**TURNING EYES TO THE BIG SKY PROJECT**

a unique learning opportunity focused on strengthening science curriculum in the elementary and middle school setting offered by Montana State University and the Montana Space Grant Consortium.

This SPIE, NASA, and MSU-funded education based outreach research project is designed to:

- enrich science curriculum in the elementary and middle school setting in the Amsterdam-Churchill, Belgrade, Big Sky, Big Timber, Bozeman, Butte, Cardwell, Four Corners, Gallatin Gateway, Livingston, Manhattan, Three Forks, and Whitehall areas.
- provide training, materials, and MT OPI credits for 15 teachers on the subjects of general astronomy, light and optics.
- assess student learning of science topics through the *Hands-On Optics* curriculum.

This project provides:

- professional development in the areas of light and optics for practicing public elementary/middle school teachers that will be held all day on October 16, 2010 at Montana State University in Bozeman.
- curriculum and materials for each selected teacher and their classrooms (enough materials will be awarded for up to 25 students per classroom).
- MT OPI continuing education credits to each of the participating teachers.
- a classroom presentation by NASA Space Science Student Ambassador on general astronomy and current NASA missions in our solar system.

Requirements of selected teachers:

1. be a practicing public-school teacher in grades 4th through 8th in the above southwestern Montana areas.
2. attend the teacher development workshop that will be held all day on October 16, 2010 at Montana State University in Bozeman.
3. commit to teaching the *Hands-On Optics* curriculum during the 2010/2011 school year.
4. complete a pre/post survey and questionnaire on your experience.
5. be willing to administer pre/post-assessments and solar observation forms to your students, along with distributing and collecting a consent form from students’ legal guardians. These materials will be returned to the project’s P.I.
6. allow photographs be taken in your classroom during implementation of the curriculum.
7. commit to having the project’s P.I. come into your classroom to present a general lesson on astronomy after the pre-assessment has taken place.
8. attend the culminating star-party event to be held in conjunction with MSU’s annual Astronomy Day at the Museum of the Rockies on April 2, 2011.

Participating teachers should be willing to commit to full project involvement until May 2011.

If you are interested in participating in the *Turning Eyes to the Big Sky Project*, please fill out and submit the following application no later than September 27, 2010.
TURNING EYES TO THE BIG SKY PROJECT

Teacher Application Form:

Name: ________________________________________

School: _______________________________________

School email: ________________________________

School phone number: _________________________

School mailing address: _________________________

How many students are in your class? _________

How many years have you been teaching? _________

What grade level(s) are you teaching in 2010/2011? _________

Do you teach science only or all subjects? Please circle your response.

What size t-shirt do you wear? _________

On the following lines, please describe your knowledge of astronomy, light, optics and address your interest in this project.

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I have read the information above and understand that if accepted into this project, my class and I will partake in an education based research project led by Montana State University and the Montana Space Grant Consortium during the 2010/2011 school-year.

________________________________________________________

Applicant Signature                                      Date
TURNING EYES TO THE BIG SKY PROJECT

Principal or Supervising Administrator Permission Form:

I support ______________________________ (teacher’s name) in participating in the Turning Eyes to the Big Sky Project and recognize that his or her class will take part in an educational research project led by Montana State University and the Montana Space Grant Consortium. I also recognize that this project will require this teacher to teach a light and optics curriculum and also participate in activities mentioned previously on this application over the course of the 2010/2011 school-year.

__________________________________________  ______________________________
Administrator Signature                      Date

__________________________________________
Administrator Name

Please mail or fax this application to:

Ryan M. Hannahoe  
Department of Physics  
264 EPS Building  
Montana State University  
Bozeman, MT 59717  

(406) 994-4452

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[Logos of SPIE, NASA, and Montana State University]