



NSTA Regional Director—Jennifer Thompson

ASTA Mission Statement

To inspire, promote and support excellence in science education

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2012-2013 Executive Committee

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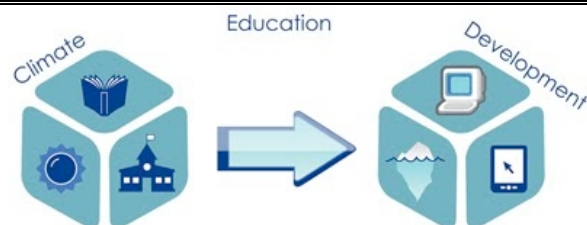
Northern Rep—VACANT

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At-Large Seat B—Bjorn Wolter, Juneau

Presidential Awards—Dave Gillam, Anchorage

ADVISORY Participant:



Changing Climates: Tracking Trends
2013 AMSC
Alaska Math and Science Conference

Jointly sponsored by the
Alaska Science Teachers Association and
the Alaska Council of Teachers of
Mathematics

Register online today!

<https://sites.google.com/site/2013akmathsciconference/>

The conference theme is
“Changing Climates: Tracking Trends.” Our primary meeting venue is Anchorage’s East High School.

Three strands for sessions will be available:

- * Tracking Trends in Science & Math Classrooms
- * Tracking Trends in Research & Climate Change
- * Tracking Trends in Professional Development

***Now accepting
Proposals for Presentations online.***

***Visit our site for registration,
accommodations, events, keynotes,***

field trips and more...

ASTA's May Elections!

Please participate in our May election. Members will vote on 6 positions by going to:

<http://www.surveymonkey.com/s/TP9TKWZ>



Learn about the NGSS:

<http://www.nextgenscience.org/next-generation-science-standards>

from NSTA Express Special Edition: Next Generation Science Standards Released
Next Generation Science Standards (NGSS) Released - NSTA welcomes the final version of the Next Generation Science Standards (NGSS). The standards are now at www.nextgenscience.org. The new standards establish learning expectations in science for K–12 students combining three important dimensions—science and engineering practices, disciplinary core ideas, and crosscutting concepts. NGSS provides a cohesive approach to science instruction that will significantly change the way science is taught and learned. Twenty-six states led the development of NGSS in a process managed by Achieve. The 41-member writing team included many classroom teachers. The standards are based on the *Framework for K–12 Science Education* from the National Research Council (NRC). Achieve also partnered with NSTA, NRC, and the American

Association for the Advancement of Science in the standards' development.

Read NSTA's Response to the Release of NGSS: "The Next Generation Science Standards establishes clear educational goals that can give students the skills and knowledge they need to be informed citizens, college ready, and prepared for STEM careers," said **Dr. David Evans, NSTA Executive Director**. "All students—from Maine to California—deserve access to the best science education and these standards that will be consistent from state-to-state have the potential to make that happen."

Got questions about NGSS? We've got answers in this [NSTA Frequently Asked Questions About NGSS](#).

Learn more about the new members-only [NSTA listserv](#) dedicated solely to the NGSS. **Learn more** about the [history of the NGSS](#)

Read News Articles on NGSS Hot Off the Press
Education Week's Erik Robelen highlights the release of the new standards in his piece "Common Science Standards Make Formal Debut." Read the full story, including comments from NSTA's Executive Director, David Evans, http://www.edweek.org/ew/articles/2013/04/09/28science_ep.h32.html?tkn=MURFAauW1LWL CGxjG0D4mO6P6tyKC64zfBvP&cmp=clp-edweek.

Your Complete Guide to the Next Generation Science Standards Your search for NGSS resources starts at www.nsta.org/ngss. [View the Next Generation Science Standards](#) as well as a variety of documents and supporting materials organized by NSTA to help you understand and navigate the NGSS.

Pre-order your copy of the *NSTA Reader's Guide to the Next Generation Science Standards*. Written by science education expert Harold Pratt, the publication will give readers a deep understanding of NGSS core ideas, scientific and engineering practices, and crosscutting

concepts. Look for other STEM books coming soon and watch for news on how you can purchase your own print copy of the full NGSS from NSTA coming this fall.

Register now for an NSTA online short course on assessment and engineering. "Moving Toward NGSS: Visualizing K–8 Engineering Education," (May 16–May 30) will provide practical insights into teaching engineering in the elementary or middle school classroom.

Sign up for one of these free upcoming NSTA web seminars on NGSS exploring crosscutting concepts, including **Structure and Function (5/14)**; **Stability and Change (5/28)**; and **Systems and System Models (6/11)**. (Check out the entire series on NGSS web seminars archived in the NSTA Learning Center.)

Read and download NSTA's growing collection of monthly journal articles exploring the three dimensions of the NGSS. Articles examine the practices, crosscutting concepts, connections to common core, and more. The latest articles focus on disciplinary core ideas written by the NGSS lead writers Rodger Bybee, Joe Krajcik, and Michael Wyession.

Watch Montana teacher of the year Paul Andersen's comprehensive video series on NGSS.



UAA's 2013 Engineering Summer Camps have arrived! BP has once again graciously agreed to fund these FREE camps for boys and girls, grades 4-12. The 3 camps are

Robotics
Structure Destruction
Alternative Energy

For more information and registration go to: <http://uaasummercamps.com/2013/>

Summer Professional Development Opportunities

Alaska Geographic Teacher Trainings 31 May 2013 * Various sties throughout Alaska

Educators and Scientists: Putting Our Heads Together to Get Kids Excited About Science 05 June 2013 * UAS Sitka Campus

A Pedagogy of Place STREAM Institute: Professional development workshop 17 Jul 2013 * UAS Juneau

Alaska Science Consortium Summer Science Wrokshop: Integrating Art and Science 23 Jul 2013 * BP Energy Center in Anchorage, AK

Find New Ways to Ensure 'No Child Left Inside'

Any day can be "No Child Left Inside" Day - a time for young people to experience Earth science with outdoor learning activities. The free NCLI Day Guide offers lots of activities to help you do just that with your elementary, middle, and high school students! Start planning your own NCLI Day event. Get outside today! AND plan a special event for NCLI Day on Tuesday, October 15, during Earth Science Week 2013 - when educators and young people nationwide will be wading into creeks, climbing hills, and searching the skies to learn Earth science! Find the NCLI Day Guide at <http://www.earthsciweek.org/ncli/index.html>. Have a great NCLI Day!



(image: <http://static.ddmcdn.com/gif/easy-outdoor-science-activities-for-kids-5.jpg>)

CHECK OUT THESE COOL SCIENCE WEBSITES:

Incredible Image of the Sun

http://www.nasa.gov/images/content/719590main_Grid-Sun-orig_full.jpg

National Ocean Sciences Bowl

<http://seagrant.uaf.edu/nosb/whatis.html#national>

Adopt a Drifter

<http://www.adp.noaa.gov/index.html>

Minute Physics

<http://www.youtube.com/user/minutephysics>

Nature Works Everywhere

<http://www.natureworkseverywhere.org>

Science Olympiad

<http://www.alaskascienceolympiad.org>

In the News...

Triangle Coalition Announces 2013-2014 Einstein Fellowships

Twenty-seven distinguished STEM educators selected to serve next school-year at four federal agencies

ARLINGTON, Va. (March 26, 2013) – The Triangle Coalition for Science and Technology Education today announced 27 science, technology, engineering, and mathematics (STEM) educators who have been selected for the 2013-2014 Albert Einstein Distinguished Educator Fellowship Program. Selected educators will serve in Washington, D.C. for 11 months beginning September 1, 2013 at sponsoring federal agencies which include the Department of Energy (DOE), National Aeronautics and Space Administration (NASA), National Oceanic and Atmospheric Administration (NOAA), and the National Science Foundation (NSF). Einstein Fellows provide practical classroom insight in guiding education programs and policies, especially those related to STEM education.

Founded in 1990, the Albert Einstein Distinguished Educator Fellowship Program is a paid fellowship for K-12 STEM excellent

educators. Fellowships aim to increase understanding, communication, and cooperation between the legislative and executive branches of the government and the STEM education community. The Albert Einstein Distinguished Educator Fellowship Act, authorized by Congress in 1994, gave DOE federal responsibility for the program. The Triangle Coalition for Science and Technology Education administers the Program for the DOE Office of Science.

The 2013-2014 Einstein Fellows were selected through a rigorous application and interview process from a competitive, nationwide pool of nearly 200 applicants. Triangle Coalition is pleased to announce Alaska's selected Einstein Fellow as follows:

Sheryl Sotelo, a teacher at **McNeil Canyon Elementary in Homer, Alaska**, will serve at the National Science Foundation's Directorate for Education and Human Resources (EHR), Human Resources Development Division (HRD) under the guidance of Marilyn Suiter.

UAA COE Professor Alison 'Sunny' Mall receives the 2013 Selkregg Community Engagement and Service Learning Award

Alison "Sunny" Mall, assistant professor in UAA's College of Education, is the recipient of the 2013 Selkregg Community Engagement and Service Learning Award for her project, "Engaging Secondary Mathematics Teachers in Teaching Mathematics for Social Justice."

This year's Selkregg Award will support rural and urban secondary mathematics teachers in teaching mathematics for social justice within the contexts of their individual communities and villages in Alaska. The teachers will create a collection of instructional units designed to guide Alaska's teachers in teaching real-world mathematics in a manner that will ultimately help students learn to analyze complex, social issues while simultaneously ensuring students gain essential academic skills. The research study

underlying this project will add to the knowledge base of mathematics teacher education. The community partners for this research are the Alaska Council of Teachers of Mathematics and Alaska Science Teachers Association.

The Selkregg Award, established in 2005, draws from a memorial fund established in the name of Fred M. Selkregg Jr., a longtime Alaskan who was a civil rights activist, community leader and spiritual teacher; and Lidia Selkregg, a city planner and UAA professor who worked passionately for Anchorage’s ports and watersheds, rural and urban welfare and civil rights. The Selkreggs brought a commitment to openness, truth, democracy and social justice to all of their work.

This \$5,000 award supports faculty in the development of community engaged research, creative activity and academic service learning projects.

Visit the Center for Community Engagement and Learning (CCEL) website for more information.



ASTA Honors Excellence in Teaching

The Alaska Science Teachers Association annually awards one citation for distinguished service in the field of science education. ASTA members are invited to share in the selection process by sending nominations of Alaska educators to ASTA for review by the Awards and Recognition Committee. This year the nominations open on January 15, 2013.

The award is designed to recognize Alaska educators who have made extraordinary contributions to the advancement of science education. Each award consists of up to \$500 to travel to the biannual Alaska Math/Science Conference, where a formal citation and a suitable token of appreciation for the outstanding service rendered by the recipient will be given.

Please see the nomination form below.



Mini-Grant Opportunities

Check out our two ASTA mini-grant opportunities for members: Classroom Projects and Travel grants! The applications are attached below and must be postmarked by May 20th. This deadline has been extended, so apply today.

\$

Spread the Word...

Share **ASTA** with your colleagues by posting this flyer in your school!



Do you teach Science here in Alaska?

Join the Alaska Science
Teachers Association, your
statewide professional
organization.

Here are a few of the many reasons professionals participate in ASTA:

#1 Science News and Opportunities! Members of ASTA can stay “in the know” about science opportunities such as awards, camps, programs, or internships for you and your students by reading our newsletter and website. Read about new ways to teach or get sample lesson plans from our website to ignite your science pedagogy.

#2 Conferences! As a member you are able to take advantage of professional development offered through national and statewide conferences where workshops, resources, speakers, and field trips broaden your knowledge and address many of your interests.

#3 Network! Association with other professionals who have similar interests and a wide variety of experiences, gives you opportunities to share your expertise and learn from others. This networking is so valuable!

#4 Involvement and Leadership! Being a member means you can give back to the profession, by getting involved. There are many opportunities to actively participate in events, committees, conferences, and board positions.

#5 Grants! Members are eligible to apply for grants to help with classroom equipment or project costs, or for conference travel grants.

#6 Help other teachers! You can choose to lead a conference workshop, or help your school and district colleagues learn more about science and the teaching of science..

ASTA Mission Statement

To inspire, promote and support excellence in science education.

Our goals advocate science literacy for all Alaskans; promote the exchange of information about science and science education among researchers, scientists, institutions, public leaders and science teachers; encourage the development of a skilled and knowledgeable work force in science related careers.

JOIN TODAY BY LOGGING ONTO <http://www.aksta.org/membership.html>.



ASTA Mini-Grant Application for Classroom Project
Deadline –March 15, 2013

Mini-grants are awarded to ASTA members on a semi-annual basis. Applications will only be considered if they are post marked or e-mailed by the due date. This application is for a project mini-grant.

Title of Proposed Project _____
Teacher Name _____ **School** _____
Address _____
Phone _____ **email:** _____
Amount Requested (\$500.00 maximum) _____

**If awarded a project grant, an article about your project to be published in the next ASTA Newsletter AND receipts need to be submitted to the ASTA Treasurer by September 15, 2013 in order to receive the grant funds.*

**Must be an Alaska resident in addition to being a member of ASTA.*

You may use one additional page to complete the following questions.

Project Description

1. Briefly describe your proposed project. Include in the description project goals, the number of students involved, the Alaska Science Standards that are addressed, and proposed activities. **(5)**

2. Timeline for completion of your project. **(5)**

3. How will you evaluate the effectiveness of your project? **(5)**

Proposed Budget (5)

Budget Amount	Activity

Total	

Mail (postmark date on or before May 20, 2013) or e-mail the completed form to pbrown@hbsd.net no later than May 20, 2013. Forms can be mailed to Patty Brown, P.O. Box 984, Haines, AK 99827

I assert that these plans I am presenting are as accurate as I can make them and that I intend to make every effort to complete this project.

Signature of Applicant

Date

Scoring Guide for Classroom Project Mini-Grant Proposal

	Project Description	Timeline	Evaluation	Budget
5	<ul style="list-style-type: none"> Project description is complete, concise and includes all required elements (project goals, # of students involved, Standards addressed, proposed activities) Project activities involve active science learning for all students Project goals clearly promote scientific inquiry 	<ul style="list-style-type: none"> Timeline is realistic Goals are achievable in allotted time 	<ul style="list-style-type: none"> Evaluation plan is clear and well thought out Plan clearly evaluates effectiveness of project 	<ul style="list-style-type: none"> Budget is clear All expenditures are directly related to project activities
3	<ul style="list-style-type: none"> Project description is clear, includes all required elements Project activities may involve some active science learning for all students Project goals promote scientific inquiry 	<ul style="list-style-type: none"> Timeline is realistic Goals may be achieved in allotted time 	<ul style="list-style-type: none"> Evaluation plan is clear Plan attempts to evaluate effectiveness of project 	<ul style="list-style-type: none"> Budget is clear Most expenditures are directly related to project activities
1	<ul style="list-style-type: none"> Project description is unclear, may be missing required elements Project activities don't involve active science learning for all students Project goals don't promote scientific inquiry 	<ul style="list-style-type: none"> Timeline unrealistic Goals not achievable in allotted time 	<ul style="list-style-type: none"> Evaluation plan is not clear Plan does not evaluate effectiveness of project 	<ul style="list-style-type: none"> Budget is not clear Expenditures are not related to project activities

THE EMMA WALTON DISTINGUISHED SERVICE AWARD
Presented by the Alaska Science Teachers Association
GUIDELINES

The Alaska Science Teachers Association annually awards one citation for distinguished service in the field of science education. ASTA members are invited to share in the selection process by sending nominations of Alaska educators to ASTA for review by the Awards and Recognition Committee. This year the nominations open on January 15, 2013.

The award is designed to recognize Alaska educators who have made extraordinary contributions to the advancement of science education. Each award consists of up to \$500 to travel to the biannual Alaska Math/Science Conference, where a formal citation and a suitable token of appreciation for the outstanding service rendered by the recipient will be given.*

Dr. Emma Walton passed away in September 2012. She leaves a legacy of over forty years of teaching and education leadership in Alaska and on the national level. People who have met and worked with her over the years have admired her energy, motivating spirit, and unflagging commitment to the improvement of science and education. This award is granted to celebrate Emma's work as well as the effect of this spirit burning brightly in others.

ASTA Awards and Recognitions Criteria

Excellence of contribution to science education in Alaska is the main criterion for selection of the recipients. Among the types of outstanding services that are considered by the committee are:

- (1) Unique or extraordinary accomplishments in science teaching
- (2) Active leadership in science and/or science education.
 - _____ Local level
 - _____ State level
 - _____ National level
- (3) Noteworthy scholarly contributions to science education at any level.
- (4) Focusing of public attention and the need for improvement and better support of science education.
- (5) Direct and substantial contributions to the improvement of science education at any level.
- (6) Contributions over a significant period of time.
- (7) Overall excellence of contributions.

*If the conference is in the recipient's city of residence and travel expenses will be negligible, the \$500 may be spent for some other professional purpose. The 2013 Alaska Math and Science Conference is in Anchorage.

SEND APPLICATION PACKET TO:

Patty Brown
 Alaska Science Teachers Association, President

P.O. Box 984
Haines, AK 99827 ATTN: ASTA Distinguished Service Award

For the 2013 award, this packet should be received no later than July 1, 2013. The winner of the Distinguished Teaching Award will be notified by August 15, 2013.



**ASTA Mini-Grant Application for Professional Development Travel
Due May 20, 2013**

Mini-grants are awarded to ASTA members on a semi-annual basis. Applications will only be considered if they are post marked or e-mailed by the due date.

**If awarded a travel grant, receipts need to be submitted to the ASTA Treasurer within 45 days after the professional development, in order to receive the grant money.*

**Must be an Alaska resident in addition to being an ASTA member.*

**If awarded a grant, please submit an article to be published in the following ASTA Newsletter.*

This application is for a professional development travel mini-grant.

**Name of the Professional Development Conference or Seminar
National Science Teachers Association (NSTA)**

Teacher Name _____ **School** _____
Address _____
Phone _____ **E-mail:** _____
Amount Requested (\$500.00 maximum) _____

You may use additional pages to complete the following questions.

Professional Development Conference or Seminar Description

3. Briefly describe the professional development conference, seminar, or other experience you are planning on attending. Include in the description conference or seminar goals, the proposed activities and, briefly, the Alaska Science Standards or Next Generation Science Standards that will be addressed. **(5)**

Standards addressed:

4. What are your personal goals for attending this conference or seminar? How will you share the information that you receive with your fellow professionals and your students **(5)**.

5. Proposed timeline including the dates of the seminar or conference and presentations of information gained at the seminar or conference.

Proposed Budget (5)

Budget Amount	Activity
Total	

Expenditures are reimbursed from receipts mailed to the ASTA Treasurer following the documented attendance at the seminar or conference.

Mail (postmark date on or before May 20, 2013) or e-mail the completed form to pbrown@hbsd.net no later than May 20, 2013. Forms can be mailed to Patty Brown, P.O. Box 984, Haines, AK 99827

Scoring Guide for Seminar / Conference TRAVEL - Mini-Grant Proposal

	Project Description	Timeline	Personal Goals/Use of Information	Budget
5	<ul style="list-style-type: none"> Description of the seminar or conference is complete, concise and includes all required elements (project goals, # of students involved, Standards addressed, proposed activities) Seminar/conference information involves active science learning for a broad range of students and professionals 	<ul style="list-style-type: none"> Timeline is realistic Goals are achievable in allotted time 	<ul style="list-style-type: none"> Personal goals are well defined A plan to share information is well defined and thoroughly described 	<ul style="list-style-type: none"> Budget is clear All expenditures are directly related to attendance at conference or seminar
3	<ul style="list-style-type: none"> Description of the seminar or conference is clear, includes all required elements Seminar/Conference information involves some active science learning for some students and professionals 	<ul style="list-style-type: none"> Timeline is realistic Goals may be achieved in allotted time 	<ul style="list-style-type: none"> Personal goals are clear A plan to share information is minimally described 	<ul style="list-style-type: none"> Budget is clear Most expenditures are directly related to attendance at conference or seminar

<p>1</p>	<ul style="list-style-type: none"> • Description of the seminar is unclear, may be missing required elements • Seminar/conference information does not involve active science learning for students and professionals 	<ul style="list-style-type: none"> • Timeline unrealistic • Goals not achievable in allotted time 	<ul style="list-style-type: none"> • A plan to share information is not well defined or thoroughly described • A plan to share information is not well defined 	<ul style="list-style-type: none"> • Budget is not clear • Expenditures are not related to attendance at conference or seminar
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