

# Welcome to the North Dakota Space Grant 14<sup>th</sup> Annual Affiliates Meeting

March 22-23, 2019



Host: John Webster  
Minot State University  
Minot, ND

Jim Casler  
Director

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Deputy Director

Marissa Saad  
Coordinator



Good Morning!

Saturday, March 23, 2019

# Agenda – Saturday, March 23, 2019

- ▶ *Today, we're going to:*
  - ▶ *Enjoy some breakfast*
  - ▶ *Hear from Marlin about future SG Goals*
  - ▶ *Listen to three student presentations*
  - ▶ *Phew, take a break, and quick – take a group photo!*
  - ▶ *Last but not least, hear about four more experiences*
  - ▶ *Are you hungry? Lunchtime!*
  - ▶ *Business Meeting (for all!) Good things are happening!*
  - ▶ *Reimbursements!*



# Student Presentations

# Business Meeting

# Business Meeting

- Review action items and recap from last year's business meeting
- Budget Updates
- NIFS
- Visits to Affiliate Institutions
- Educator Workshops
- Reimbursement Information

# Discussion from last year:

- ▶ Bridge program
  - ▶ **New**: invite students who are transferring from one degree program to another (AS to BS, BS to MS, etc.). This can be at the same institution.
- ▶ NASA Internships
  - ▶ Advertise to non-STEM students, such as graphic designers, communications, etc.
- ▶ Student Involvement
  - ▶ Career fairs and presentations to student groups across ND (affiliate representation at fairs)
- ▶ Communication
  - ▶ Student feedback: make opportunities easier to find on websites
  - ▶ **Update**: new NDSGC website this summer
- ▶ Meetings
  - ▶ Keep it at two days; if it was a one day meeting, many people have to travel far, making it a two-day trip anyways
  - ▶ Invite **prospective students** to affiliate meetings
  - ▶ 2018: early April works best (room availability is a big issue)

# National Updates

## Updates from the National Meeting

- Office of Education → **Office of STEM Engagement**
- Congress awarded Space Grant \$44 million for FY19 (\$4 million increase from FY18)
- FY18 Period of Performance for NDSGC ends: 4/22/19
- NDSGC Period of Performance for FY19: 4/23/19 – 4/22/20
- Waiting for official grant renewal – *as of 3/21*
- Visited DC: Cramer and Hoeven are very supportive; we introduced SG to Armstrong
- [NASA's National Update PDF online here](#)

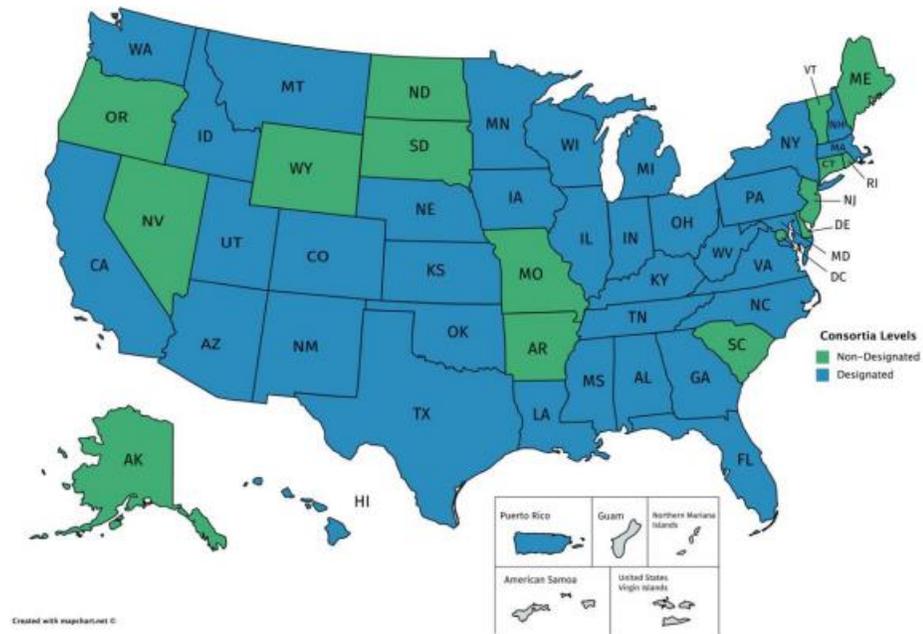
## ▶ Four-year solicitation

- ▶ To be released: Late Summer/Early Fall 2019
- ▶ Proposals due: Late Fall 2019 (Will ask for letters of support)
- ▶ Increased focus on NASA Mission Directorates: 1) Aeronautics, 2) Human Exploration & Operations, 3) Science, 4) Space Technology

# How we are awarded funding:

## FY18 FUNDING STRUCTURE

Status	Number of Awards	Award Value	Award Total
Designated	35	\$760,000	\$26,600,000
Non-Designated	17	\$570,000	\$9,690,000
		<b>Grand Total</b>	<b>\$36,290,000</b>



NOTE: Funding does not include U.S. VI and Guam as separate Consortia; they are serviced by South Carolina and Hawaii Space Grants respectively

# Designation Status

## HISTORY OF SPACE GRANT CONSORTIA DESIGNATIONS

- The first Space Grants represented **21 states**, became known as Designated once Congress directed Space Grant expand into more states by offering Program Grant and Capability Enhancement (i.e., Non-designated) -> Designated status is not in the law or regulations
- Congress requested that NASA expand the number of designated states through competitive means in 1999 (25 designated) , 2002 (28 designated), and 2004 (35 designated). This competition allowed states to increase to the higher funding level.
- Designation status among the 52 Consortia has not changed since 2004

# NASA is working out options

## RECOMMENDED FUNDING MODEL – COMPETITIVE OPPORTUNITIES

- Consortia eligible for equal amounts of base funding – Dissolution of Designated vs. Non-Designated
- Competitive opportunities from partner driven Mission Directorates will be available via a separate solicitation
  - Mission Directorates will provide a minimum of 1:1 matching funding
    - HEOMD (2020), STMD (2020), SMD (2021) and ARMD (TBD)

Space Grant FY2020 Competitive Funding (Guam and U.S. VI Supplemental) Funding Levels	
<b>Budget Guideline</b>	<b>\$44,000,000</b>
Base Awards (52 @ \$675,000)	\$35,400,000
Competitive Awards Mission Directorate match (total avail ~\$6.4M)	\$3,200,000
Non-Awards	\$5,400,000
<b>Total</b>	<b>\$44,000,000</b>

Space Grant FY2020 Competitive Funding (Guam and U.S. VI Supplemental) Funding Levels	
<b>Budget Guideline</b>	<b>\$44,000,000</b>
Base Awards (52 @ \$625,000)	\$32,800,000
Competitive Awards Mission Directorate match (total avail ~ \$11.6M)	\$5,800,000
Non-Awards	\$5,400,000
<b>Total</b>	<b>44,000,000</b>

NOTE: Includes Guam and U.S. VI as \$150,000 supplements respectively

# State Funding Update

## ▶ Three year grant + One-year Extension: April 23, 2015 – April 22, 2018:

- ▶ FY15: \$430,000
- ▶ FY16: \$300,000 + \$270,000 augmentation
- ▶ FY17: \$300,000 + \$270,000 augmentation
- ▶ FY18: \$300,000 + \$270,000 augmentation

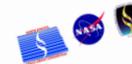
## ▶ State Match:

- ▶ FY15: \$200,000
- ▶ FY16: \$200,000
- ▶ FY17: \$184,224
- ▶ FY18: \$184,224

## ▶ Additional One-Year Extension Proposed

- ▶ POP: April 22, 2019 – April 21, 2020
- ▶ Submitted proposal for one year extension in November of 2018

Est. 1988



North Dakota Space Grant Consortium (NDSGC)  
Strategic Plan 2015-2018

Since 1990, the North Dakota Space Grant Consortium (NDSGC) has been the primary NASA higher education program in the state to support diverse and effective research, education, and outreach activities. These efforts have led to a variety of programs with high-impact outcomes, including: providing North Dakota college students to missions in NASA's Small Business Technology Transfer (STTR) program; providing research and development opportunities to the state's private industry; and providing support to the state's private industry. The past accomplishments have been made possible by the extensive efforts and support of the state of North Dakota (ND). This support is necessary to the continued success of the Consortium's programs and activities. The state's support is critical to the Consortium's ability to increase the number of college students pursuing science, technology, engineering, and mathematics (STEM) careers and to provide the state with a highly skilled workforce. Although the NDSGC has demonstrated significant past success, it is time for each state and its citizens to recommit themselves to the state's higher education system. The state's support is critical to the Consortium's ability to increase the number of college students pursuing science, technology, engineering, and mathematics (STEM) careers and to provide the state with a highly skilled workforce. The state's support is critical to the Consortium's ability to increase the number of college students pursuing science, technology, engineering, and mathematics (STEM) careers and to provide the state with a highly skilled workforce.



# NIFS

## Student Fellowship Applications:

# of Applicants	FY18	FY17	FY16
Summer	<b>5*</b> UND-3, NDSU-1, BSC-1	<b>11</b> UND-10, NDSU-1	<b>20</b> UND-10, NDSU-9, VCSU-1
Fall	<b>11</b> UND-6, NDSU-3, TMCC-1, VCSU-1	<b>16</b> UND-12, NDSU-3, VCSU-1	<b>10</b> UND-5, NDSU-3, DSU-1, BSC-1
Spring	<b>6</b> UND-2, NDSU-4	<b>6</b> NDSU-4, UND-2	<b>7</b> UND-3, NDSU-3, UTTC-1

- Encourage students to apply for research fellowships
- Guidelines are on website
- Increasingly competitive
- \*small window of advertisement – waiting for funding

### •Deadlines:

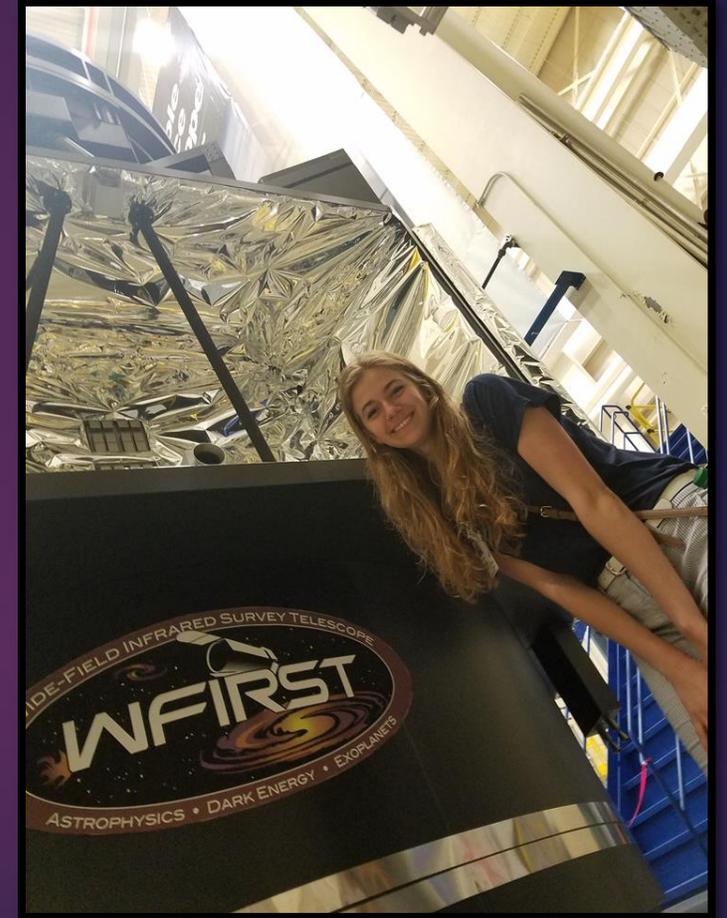
- Summer – April 15**
- Fall – August 6**
- Spring – December 2**

# Bridge Program

- Any student transitioning from one degree to an advanced one (AS to BS, BS to PhD, etc.)
- Encourage all to apply
- First successful transfer in summer of 2017
- Will look at different weeks of the summer (closer to school)

# NDSGC Funding

- NASA Competition Teams
  - Application deadline for everyone, **November 6**
  - Highly encourage college teams from outside UND and NDSU
    - Additional FIRST Robotics team this year
- NASA Internships
  - Encourage students from affiliate institutions to apply
  - **\$7300** undergraduates, **\$9000** graduate students
  - **2019** ND Summer applicants: **30 total**
    - 2018 ND Summer applicants: 30 total
    - 2017 ND Summer applicants: 34 total
    - 2016 ND Summer applicants: 25 total



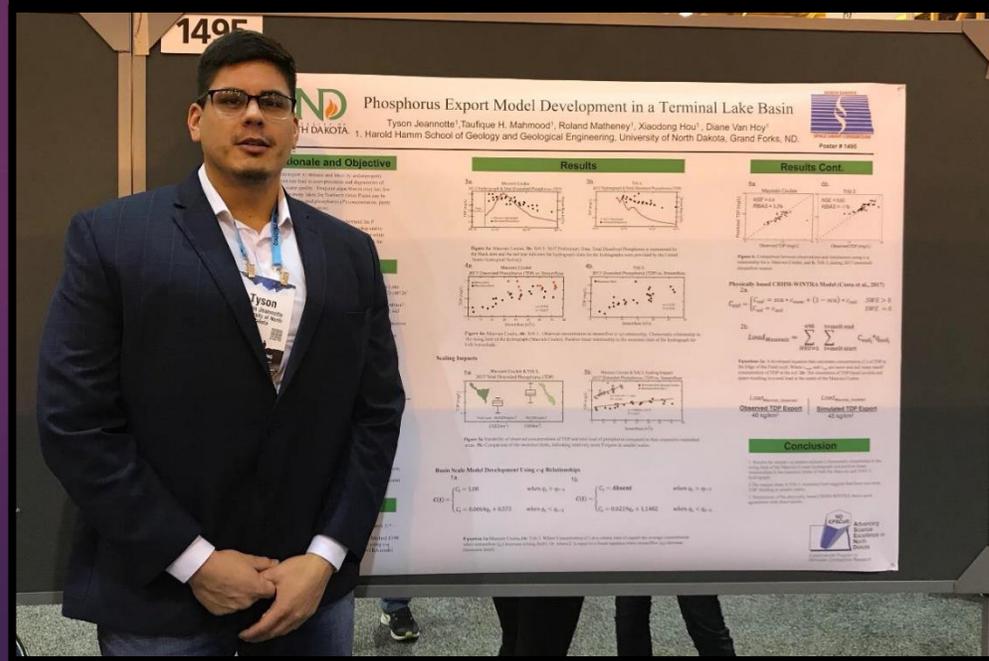
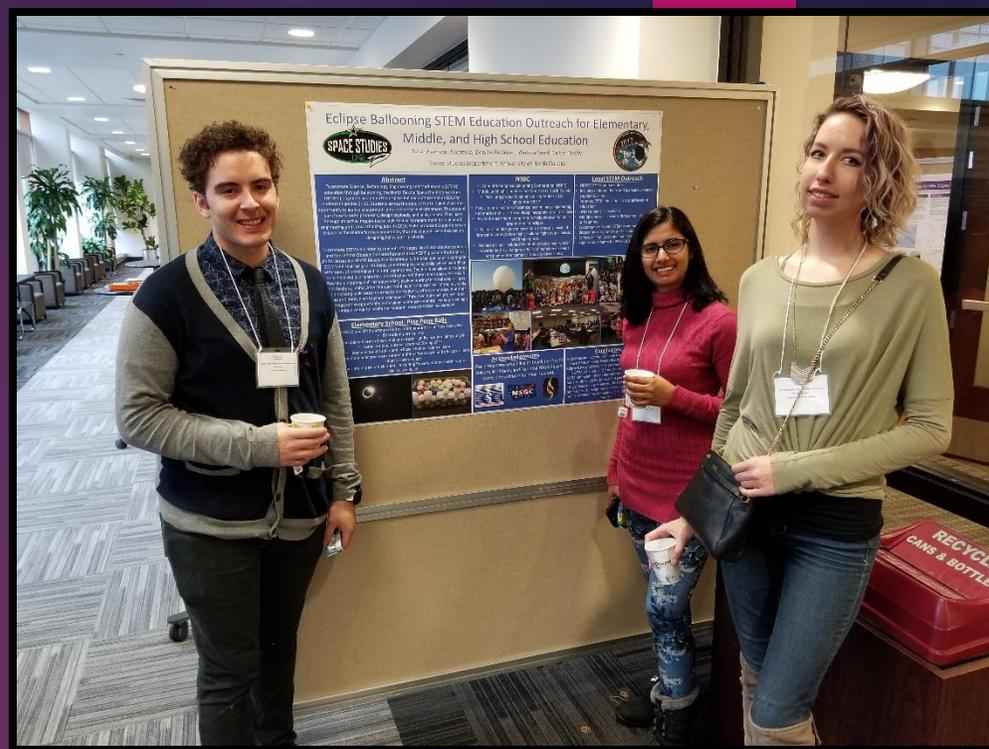


# Scholarship Opportunity

- ▶ **North Dakota Archaeological Association**
  - ▶ Cynthia Kordecki Research Scholarship for Spring 2019
  - ▶ Any age and level of experience may apply
    - ▶ K-12, higher education, educators, lifelong students
- ▶ Must be relevant to the NDAA objectives to promote scientific investigation, preservation, and publication of archaeological research in the Northern Plains (ND)
- ▶ Due **May 3, 2019**
  - ▶ Notified by May 20<sup>th</sup>
- ▶ **<http://www.ndarchaeology.org>**
- ▶ Contact Erik Holland for details

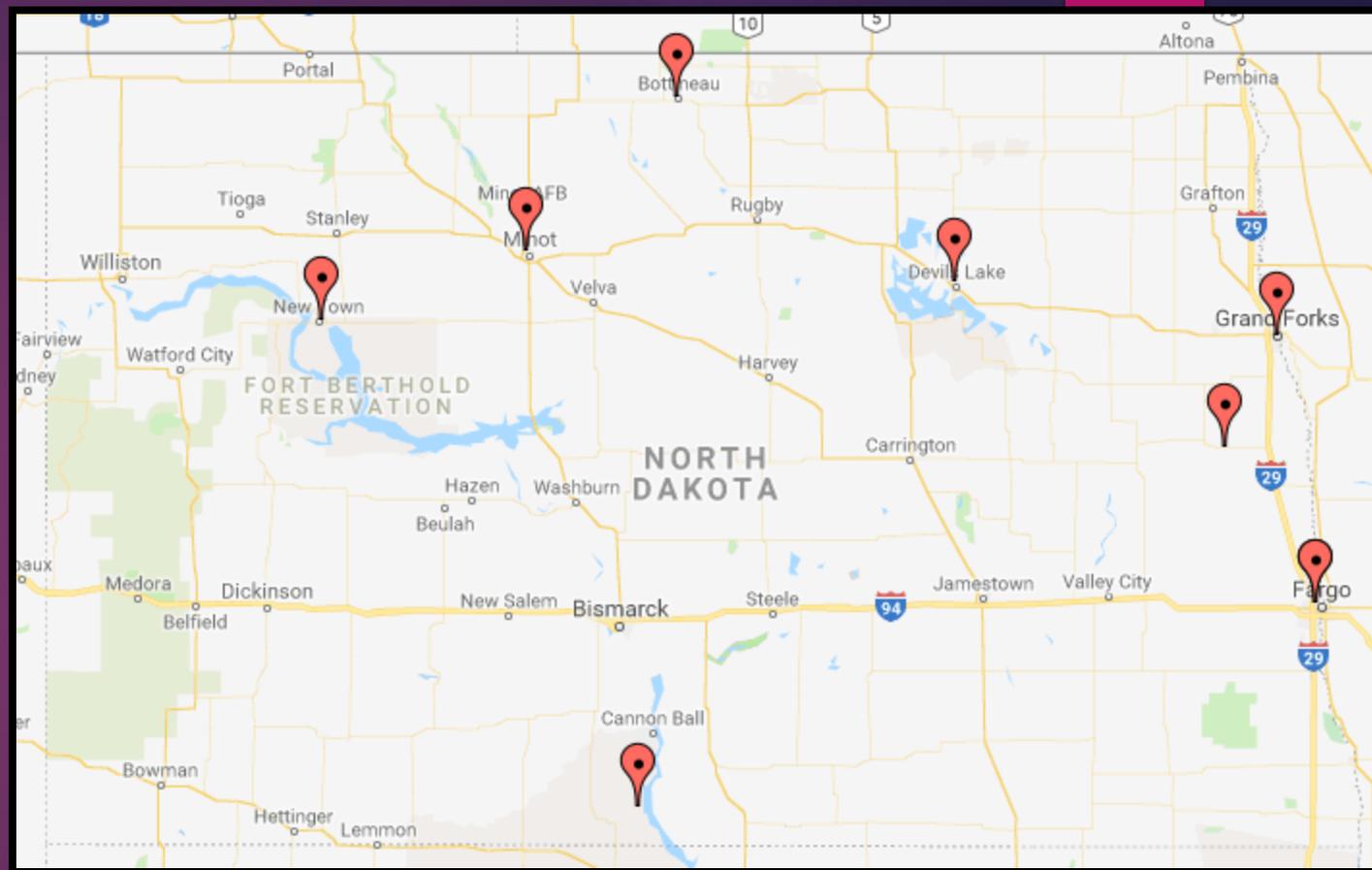
# Student Travel Grants

- ▶ Travel to conferences to present research or attend hands-on workshops
- ▶ \$500 awards
- ▶ *Rolling applications to change to each semester*
- ▶ Previous years' applicants from UND and NDSU
- ▶ Encourage students at affiliate institutions to apply!



# STEM Ambassadors

- Students are funded to conduct engaging outreach
  - K-12 schools, library events, museums, public outreach events
  - One Ambassador worked full time at Gateway to Science Center – ½ stipend from NDSGC, ½ GSC
- **STEM Education** majors encouraged!
  - We're visiting more education classes
  - We can visit your school!
- **Apps due May 31<sup>st</sup>**



LRSC, UND, MaSU, MiSU, SBC, NDSU

# 2015-2019

# Educator Opportunities

## Internal

- Pre-service and in-service STEM Education
  - Sessions commonly 1-3 hours long
- Upcoming in-service teacher workshop at UND in **Summer 2019**
- Offer Professional Development credits for teachers
- Host “Space Camp” for students

## External

- Space Camp & Conferences for Educators
  - Marshall Space Flight Center, Space Center Houston, Kennedy Space Center



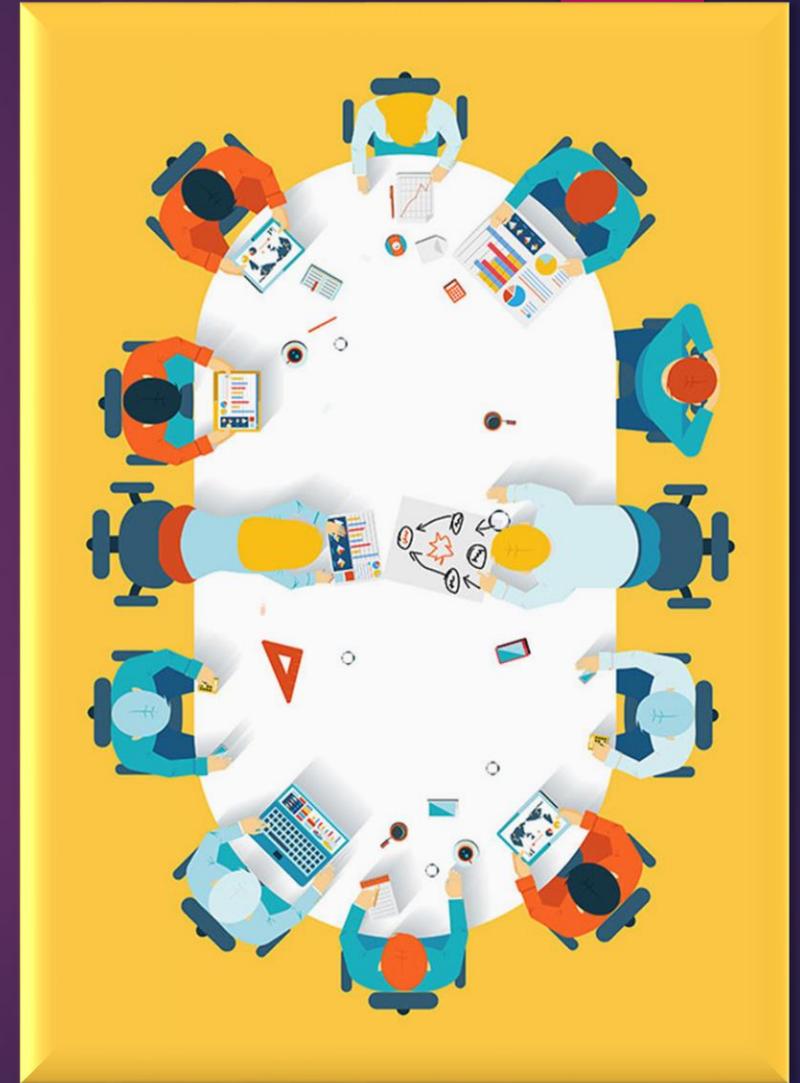
# Apollo 11 Anniversary



- ▶ 50<sup>th</sup> Anniversary on July 20<sup>th</sup>!
- ▶ SMD & O-STEM [\(pdf\)](#):
  - ▶ Northwest Earth and Space Sciences Pipeline's [ANGLeS](#) Apollo challenge (drone and rover challenge)
  - ▶ 3 ND H.S. teams traveling to Rapid City, SD for Regional Competition
- ▶ Marshall Space Flight Center [\(pdf\)](#):
  - ▶ Nationwide rocket launch endeavor (attempting to make a world record)
    - ▶ Any size: stomp rockets, model rockets, etc.
    - ▶ Focusing on Saturn V's launch time: **9:32 am** (Local)
- ▶ Anyone hosting a special celebration?

# Flipped Session

- ▶ Refresher: Ideas from this morning:
  - ▶ Virtual Reality
  - ▶ UND Atmospherium
  - ▶ Challenger Center with Gateway to Science Center
  - ▶ Lunar Rocks
  - ▶ Great Lunar Expedition for Everyone (GLEE)
- ▶ Group Discussion and Brainstorming
  - ▶ Can build off presented ideas or propose your own!
  - ▶ Goal of session: NDSGC programmatic improvements
  - ▶ [Countdown Clock](#)



# Reimbursement Assistance

Skip this part



## NON-EMPLOYEE/STUDENT TRAVEL EXPENSE WORKSHEET - NDSGC

**\*\*Form must be completed and attached to Voucher, and forwarded to Accounting Services, Stop# 8356\*\***

Please refer to the Accounting Services web site for Non-Employee Travel Policies and Procedures.

Individual is:  **ND STATE EMPLOYEE** Excludes UND Employees (Account 623200)  **NON-EMPLOYEE** (Includes non-UND students) (Account 623200)  **STUDENT - UND only** (undergraduate, graduate, & Medical School residents) (Account 521105)

NAME \_\_\_\_\_ Last 4 digits of SOCIAL SECURITY NUMBER \_\_\_\_\_  
(Required for all US Citizens)

VISA TYPE (Required for Non-Resident Aliens) Copy of Visa and I-94 MUST be attached.

PERMANENT HOME ADDRESS: \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

Date of Departure \_\_\_\_\_ Time of Departure \_\_\_\_\_ Date of Return \_\_\_\_\_ Time of Return \_\_\_\_\_

Destination (City, State, Country) \_\_\_\_\_

Purpose of Trip \_\_\_\_\_

Vehicle Driven:  Personal  State Fleet  N/A

**EXPENSES TO BE REIMBURSED:**

**MEALS** (per diem based on current in-state and out-of-state rate listings): Receipts are not required for meals, unless claiming reimbursement for paying for another's meal(s).

	Rate		# of Meals	=	Total
Breakfast:	7.00	x	_____	=	_____
Lunch:	10.50	x	_____	=	_____
Dinner:	17.50	x	_____	=	_____
<b>Meal Total</b>					_____

**MILEAGE** (GSA rate): Receipts are not required for mileage. NOTE: NDSGC caps mileage reimbursement at \$250/trip.

NDSGC rate: .4/mi      Total Miles \_\_\_\_\_      Rate \_\_\_\_\_      Mileage Total \_\_\_\_\_  
 \_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_

**LODGING:** (Do not include lodging expense if direct billed to UND)      Lodging Total \_\_\_\_\_  
 \_\_\_\_\_

**AIRLINE:** (Do not include ticket expense if direct billed to UND)      Airline Total \_\_\_\_\_  
 Original passenger coupon or Electronic Ticket Invoice required. \_\_\_\_\_

**MISCELLANEOUS:** Please list each expense and applicable amount      Misc. Total \_\_\_\_\_  
 Original receipts required except for taxi fares =<\$10.00 \_\_\_\_\_

**TOTAL AMOUNT TO BE REIMBURSED:** \_\_\_\_\_  
 (Should equal sum of all categories above and should equal amount on Voucher)

Funding: 30247-2245 UND0020212

PI/Department Approval: **Dr. Jim Casler** \_\_\_\_\_ Date \_\_\_\_\_

I hereby certify this itemized statement representing a claim for per diem, mileage and /or travel expenses or combination thereof is truthful and accurate. All expenses claimed have not been paid by the state through direct payments to the hotel or with a state credit card and is not a duplicate payment.

Traveler's Signature (in ink) \_\_\_\_\_ Date \_\_\_\_\_

# Past Affiliate Meeting Locations

- ▶ (prior) 2012: UND
- ▶ 2013: Dakota College at Bottineau
- ▶ 2014: Heritage Center
- ▶ 2015: Lake Region State College
- ▶ 2016: Dickinson State University
- ▶ 2017: Bismarck State College
- ▶ 2018: North Dakota State University
- ▶ 2019: Minot State University



**Thank you all for coming!**

**Special thanks to **John Webster** and  
**MSU** for hosting the meeting!**

**We would like to reuse your **lanyards**.  
Thanks!**