



# North Dakota Space Grant Consortium Annual Affiliates Meeting

**Dickinson, ND – April 8-9, 2016**

Santhosh Seelan  
Director, NDSGC

Caitlin Nolby  
Deputy Director, NDSGC

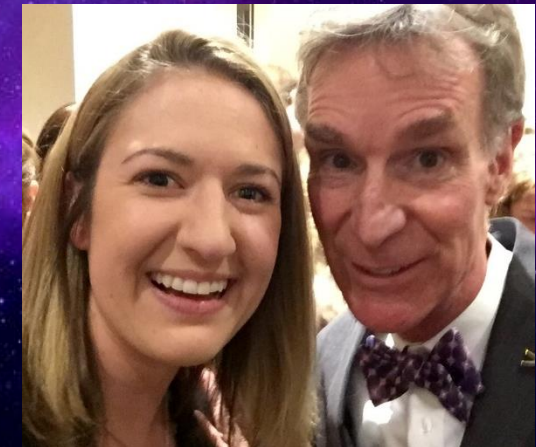
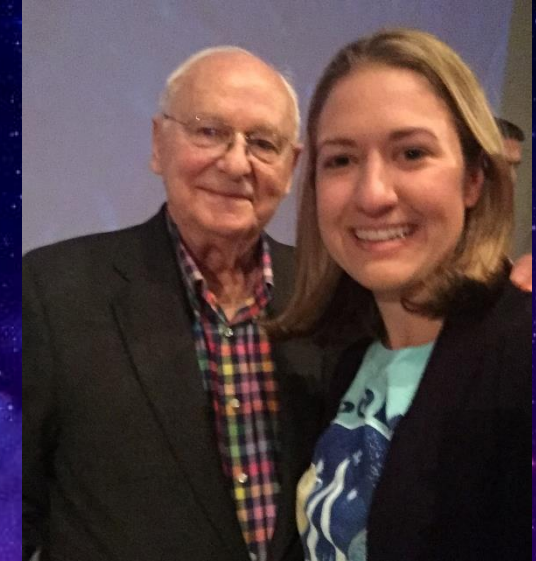
Marissa Saad  
Coordinator, NDSGC



Meet the New  
Space Grant  
Team Members

# Marissa Saad

- Coordinator of Space Grant
- EdD candidate in Teaching and Learning
- Master's Degree in Space Studies
- Bachelor's Degree in Astronomy
- Loves to go hiking, birding, and launch high altitude balloons!



# Dr. Jim Casler

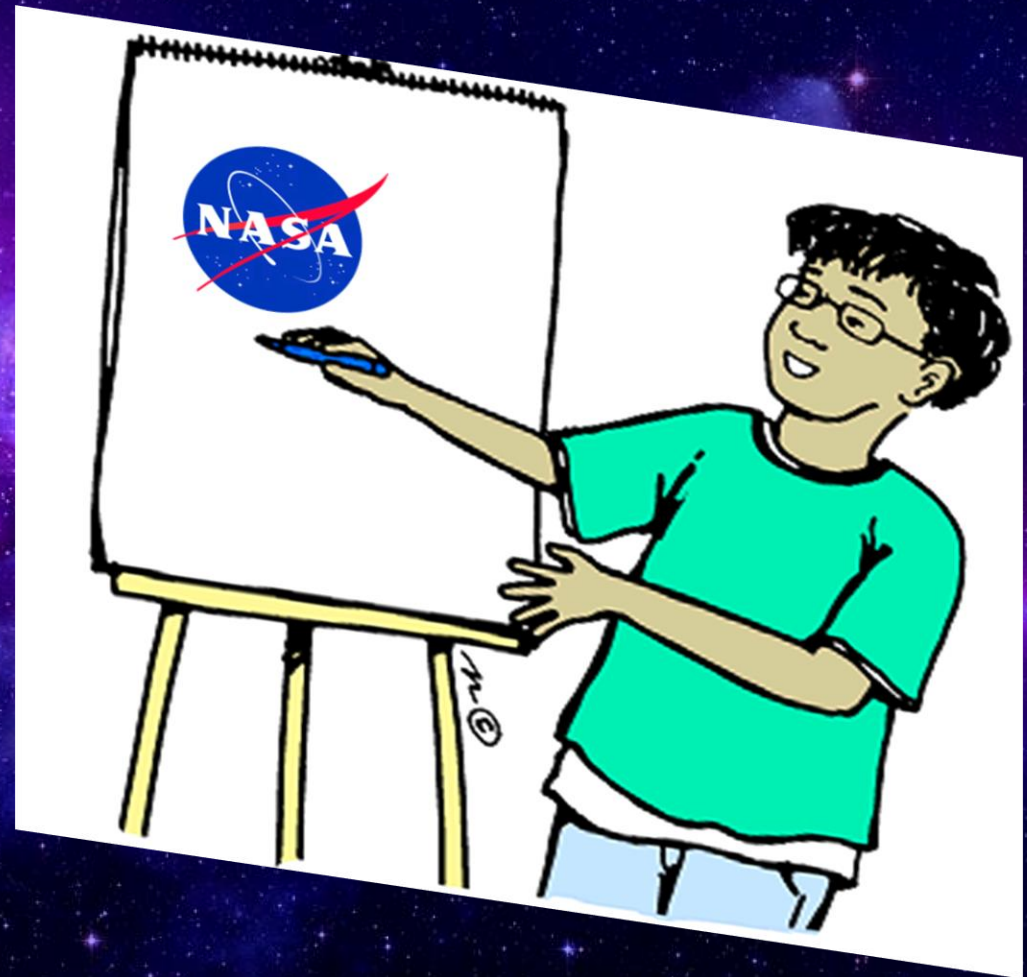


- Space Studies Professor
- PhD in Engineering from NDSU
- Great leadership
- His favorite color is **Green**



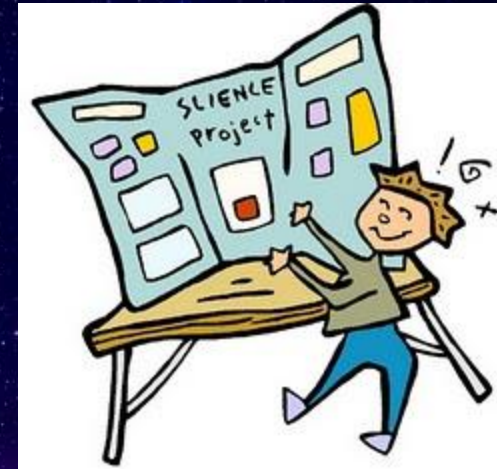
# Agenda – Friday, April 8<sup>th</sup>

- 1:15 pm Highlights of the Past Year
- 1:30 pm Presentations
- 2:15 pm *Break*
- 2:30 pm Presentations
- 3:45 pm *Break*
- 4:00 pm Presentations
- 5:15 pm Adjourn!
- 6:00 pm *No-Host Dinner*



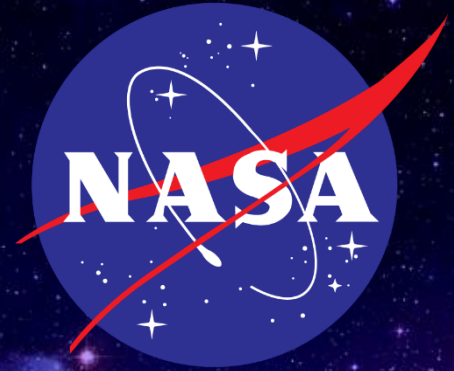
# Agenda – Saturday, April 9<sup>th</sup>

- 8:00 am Reconvene – *(breakfast at hotels; snacks provided)*
- 8:10 am Stomp Rocket Activity
- 9:10 am Presentations
- 10:25 am *Break*
- 10:40 am Presentations
- 11:55 am Group Picture
- 11:50 am *Lunch*
- 12:35 pm Business Meeting
- 1:35 pm (Optional) Tour of DSU



# Purpose of Space Grant

- The NASA Space Grant Program is a national network that promotes science, technology, engineering and mathematics (STEM) education through cooperative and multidisciplinary programs while recruiting and training the workforce.
- The North Dakota NASA Space Grant Consortium fulfills the Space Grant mission by involving North Dakota faculty, students, and K-12 teachers and students from across the state.
- The NDSGC works in close coordination with North Dakota NASA EPSCoR (Experimental Program to Stimulate Competitive Research) to improve the environment for STEM education in North Dakota





CANKDESKA CIKANA  
COMMUNITY COLLEGE  
*Spirit Lake Dakota Nation*



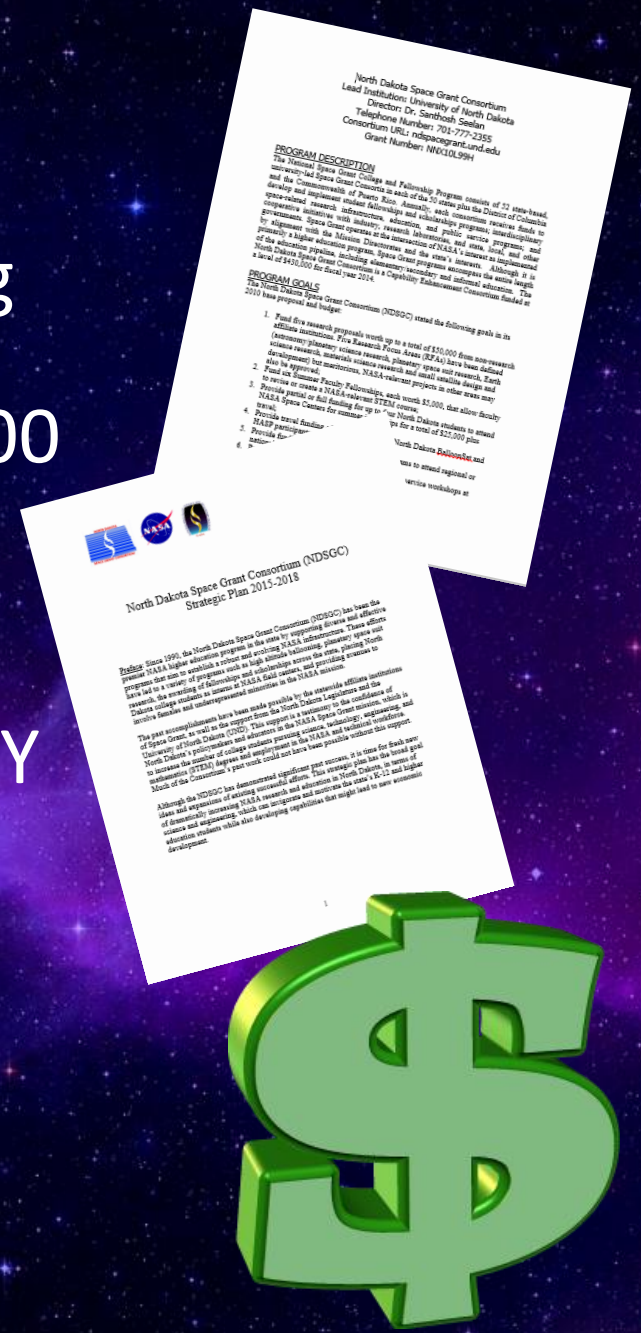
VALLEY CITY  
STATE UNIVERSITY





# Funding update

- Received approval for No-cost Extension through June 2016 for the earlier five year (2010-15) funding cycle
- Three year base funding \$430,000 for FY15, \$300,000 for FY16 and \$300,000 for FY 17
- \$200,000 state match per year
- Augmentation funding proposal submitted earlier this week for \$270,000 for FY 16 and \$270,000 for FY 17.
- So we have funding till April 2018
- Thanks to all of you for timely support letters!
- Thanks also for your great work and inputs for the annual report for FY 2015 which was submitted to NASA in April 2016



# Our Major Activities

- **Summer Faculty Fellowships**
- **Scholarships/Fellowships**
- **GRAs and Tuition Waivers**
- **Student Travel Funding for Conferences**
- **Support for national competitions**
- **Research Focus Area Projects**
- **Human Spaceflight Laboratory (rover, suits, habitat)**
- **Summer internships at NASA Centers**
- **Meetings and other administrative expenses**

# FY15 Report Highlights

- 136 undergraduate scholarships awarded
  - 70 female / 66 male
  - 6 American Indian Scholarships
  - 2 Pearl I. Young Scholarships (UND)
  - 2 Lillian Goettler Scholarships (NDSU)



Lillian Goettler Scholarship (NDSU)  
Michelle Sauvageau and Mi Huynh

(left)

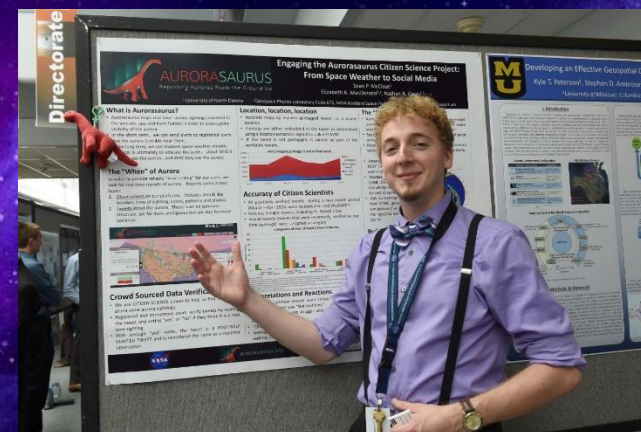
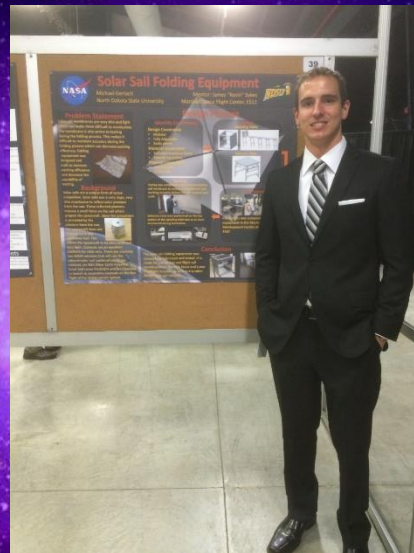
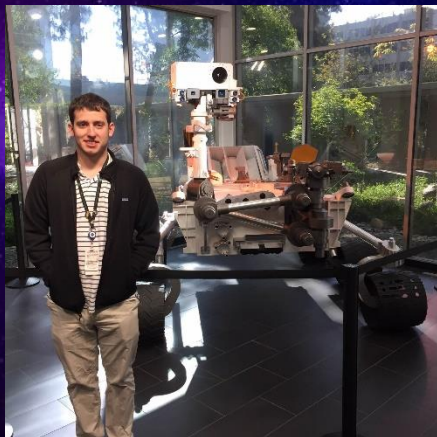
(above)



Janelle Hakala and Marika Diepenbroek  
Pearl Young Scholarship (UND)

# FY15 Report Highlights

- 10 Student Internships Awarded



# FY15 Report Highlights

## 24 Student Research Fellowships Awarded



# FY15 Report Highlights

## 6 Summer Faculty Fellowships



Aaron Kingsbury  
MSU



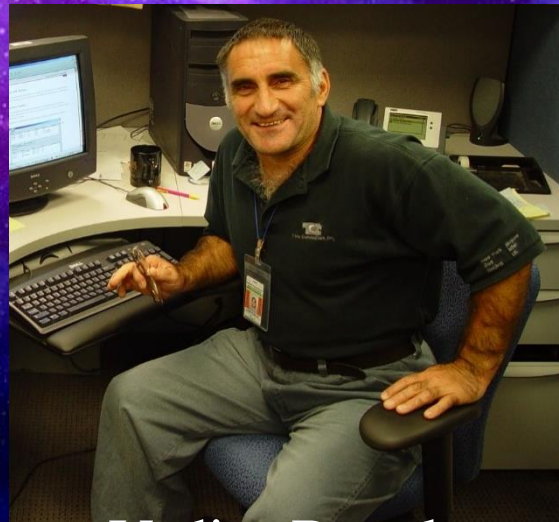
Tom Gonnella  
MSU



Cindy Burgess  
DSU



Paula Martin  
DSU



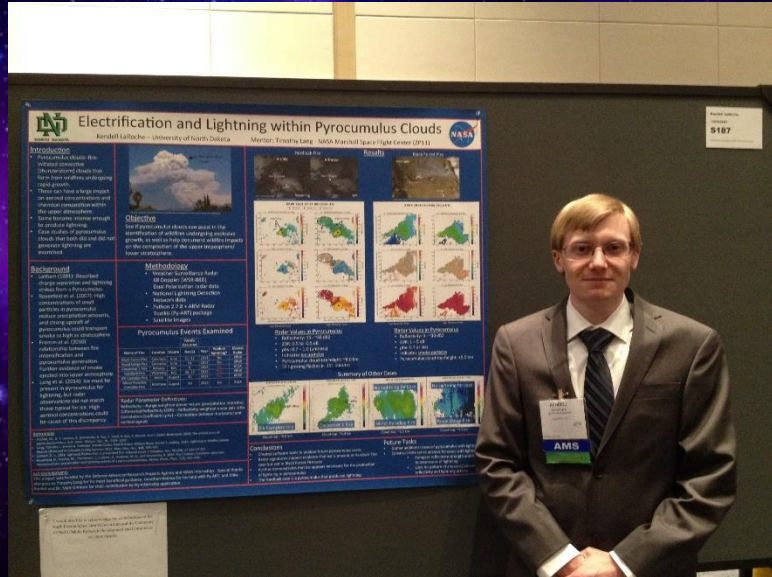
Vadim Rygalov  
UND



Gautham  
Krishnamoorthy  
UND

# FY15 Report Highlights

## 4 Student Travel Grants



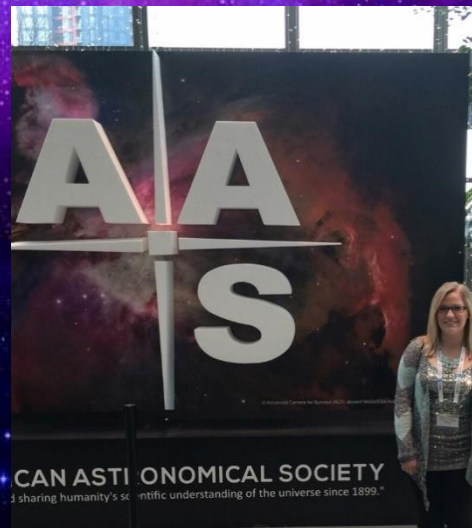
Kendell LaRoche  
UND



Kam Yee  
UND



Alex Nikle  
UND



Haylee Archer  
UND

# FY15 Report Highlights

## College Fairs

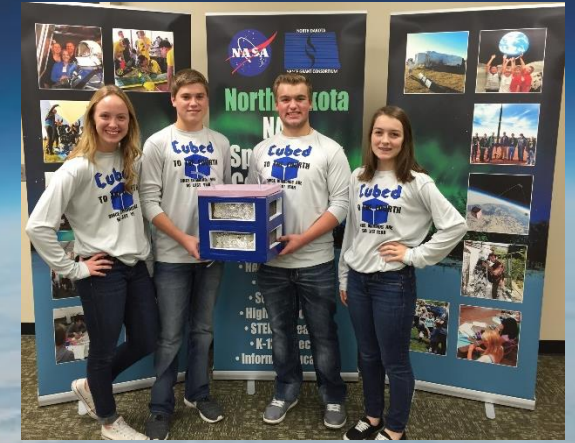
- MHA Nations
- UND Engineering
- Williston College





# Successful FY15 Pre-College Activities:

- Mega-Launch
- 6<sup>th</sup> Near-Space Balloon Competition



# FY15 Pre-College Highlights

## 3 Student Team Competitions

West Fargo FIRST  
Robotics Team  
at the World  
Championship



Cando FIRST  
Robotics Team

Northwood FIRST  
Robotics Team

# FY15 College NASA-Team Highlights



UND  
Robotics



NDSU AIAA Team



NDSU Rover  
Challenge Team



UND/UNF HASP

UND Student  
Launch Team



# FY15 Report Highlights

1910 students with Informal Education  
(Outreach)



# FY15 STEM Outreach Highlights



STEM Ambassadors

Mayville State (1)

UND (3)

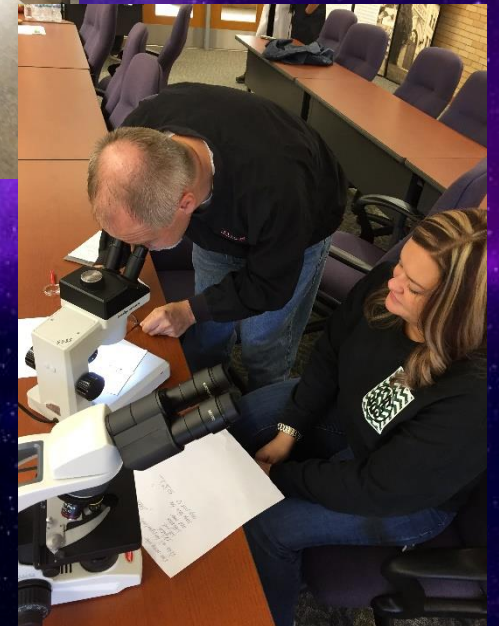
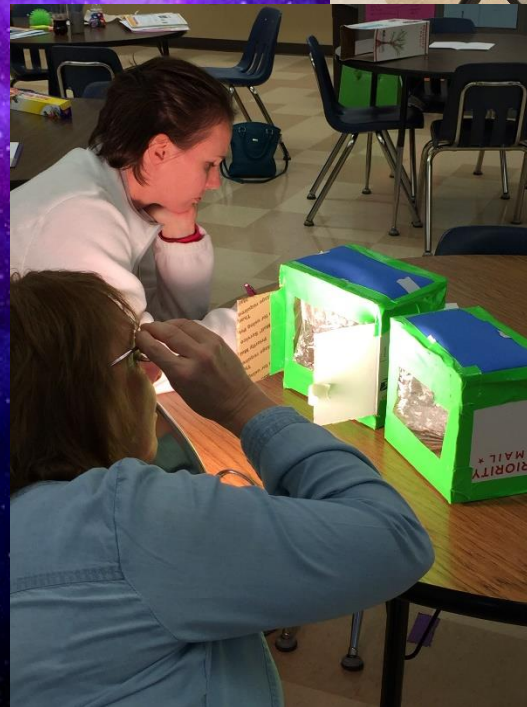
Lake Region State College (1)

# FY15 Pre- and In- Service Education Highlights

- 157 Pre-Service Teachers
- 130 In-Service Teachers – PD credit



Mayville State University SciGirls Workshop





# Human Space Flight Laboratory

Kennedy Space Center



# 2015 National Space Grant Meeting

Tucson, Arizona



2017 Grand Forks!





The New Aurora is out!



A deep space photograph featuring a large, glowing nebula in shades of purple and magenta. The nebula has a complex, swirling structure with a bright, central core. In the upper left corner, a prominent star is visible, surrounded by a circular diffraction pattern. The background is a dark, star-filled field.

Saturday, April 9, 2016









# Rockets to the Rescue

- Goal = Build and launch a rocket, keep your payload intact, and save Mark Watney!
- 25 minutes to build your structure
- Launch your payload to Mars!
- What will *your* team's strategy be?



4 - H NATIONAL YOUTH SCIENCE DAY

**ROCKETS**  
TO  
THE **RESCUE**



Business meeting



# Business meeting agenda

- Update on 2017 National Meeting in Grand Forks
- Approval of Dr. Jim Casler as Director of ND Space Grant from August 16, 2016
- Solar Eclipse Project (details on next slide)
- Summer/Fall visits to affiliate institutions
- Pre-service workshops and Classroom Visits
- Campus Career Fairs
- New Programs!
  - STEM Ambassadors
  - Community College and Tribal College Fellowship Bridge Program
- Next meeting date, day of week, time of year?
- Next meeting location
- Reimbursement information

# Eclipse project



- August 21, 2017
- 2017 Total Solar Eclipse
- Series of High Altitude Balloon Launches
- NDSGC will launch from Idaho
- College focus with potential for K-12 involvement
- Streaming of eclipse from stratosphere to NASA website
- [Eclipse.montana.edu](http://Eclipse.montana.edu)



Thank you all for coming!  
Special thanks to Corinne for  
hosting the meeting!!

Now for some Dickinson  
campus tours!