proposals for 2020 are due in mid-January. Great event for CSMS-related outreach. Or sign up to [Become an Event Assistant](#).
Location: NDSU – Memorial Union Ballroom

- ✓ [ND Science Olympiad](#) – ~~April, 18, 2020~~ **CANCELED DUE TO COVID-19 OUTBREAK**
Location: NDSU / Contacts: Guy Hokanson, guy.hokanson@ndsu.edu or Anne Denton anne.denton@ndsu.edu
- ✓ [Expanding Your Horizons](#) – *no information available right now for Spring 2020*
- [Fargo New Life Center](#) sometimes looks for volunteers for events
- [Fargo Parks Department](#) sometimes looks for volunteers for events
- [NDSU Event Calendar](#)
- [City of Fargo Library events](#)
- [Moorhead Public Library events](#)
- [West Fargo Public Library events](#)

Links for Grand Forks area that might be helpful to find events where you can complete either CSMS related or non-CSMS related Outreach:

- [Northeast ND Regional Science Fair](#) – *Tuesday, March 17, 2020 / 8am-4pm*
Location: UND School of Engineering and Mines (Collaborative Energy Complex and Lenard Hall)
Volunteers needed as judges, 9 a.m. – 3 p.m. Everything you need will be provided. To volunteer use SignUp.com, <https://signup.com/go/LRJeSJJ>.
UND site contact Gwen Klawon gwendolyn.klawon@und.edu
- [ND State Science & Engineering Fair](#) – ~~April 2-3, 2020~~ **CANCELED DUE TO COVID-19 OUTBREAK**
Location: UND (Alerus Center) Hosted by the UND College of Engineering & Mines, <http://und.edu/ndssef/>. Contact Gwen Klawon gwendolyn.klawon@engr.und.edu
- **UND STEM Day** – some of the most inspiring educational experiences happen outside of the classroom. UND is committed to using our expertise and resources to inspire the next generation of scientists and engineers through hands-on activities across the spectrum of STEM disciplines. Contact Gwen Klawon gwendolyn.klawon@engr.und.edu
- **Southeast Regional Science Fair** *March 17 / 8:30 a.m. to 4 p.m. / Bentson Bunker Fieldhouse*
Seeks judges for their annual science fair. They are in need of 20 volunteers to judge science and engineering projects by junior and senior high school students. Judging begins at 8:30 A.M. with a brief meeting and will finish around 4 P.M. For more information email patty.kratcha@k12.nd.us.
- [Super Science Day](#) – ~~Sunday, April 26, 2020 / 1-4pm~~ **CANCELED DUE TO COVID-19 OUTBREAK**
Hands-on activities for children grades 1-6. [Volunteer or be a presenter](#)
Location: Grand Forks – Purpur Arena, 1122 7th Ave S, Grand Forks
* see the [Dakota Science Center](#) site for more opportunities
- **Tests of Engineering Aptitude, Mathematics, and Science (TEAMS) testing day**
An annual, theme-based competition that provides middle school and high school students with the opportunity to discover engineering with the potential to make a difference in the world. Volunteer proctors are needed in the room. Contact Gwen Klawon at gwendolyn.klawon@engr.und.edu
- **Ben Franklin Elementary Chemistry Fun Event** – *no information available right now*
Coordinated by Dr. Alena Kubátová, alena.kubatova@UND.edu
- [UND Chemistry](#) lists some outreach:
 - Contact und.cheminfo@und.edu for possibility of volunteering at an event
 - Contact Alena Kubátová to see if she is arranging any Chemistry outreach events for CSMS topics or general Chemistry topics
- [UND Engineering and Mines](#) has an Outreach webpage: <https://engineering.und.edu/outreach/index.html>
- [UND event calendar](#)
- [Grand Forks Kid's Connection newsletter](#) (sometimes features Outreach events)
- [Grand Forks Public Library](#):
 - Check on volunteer opportunities by calling Information Services at 701-772-8116