

The official e-communication  
for Colorado MESA

# eNews



Welcome to the September 2007 - Volume 2, Edition 2 of the Colorado MESA e-News electronic newsletter. Please let us know how we can assist your MESA program and make a positive difference for our MESA students. For more information on any item

mentioned in the newsletter, please contact our office at 303.556.8547 or via email at [ColoradoMESA@cudenver.edu](mailto:ColoradoMESA@cudenver.edu). In this edition, you'll find information on MESA program tips, High School Fall Fling, Multi-Task Trebuchet Challenge Design updates, Scholarships and much more. To view past newsletters or print a pdf version of the current issue, visit [www.cmesa.org/news.html](http://www.cmesa.org/news.html)

## MARK Professional Development

Thank you to all who attended the annual MESA Advisors Retreat and Kick Off (MARK) Professional Development Training on September 7<sup>th</sup> and 8<sup>th</sup>. The event was a huge success with over 70 advisors from around the state attending event at UCDHSC Downtown and CU Boulder. This year's MARK event highlighted a number of hands-on activities and general resources available for advisors including:



- *Multi-Task Trebuchet Challenge*  
To assist advisor with the design and construction of the trebuchet, we have developed an in-depth trebuchet curriculum to accompany the competition rules and guidelines. Included in the curriculum is an overview of the physics of the trebuchet.
- *Design and Construct a Windmill*  
Renewable energy project on how to construct a multi-purpose windmill.
- *Project SPECTRA!*
- *Energy Science for Home and School*  
A series of models related to energy in the home.

To download a complete curriculum, [click here >>](#). For more information, please contact Colorado MESA at 303.556.8547.

## MESA Program Tips

- **Student Recruitment**

Recruitment and retention of students is crucial to the success of the MESA program. It is important for MESA advisors to understand that many ethnic minority students respond differently to outreach and recruitment. Simply announcing the MESA meeting time and location is not a sufficient

recruitment effort. Successful minority recruitment means that additional forms of outreach must be undertaken. Below is a suggested timeline for recruitment:

*August 2007* Enlist the assistance of the “veteran” MESA students and the math and science faculty to identify potential MESA students that meet the general requirements.

*September 2007* Organize the first MESA student meeting and select the meeting times and places for the remainder of the semester.

Submit your Advisor Information Sheet to the statewide MESA office.

Plan your MESA semester parent meeting.

- **MESA Forms and Documents Submission Deadlines**

[Student Enrollment Forms](#)

Friday, October 5, 2007

## **High School Fall Fling**

Thursday, November 1<sup>st</sup> and Friday, November 2<sup>nd</sup>

University of Colorado at Boulder

Registration Deadline: October 25, 2007

Register Online at [www.cmesa.org](http://www.cmesa.org)

This two-day event brings over 250 high school students from nearly 30 Colorado MESA high schools around the state to the University of Colorado at Boulder campus to compete in two separate engineering team challenges: the 2007/08 MESA USA National Multi-Task Trebuchet Design Challenge and a Boat Building Design Challenge.

Scheduled for Thursday, November 1st and Friday, November 2, 2007 and Co-Sponsored by the CU Boulder Multicultural Engineering Program (MEP), the event will offer a valuable experience for your MESA students to work in teams applying their engineering skills to challenge other MESA students from around the state. Please read the following prior to registering online.

Once again, thank you for your continued support of Colorado MESA and we look forward to seeing you in November.



## **MESA University Mentor Program**

University Mentor Program



Our university mentor program provides an opportunity for MESA students and advisors to interact with mentors (university students, retired engineers and engineering professionals) in the field of mathematics, engineering, science and technology. Mentors provide leadership skills and serve as a role model for students, assist you with administering activities and developing projects for the local/statewide/national competitions.

### **Skills and Knowledge:**

- Current university student who is majoring in mathematics, engineering, science, health careers or closely related field (i.e. physics, business, teacher education, etc)
- Available to mentor students at least once a week for a course of academic semester.
- Enthusiastic and willing to learn and explore the fields of mathematics, engineering and science with the students.
- Available to participate in a Colorado MESA university mentor training prior to starting.
- Able to travel to assigned school (own car or have access to adequate transportation).

Please note that university mentors are currently available in the Denver Metro area. For areas outside the Denver Metro, please contact the MESA statewide office for more information. To request a mentor or sign up to be a mentor, please complete the online request form at <http://www.cmesa.org/advisor/mentors.html>.

## **Upcoming Field Trip Opportunities**

### **Young Women in Science and Technology Convention**

Thursday, November 1, 2007

Sponsored by DeVry University

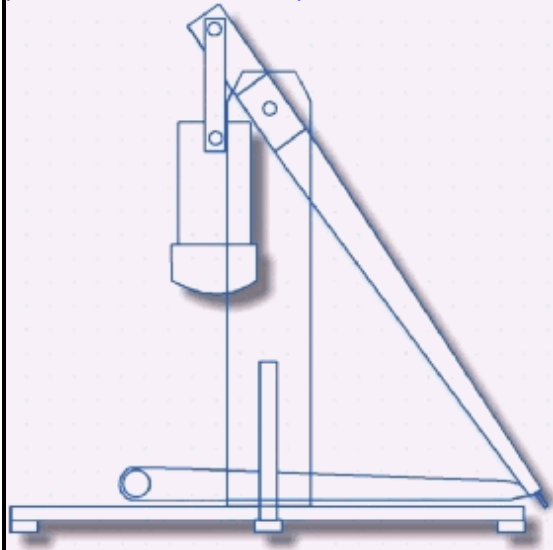
The convention will be held at the Adams Mark Hotel in downtown Denver. The event is FREE and open to ALL high school age females. Your students will have the opportunity to interact with a panel of distinguished and influential females in the fields of science and technology, view exhibits, and participate in hands-on workshops related to science and technology. For more information or to register, please contact Shelia Scott at [sscott@devry.edu](mailto:sscott@devry.edu) or by phone at 303.280.7570.

### **National Center for Atmospheric Research (NCAR Tour)**

Thursday, November 1, 2007

Prior to arriving at Fall Fling

NCAR's Mesa Lab, located at the west end of Table Mesa Drive in Boulder, Colorado, and is a working research laboratory. The inspiring setting is worth a visit in itself. NCAR maintains the site as a nature preserve. Mule deer, fox, and other wildlife range over the area and adjoining mountain parks. NCAR's laboratory offers a wealth of hands-on educational exhibits that visitors are welcome to explore on their own, on a tour, or with an audiotour. If you are interested in visiting NCAR on Thursday morning/early afternoon, please contact [victor.vialpando@cudenver.edu](mailto:victor.vialpando@cudenver.edu) or by phone at 303.352.3869. Space is limited!



## **MESA USA National Design Challenge** **Multi-Task Trebuchet**

MESA USA presents its national engineering design competition specifications for the 2007-2008 year. The Multi-Task Trebuchet event involves the transfer of energy from the counterweight to the projectile being thrown. **The maximum amount of energy available to complete the tasks will be limited to that stored by raising the counterweight.** Colorado high school and middle school teams will compete in the following four components in order to qualify for nationals:

1. Performance
2. Technical Paper

3. Academic Display
4. Oral Presentation

Please note the following areas in the revised 2007/08 rules and guidelines:

- Projectiles
- Academic Display
- Oral Presentation
- Device Inspection Criteria

The high school qualify event is schedule for

**November 1 & 2, 2007** at the annual **Fall Fling Event** at the University of Colorado at Boulder. For more information or questions, please email us at [coloradoMESA@cudenver.edu](mailto:coloradoMESA@cudenver.edu).

## **Scholarships**

### **Community Banks Scholarship**

Type: Local

Award Amount: Varies

Deadline Date: February 1, 2008

The scholarship is open to graduating seniors from a community that is served by a Community Banks Branch. Communities in the following Community Banks of Colorado regions will be eligible: Crested Butte region, Southwest region, Mountain region, Rockies region, Southern region, Grand Junction Region. Click [here](#) to view a map of eligible areas.

Scholarships are available to students planning to attend one of the following institutions: *Adams State College-Alamosa, Colorado State University-Pueblo, Fort Lewis College-Durango, Mesa State College-Grand Junction/Montrose, Western State College-Gunnison*

For more information, contact Emily Potts, Program Director at 720-529-3397 or by email at [scholarships@cobnks.com](mailto:scholarships@cobnks.com). Applications are available online at [www.cmesa.org](http://www.cmesa.org), select "Scholarships."



### **Horatio Alger Association of Distinguished Americans**

Type: National

Award Amount: Varies

Deadline Date: October 30, 2007

Qualification is based on integrity, overcoming adversity, financial need, good grades, involvement in activities, and a desire to contribute to society. Must be a US citizen OR in the process of becoming a citizen. Apply online at <https://www.horatiaoalger.com/scholarships/apply.cfm>

### **Coca Cola Scholars Foundation**

Type: National

Award Amount: \$4,000 to \$20,000

Deadline Date: October 30, 2007

Qualification is based on merit (includes leadership, academics, community and school involvement. Must be a US Citizen, National, Permanent Resident, refugee, or asylee planning to attend college in the US. <https://www.coca-colascholars.org/cokeWeb/jsp/scholars/FourYearInstructions.jsp>

### **Prudential Spirit of Community Awards**

Type: Local & National

Award Amount: \$1,000 to \$5,000

Deadline Date: October 31, 2007

Students must be in grades 5–12 as of the last weekday in October during the applying year. Has engaged in a volunteer activity that occurred at least partly during the 12 months prior to the date of application.

Completes an application form following all directions carefully, and submits it to the Denver Scholarship Foundation Future Center Coordinator by the deadline. <http://www.prudential.com/view/page/public/12847>

### **Boettcher Scholarship**

Type: Local

Award Amount: Full

Deadline Date: November 11, 2007

Very prestigious merit scholarship. Must rank in top 5% and have 27+ on ACT. Must be a citizen or p.r.

Based on Superior Scholastic Ability, Leadership & Involvement, Service to Community and School.

Scholarship will pay for the full cost of any 4 year college in Colorado. Please see your school counselor for more details. <http://boettcherfoundation.org/scholarships/index.html>

### **Susan G. Komen Breast Cancer Foundation**

Type: Local

Award Amount: up to \$10,000

Deadline Date: November 11, 2007

To be eligible, students must have lost a parent to breast cancer; be a high school student who will graduate this year; plan to attend a state-supported college or university in the state where they permanently reside (Colorado); never at any time have been subject to any disciplinary action by any institution or entity, including, but not limited to, any educational or law enforcement agency. Check website periodically for updated application form.

## **UPCOMING EVENTS**

▣ [Engineering Sampler at CU Boulder](#)

Saturday, October 13, 2007

University of Colorado at Boulder

▣ [District 11 MESA Career Day](#)

Tuesday, October 16, 2007

Colorado Springs

▣ [Young Women In Science and Technology](#)

Thursday, November 1, 2007

Adams Mark Hotel

▣ [Explore NCAR – Prior to Fall Fling](#)

Thursday, November 1, 2007

NCAR Facility in Boulder

▣ [High School Fall Fling](#)

November 1 & 2, 2007

University of Colorado at Boulder

▣ [FIRST Lego League Qualification](#)

November 10, 2007



UCDHSC | PO Box 173364 | Campus Box 104 | Denver, CO 80217

Phone 303.556.8568 or 303.352.3869 | Fax 303.556.2344 | Email [ColoradoMESA@cudenver.edu](mailto:ColoradoMESA@cudenver.edu)

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