



Minnesota Academy of Science

Promoting Excellence in Science Since 1873

ELECTRONIC NEWSLETTER JANUARY 2011 VOL. 2 NO. 2

www.mnmas.org www.mnacadsci.org

Save the Date - Next MN Tech Symposium is Thursday March 24

The Minnesota Technical Symposium (MnTS) planning is once again underway to bring you a night of good food and great speakers. Held at Medtronic World Headquarters, the program is sponsored by Medtronic and several professional groups including the Minnesota Academy of Science.

As a participating member of the Academy, you can attend the evening (dinner and speaker) for only \$25.

The Academy picks up costs above this amount to keep the prices low for our members.



Watch for upcoming registration information and Save the Date of Thursday, March 24, 2011 to attend this year's Minnesota Technical Symposium.

Information about last year's MnTS can be found at minnts.org.

2011 MN Academy of Science Events

To find out times, costs and special member invites, visit our website at www.mnmas.org

Science Bowl - High School	Friday, January 21 (Snow date: Sat., Jan. 22)
Science Bowl - Middle School	Saturday, February 19 (Snow date: Sun. 20)
Minnesota Technical Symposium	Thursday, March 24
Junior Science & Humanities Symposium	Sat-Sun, March 19-20
REAP Presentations/Awards	Sunday, March 20
State Science & Engineering Fair	Sun-Tues, March 20-22
Annual Meeting/Winchell Symposium	Saturday, April 16

I do not know what I may appear to the world; but to myself I seem to have been only like a boy playing on the seashore, and diverting myself in now and then finding of a smoother pebble or a prettier shell than ordinary, whilst the great ocean of truth lay all undiscovered before me.

- Sir Isaac Newton

The MN Academy of Science invites you to join us on the **MN Science Calendar!**

www.ScienceCalendar.org

Find science events, exhibits, programs and resources in all science disciplines throughout Minnesota and beyond. Listings include events for professional scientists, academics, science teachers, students, and parents.

New events are added regularly so check back often!





Message from the Executive Director

From the Director's Desk -

It's important for you as supporters, participants, volunteers and donors to understand where our funding comes from and how we spend it. While some of our program fees have been climbing over the last couple of years, we have tried to keep costs down in other areas such as parking, food and hotel rates for program participants.

The Minnesota Academy of Science couldn't stay in business on "earned" income alone. None of our programs are self sustaining. Accordingly, all of our programs require charitable support from individuals, memberships, corporations, foundations, colleges, and government grants.

As you will see from our financial report, over the last six years, we have stabilized our funding and have a small reserve available in the event that we were to lose a sponsor, not an uncommon occurrence. Over the last couple of years, we have had to replace close to 10% of our budget dollars when foundations have changed their giving policies and dropped out. The reality is that it is hard to find new support in the very tight economy we are currently experiencing. Our staff and board work very hard to utilize our funds efficiently, spending only 19.5% on fundraising and administration (the Charities Review Council recommends holding this figure to not more than 25%), allowing us to spend over 80% of our revenues on program costs - a significant achievement for a nonprofit organization with a budget under \$500,000.

Our budget for FY2011 is \$302,487. Of that amount, we earn approximately 34% from program fees and merchandise sales. The remaining 66% comes from charitable support, of which 65% is corporate donations, and foundation and government grants. **Less than 1% comes from individual donations and membership dues.** In 2011, we are planning a fundraising campaign in the hope that we can increase our individual giving to 3%, an increase from \$2,500 to \$7,500, in order to diversify our revenue base and continue to bring financial stability to the Academy.

We hope that you will consider becoming a donor to the Academy. A small gift of \$25 to \$50 each year would help us to maintain the quality of our programs and allow us to continue to provide exciting academic enhancing programs such as the Minnesota State Science & Engineering Fair, Science Bowl and Winchell Undergraduate Research Symposium.

On behalf of the Minnesota Academy of Science board and staff, thank you for your support and participation!

Warm wishes for the New Year,

Celia Waldock



Science Bowl Program Statistics - 2010

Combined Statistics for Middle School and High School Science Bowls

Number of Participants (students and coaches) - 300
Number of Schools - 27
Number of Cities - 18
Number of Volunteers - 118
Volunteer Hours - 880

Participating Schools

Benson High School, Benson
Blake Upper School, Hopkins
Blake Middle School, Hopkins
Burnsville High School, Burnsville
Cathedral High School, New Ulm
Central High School, St. Paul
Chanhassen High School, Chanhassen
Chaska High School, Chaska
Columbia Heights High School, Columbia Heights
Field Community School, Minneapolis
Gibbon-Fairfax-Winthrop Middle School, Gibbon
Harding High School, St. Paul
Hopkins North Junior High School, Hopkins
Maternity of Mary-St. Andrew School, St. Paul
Mankato West High School, Mankato
Minnetonka High School, Minnetonka
Minnetonka Middle School West, Minnetonka
Murray Junior High School, St. Paul
Oak Land Junior High, Stillwater
St. Anthony Village High School, St. Anthony Village
St. John's Preparatory School, Collegeville



The Science Bowls would not be possible without these generous Sponsors:

ECOLAB®



In-kind donations were provided by:

Costco
General Mills
Green Mill
Ecolab

St. Paul Academy & Summit School, St. Paul
St. Thomas More Catholic School, St. Paul
Springfield High School, Springfield
Springfield Middle School, Springfield
Wayzata High School, Wayzata

Thank you Science Bowl Volunteers!

Your time, effort, knowledge and support make this event a joy to work. Thanks to all of you for helping to inspire the next generation of scientists! Lisa Warbritton, Program Manager



Steph Anderson, Dr. Carroll Arnett, Elliot Augst, Michel Bere, John Borgos, Rod Bowman, Dr. Patrick Braun, David Brown, Colin Brownlow, Dr. Christopher Calderone, Liam Callahan, Dr. Adam Cantor, Greg Conrad, Ellen Consadine, Laura Cremin, Gina Danielson, Mark Davis, Teresa De la Mora, Christopher Durbin, Brandon Dvorak, Jennie Eckholt, Steven Faulhaber, Curtis Finney, Katelyn Fischer, Paul Fjaeger, Kris Fowler, Stephanie Fretham, Robert Goldman, Karl Greden, Kathryn Hanna, Jennifer Hanson, Jon Harris, Melissa Hass, Valerie Hedges, Dr. Leon Hsu, Leisha Ingdal, Tom Kelley, Mike Kemen, Ellen Kennedy, Vang Khang, Drew Kiesling, Gretchen King, Tess Kornfield, Kelsey Lange, Dean Langenfeld, Robbie Langenfeld, Ashton Lehmann, Eric Lieder, Amanda Ly, Jenny Maack-Mcaab, Shane Maefsky, Dr. Colin Martin, Beth Melcher, Dr. John Mietzen, David Misemer, Asha Mishra, Usha Mishra, Dr. Stephanie Moeller, Abdul Naseer, Karen Newell, Chris Ober, Sheri Ober, Dr. Heidi Olson, Art Payne, Brie Perell, Maribeth Powers, Jeff Resch, Melanie Rogers, Dr. Steve Saxe, Dr. Katrina Schimmel, Bob Schmall, Lynn Schwartz, Mark Shriver, Florence Sprague, Dr. Venu Thayanithy, Matt Thell, Patt Threinen, Dr. Bill Tolman, Joe Touchet, Erin Traxler, Colleen Vickerman, Jim Waddell, Alison Walsh, Lizz Wenzel, Dr. Michael Williams, David Williamson, Debra Winterton, Jim Wolfe Wood, Wayne Wolsey and Laura Young

MN State Science & Engineering Fair 2010 Statistics

Junior Science & Humanities Symposium 2010 Statistics

Just how big are the State Science and Engineering Fair and the Junior Science and Humanities Symposium each year? As you can see from the numbers below, these are big events that span the entire state. The time and dedication of all of these students, parents, teachers, judges and volunteers are staggering. Thanks to all who make this happen!

Number of student presenters: 461
Number of student observers: 9
Male: 45% **Female:** 55%

Number of student presenters: 64
Number of Observers: 5
Male: 54% **Female:** 46%



Lise Weegman
Program Manager

Participation by Region	Students	
Central	44	9%
Northeast	92	20%
Northern	18	4%
Rochester	45	10%
South Cent / SW	91	19%
Southeast	35	7%
Twin cities	126	27%
Western	<u>19</u>	4%
	470	

Participation by Region	Students	
Central	6	9%
Northeastern	13	19%
Northern	1	1%
Rochester	6	9%
South Cent / SW	11	16%
Southeastern	1	1%
Twin Cities	23	33%
Western	1	1%
OPEN COMPETITION:	5 Twin Cities,	
	1 Rochester, 1 North Dakota	

Number of Schools participating: 106
Number of cities/towns participating: 115

Number of Schools participating: 27
Number of cities/towns participating: 38

Volunteers	Qty	Hours
Science Fair Committee	20	388
Judges	247	1,768
Volunteer Staff	9	120
Other Volunteers	<u>51</u>	<u>204</u>
Total:	327	2,480

Volunteers	Qty	Hours
Planning Committee	12	149
Judges	42	238
Other Volunteers	<u>39</u>	<u>213</u>
Total:	93	600

Find us on Facebook



Become a fan of the Minnesota Academy of Science on our Facebook page at: www.facebook.com/home.php?#!/pages/Saint-Louis-Park-MN/Minnesota-Academy-of-Science/141564430517 (you need to be logged in for the link to work) or search for "MN Academy of Science" in Facebook. In addition to our page being *the* place to find out all of the events MAS is hosting this year, you can also find details on our favorite organizations' offering of exciting science events, information, and resources. We will also use the page for announcements during our events, such as winners, keynote speakers, and other exciting details. We are thrilled to connect with you!

Not yet set up on Facebook? Get signed Up! Facebook is a social networking site that allows users to connect with others using posts, blogs, groups, emails, links, photos and much, much more. Developed in 2004, Facebook has more than 500 million active users and of those, 50 percent login on any given day (www.facebook.com, October 2010). It's clear that this is an age where people have the need, and thoroughly enjoy, connecting with one another in one form or another; it's no surprise that Facebook has gained more popularity than ever imagined. But, Facebook isn't just for individual use. Organizations and businesses use Facebook to promote events, keep connected to their constituents, share material, and a variety of other reasons.

For MAS, Facebook provides the opportunity to reach students, parents, teachers and scientists quickly and easily with a wall post, link to a webpage, a note, or creation of an event. Important information can be provided and distributed almost effortlessly, as well as inexpensively. In addition, Facebook makes it simple for MAS to be a part of a broader community. By linking to or 'becoming a fan of' MAS you can help spread our mission to **recognize, promote and influence excellence in science.**

See you there! Megan Buchanan, Annual Meeting / Winchell Symposium Coordinator

Annual Meeting & Winchell Undergraduate Symposium

The 77th Annual Meeting and 22nd Winchell Undergraduate Symposium

were held April 23-24, 2010 at the University of St. Thomas in St. Paul. Keynote Speaker was Deborah L. Swackhamer, the Co-Director of the Water Resources Center at the University of Minnesota and Chair of the EPA's Science Advisory Board.



Number of Participants: 167
 Total Number of Participants on Friday 119
 Total Number of Participants on Saturday 87

Participant's Schools:

- 3 from **Augsburg** College, St. Paul
- 14 from **Bethel** University, St. Paul
- 1 from **Concordia**, St. Paul
- 9 from **Gustavus Adolphus** College, St. Peter
- 7 from **Hamline** University, St. Paul
- 8 from **Macalester** College, St. Paul
- 15 from **Minnesota State University - Mankato**
- 2 from **Minnesota State University - Moorhead**
- 9 from **North Hennepin** Comm College, Brooklyn Ctr
- 1 from **Northern State Univ**, South Dakota
- 10 from **St. Mary's** University, Winona
- 7 from **St. Catherine** University, St. Paul
- 14 from **St. Cloud State** University, St. Cloud

The 2011 event will be at North Hennepin Community College and will feature an exciting new one-day format. Submissions are being accepted until March 2011. For more information go to www.mnacadsci.org.

- 12 from **St. Olaf** College, Northfield
- 20 from **University of MN - Minneapolis**
- 2 from **University of MN - St. Paul**
- 27 from **University of St. Thomas**, St. Paul
- 2 from **USDA** Forest Service, St. Paul
- 4 unaffiliated

The Annual Meeting and Winchell Symposium were generously sponsored by:

Colleges and Universities:

- Augsburg College
- Bethel University
- College of St. Benedict
- St. Olaf College
- Saint Mary's University
- U of M's Institute of Technology

Other:

- MN American Chemical Society
- Beta Beta Beta National Biological Honor Society
- Anonymous donations

We couldn't do it without our Volunteers!

How many volunteers participated in the Annual Meeting and Winchell Symposium?

Planning Committee:	11	# of combined hours (approx):	330
Judges:	12	# of combined hours (approx):	48
Student Volunteers:	5	# of combined hours (approx):	30
Graduate Students:	8	# of combined hours (approx):	5
Total Volunteers:	36	# Approx. # of volunteer hours:	413



Over 400 hours were volunteered to make the 2010 event such a success. We simply couldn't do what we do without all of you great volunteers! THANK YOU!

-Megan Buchanan, Program Coordinator

The Minnesota Academy of Science Finances

Fiscal Year End:	2005	2006	2007	2008	2009	2010
Revenues:						
Total Public Support:	\$189,846	\$164,173	\$200,049	\$200,897	\$207,445	\$212,750
Total Earned Revenue:	\$ 72,907	\$ 90,692	\$ 73,456	\$ 79,079	\$ 93,086	\$100,109
Other:	\$ 29	\$ 29	\$ 233	\$ 29	\$ 684	\$ 729
Total Revenue:	\$262,782	\$254,894	\$273,738	\$280,005	\$301,215	\$313,588
Expenses:						
Program Services	\$181,280	\$173,944	\$199,113	\$217,688	\$248,424	\$251,287
Mgmt, Gen Op & Fundrsng	\$ 71,488	\$ 44,344	\$ 41,049	\$ 48,122	\$ 52,557	\$ 52,672
Total Expenses:	\$252,768	\$218,288	\$240,162	\$265,810	\$300,981	\$303,959
Net Assets – Beginning of Year	\$ (11,586)	\$ (1,572)	\$ 35,034	\$ 68,610	\$ 82,805	\$ 83,039
Net Assets – End of Year	\$ (1,572)	\$ 35,034	\$ 68,610	\$ 82,805	\$ 83,039	\$ 92,668

Less than 1% comes from individual donations and membership dues.

We hope that you will consider becoming a donor to the Academy.

The Minnesota Academy of Science would like to gratefully acknowledge our sponsors



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