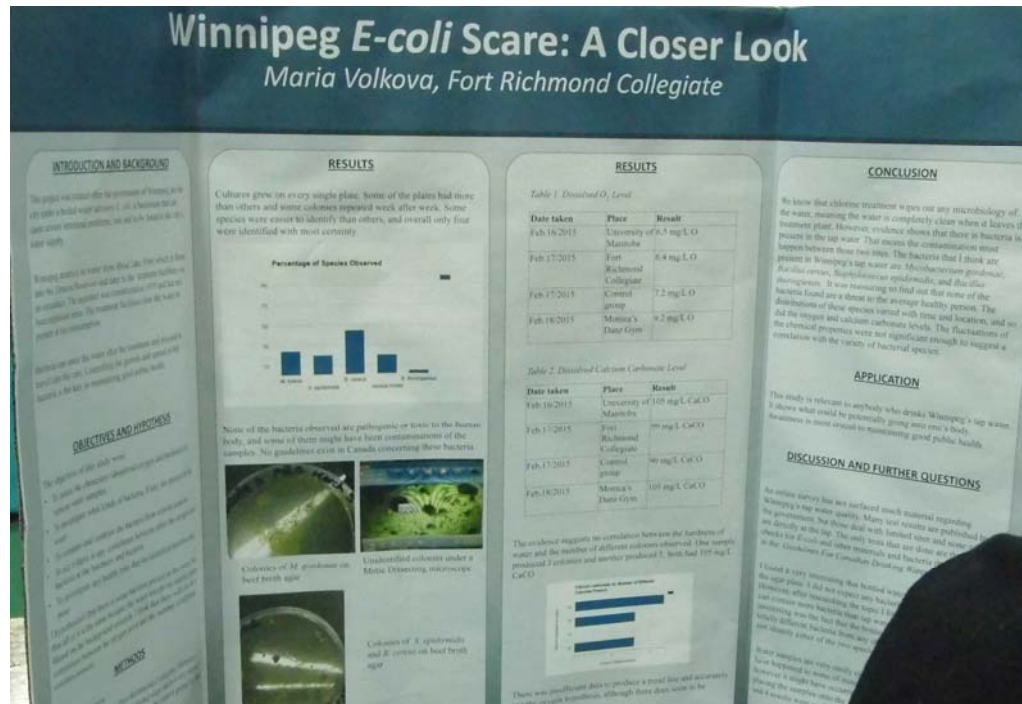


The Formula

Mid-Canada Regional Section
June 8, 2015



CELEBRATING 27 YEARS
AS A SECTION OF AOAC



JUNE 9, 2015
PLANNING FOR THE BIGGEST DAY OF THE YEAR
FOR MSSS MEMBERS AND THE COMPANIES
WHICH SUPPORT THEM

AOAC HELPS AT THE 2015 MSSS

Cover photo: One of many high quality science projects at the 2015 edition of the MSSS.

I hope you enjoy this issue. We hope to see all of you at MidCanada's biggest day of the year on June 9. My apologies to all for not getting an issue of the FORMULA into your hands months ago. Each issue requires a great, celestial confluence. Members of your AOAC Executive have to find time to prepare a contribution, and too often work and family keep them occupied, instead.

If you would like to spend a few hours this year, helping Mid Canada AOAC succeed into the future, please consider letting us know. We would like to see a few fresh faces on the Executive for 2015-2016.

If you can think of anything that would be of interest to your fellow members, in a presentation or a newsletter article, please let any member of the AOAC Executive know.

Contributions are most welcome for next time!

Why not tell us what is new at your lab?

Please let us know how you liked this at

917guy@gmail.com

David Grant, Editor

**All photos and text, not otherwise attributed,
are by D.Grant, and Ray Bacala**

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PRESIDENT'S COLUMN

It has been a great year serving as president of Mid-Canada AOAC, where we have accomplished many things. We have made great strides in improving our outreach to Manitoba's scientific community. We have also modernized our website, improved our AOAC Day registration process, revived AOAC Golf Day, and expanded our slate of training workshops, to name a few of our great initiatives. All of this would not be possible without our enthusiastic executive committee. They have been a joy to work with this past year.

As usual, the presidential term will culminate in AOAC Day on June 9th, and I am excited and proud of this year's program. Our keynote speaker will be Lisa Fernando, Special Pathogens Biologist at Canada's National Microbiology Laboratory. She will provide insight into what it's like to work in the unique environment of a Level 4 containment lab with the world's most dangerous pathogens. We also have a great slate of technical talks and four free workshops, offered by Pinchin Environmental, SafeWork Manitoba, and Chromatographic Specialties. On AOAC Day, we will be announcing more AOAC programming for the coming year. Of course, we are always listening to our members. If there are workshops and other programs you would like to see offered, please contact us and let us know! And if you'd like to get more involved, we are also looking for new members of our executive committee.

Finally, I am happy to pass the reigns over to the capable hands of our President-elect, David Grant. He has been a long-time member and contributor to Mid-Canada AOAC, including many dedicated years preparing The Formula, our regular newsletter. I know he'll do a great job as our new president.

Thank you to all of our members for the past year. I think Mid-Canada AOAC is heading in a great direction, and I'm looking forward to the future!

**Sincerely,
Brian Asher
President, Mid-Canada AOAC**

AOAC DAY 2015



JUNE 9TH
VICTORIA INN HOTEL AND
CONFERENCE CENTRE
WINNIPEG, MB

**REGISTER
EARLY**
FOR A CHANCE
TO WIN A
\$100
GIFT CARD

MANITOBA'S LARGEST ANNUAL SCIENTIFIC CONFERENCE AND TRADE SHOW

Keynote Speaker:
Lisa Fernando, Ebola Specialist,
National Microbiology Laboratory

Buffet Lunch

Technical Presentations

Mid-Canada AOAC
Annual General Meeting



Who Should Attend?

Laboratory technicians, supervisors, scientists, and managers
working in the fields of:
agrology, biology, chemistry, environmental studies,
food science, microbiology, toxicology, veterinary science

FREE WORKSHOPS!

- ❖ **Global Harmonized System Workshop – *Pinchin Environmental***
- ❖ **Musculoskeletal Injury (MSI) prevention and Ergonomics in the Lab and Office – *SafeWork Manitoba***
- ❖ **HPLC Method Development and Method Transfer – *Chromatographic Specialties***
- ❖ **Plumbing, Care, and Maintenance of Your HPLC – *Chromatographic Specialties***

Registration fee: \$25 (includes lunch)

FREE Registration for Students

Register Online at: www.midcanadaaoac.org

Inquiries: president@midcanadaaoac.org





Wednesday June 10th 2015

The Players Course

2695 Inkster Blvd.

\$20 for 9 holes including lunch

Spots are limited.

Please email

Mike.Roscoe@grainscanada.gc.ca

to book your spot today!



Sponsored by:

ThermoFisher
SCIENTIFIC

Details:

- 1) Tee times will start at 8:30 am. Enjoy half a day of golfing followed by lunch.
- 2) The tournament will be a Texas scramble (best ball) format. No skill or experience is required! Some of our regular participants only golf once per year at this event.
- 3) Please indicate whether you are registering alone or as part of a group. Feel free to provide a team name.
- 4) Individuals and groups of three or less will be combined into groups of four.
- 5) Single and double golfers are encouraged to share their golf experience so that groups can be balanced.
- 6) Club rental is available from the course, at the player's expense.
- 7) One team will be immortalized on the Mid-Canada Cup, but being a winner is included with every registration!

Free Training Workshops for AOAC DAY – June 9th 2015

Register Online (www.midcanadaaoac.org) to reserve your spot!

1. Global Harmonized System workshop - Peter Griffin, *Senior Occupational Hygienist*, Pinchin Environmental

Approx. 2 hours

Are You Ready For The “New” WHMIS Regulations?

The “Globally Harmonized System of Classification and Labelling of Chemicals (GHS)” will address classification of chemicals according to types of hazard and how to properly communicate health and safety information on labels and material safety data sheets.

GHS ensures that information on physical hazards and toxicity from chemicals are available to protect people and the environment during the handling, transport and use of these chemicals. The GHS also provides a basis for harmonization of rules and regulations on chemicals at national, regional and worldwide level, an important factor also for trade facilitation.

What is GHS

Why is it important to you

How is it different from WHMIS

When will it be implemented

2. Musculoskeletal Injury(MSI) prevention and Ergonomics in the Lab and Office - Roland Reenders, *Prevention Coordinator*, Safework Manitoba

Approx. 3 hours

Many workers experience musculoskeletal pain or injuries associated with their work environment. This course will explain how musculoskeletal injuries (MSI) can develop and how to prevent them in typical office or lab settings and in general. Ergonomics relating to seating, workstation setup, equipment considerations, responsibilities, exercise, and safe lifting and materials handling will be discussed.

3. Method Development and Method Transfer – Matt Clark, *Technical Support Supervisor*, Chromatographic Specialties

Approx. 1 hour

How and why the design and plumbing of your HPLC will affect the ruggedness of your method over time and between laboratories. Some common hidden variables in method development, and how to unmask them during method development or fix them in a method transfer.

This includes picking the most meaningful system suitability values for your method.

4. Plumbing, Care and Maintenance of your HPLC - Matt Clark, *Technical Support Supervisor*, Chromatographic Specialties

Approx. 1 hour

Brand new or vintage workhorse, the results you get from your HPLC are only as good as your pumps and tubing. Look at simple ways to keep your new HPLC working at its best, and to tweak your older instruments for faster analyses or smaller sample sizes.

As well as making the best connections, we'll talk about products and mindsets to avoid unplanned downtime and make routine maintenance as fast as possible.

Good companion for “**Method Development and Method Transfer**” if you frequently need to transfer in methods from other labs.

If you have a suggestion of a training opportunity you'd like Mid-Canada AOAC to host, please email us at president@midcanadaoac.org



SPECIAL AWARDS AT THE 2015 MSSS After the gold medals had been handed out, the crowd of parents and students above was invited back to the U of M. Below left, Dr. Digvir Jayas, welcomes us all on behalf of the UofM. One of the founders of the MSSS, the Science teacher who inspired many of the current MSSS execs, Mr. Pratt, speaks to the crowd, and is awarded the glass plaque at bottom left!





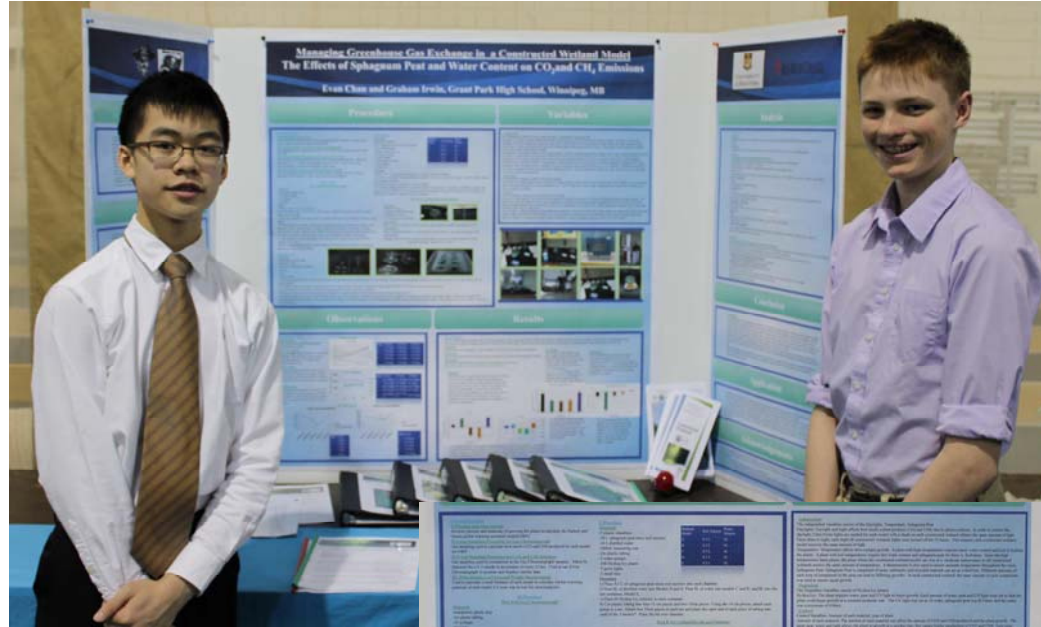
Above is the head table, the gray backdrop for photos, and the video screen. A photo of each project, the category it won, and the student's name appeared as each award was presented. The MSSS had a guy taking official pics, and a Free Press guy took pics of most of the later awards. I covered most of the presentations, and many folks took their own pics, as below.



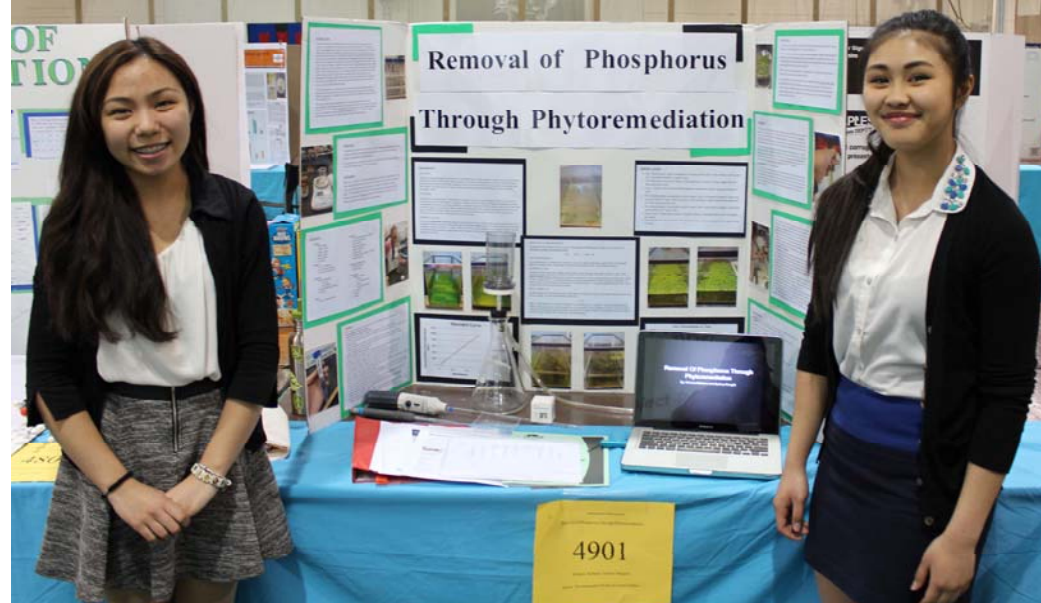
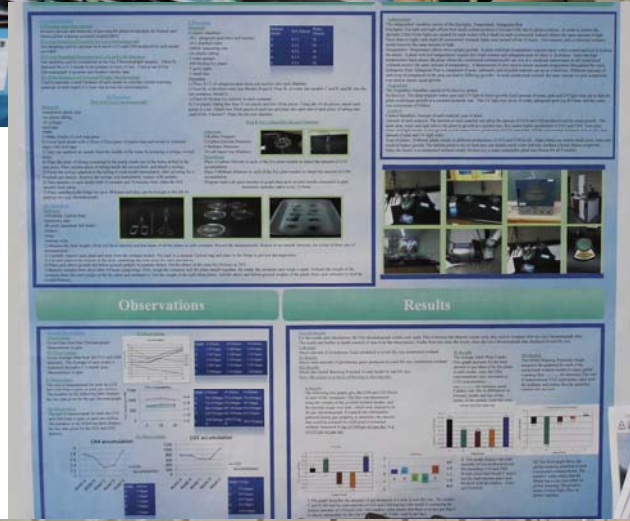


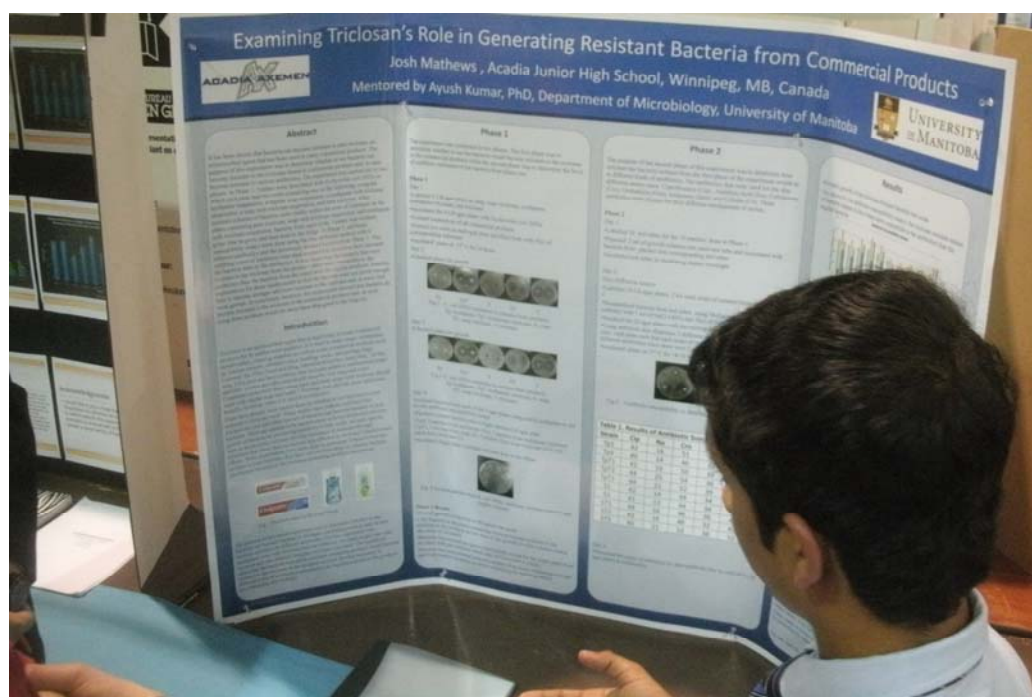
MC AOAC President Brian Asher presents Awards to 4 winning students . All were very pleased to be recognized for their hard work.



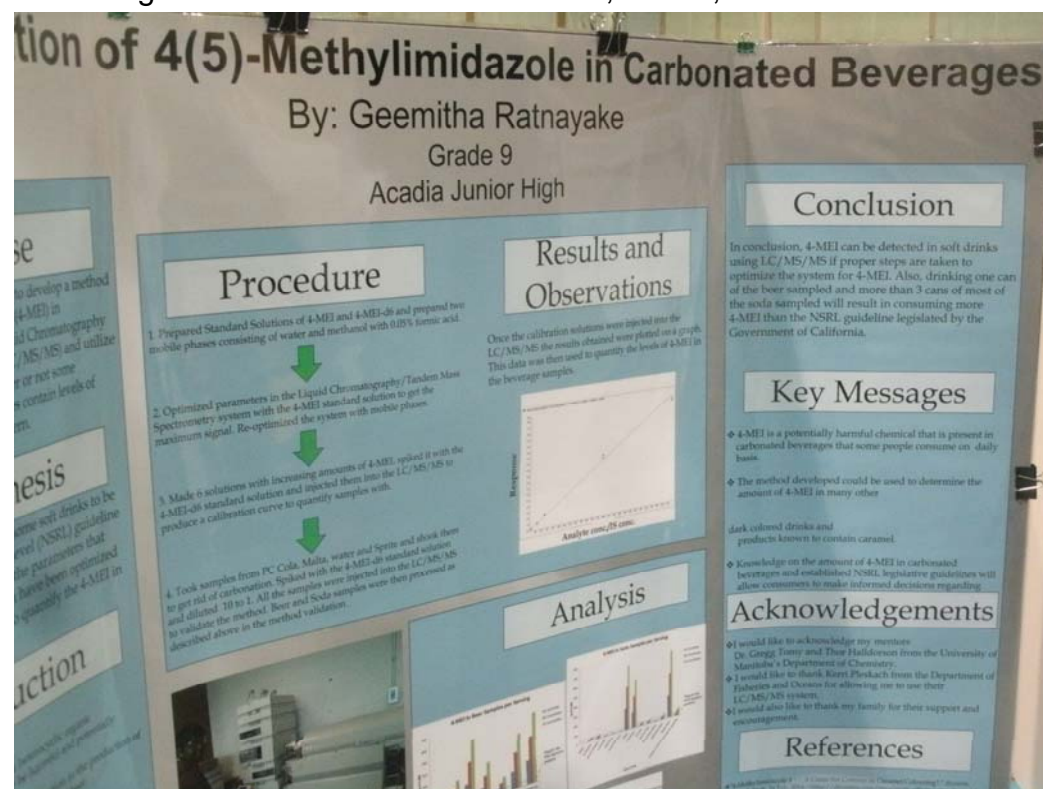


Two of the 2015 MSSS projects which were awarded top prizes by AOAC-Mid Canada.





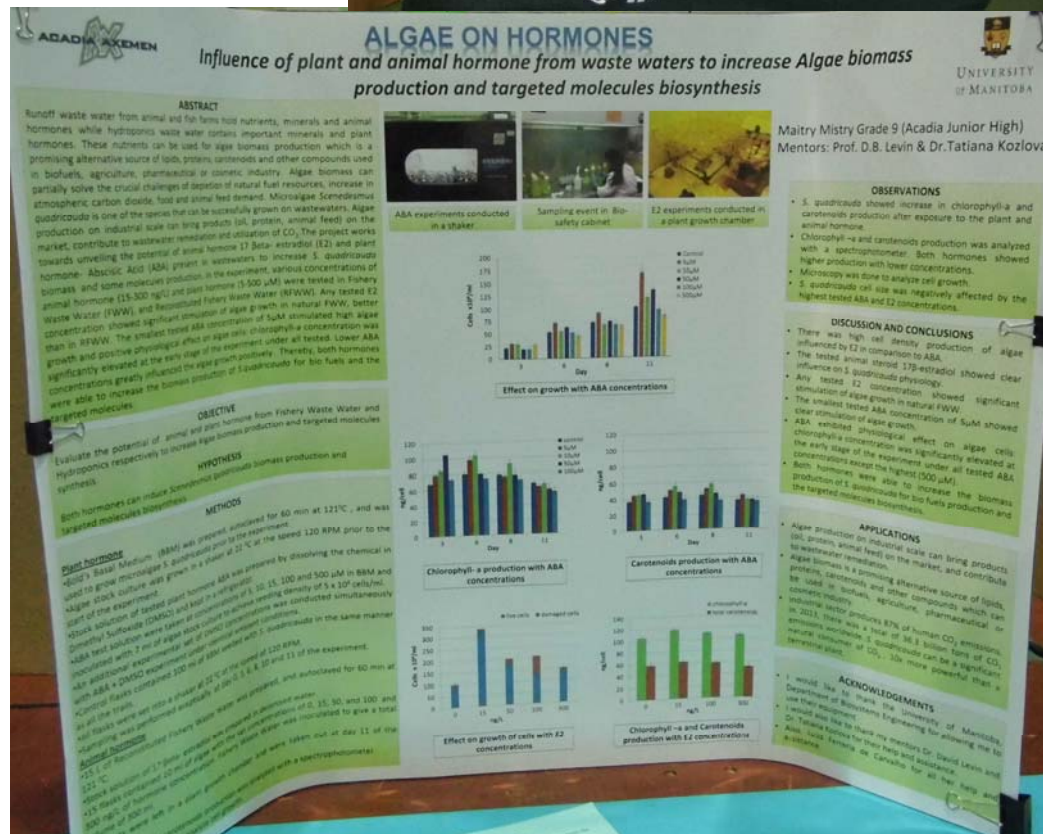
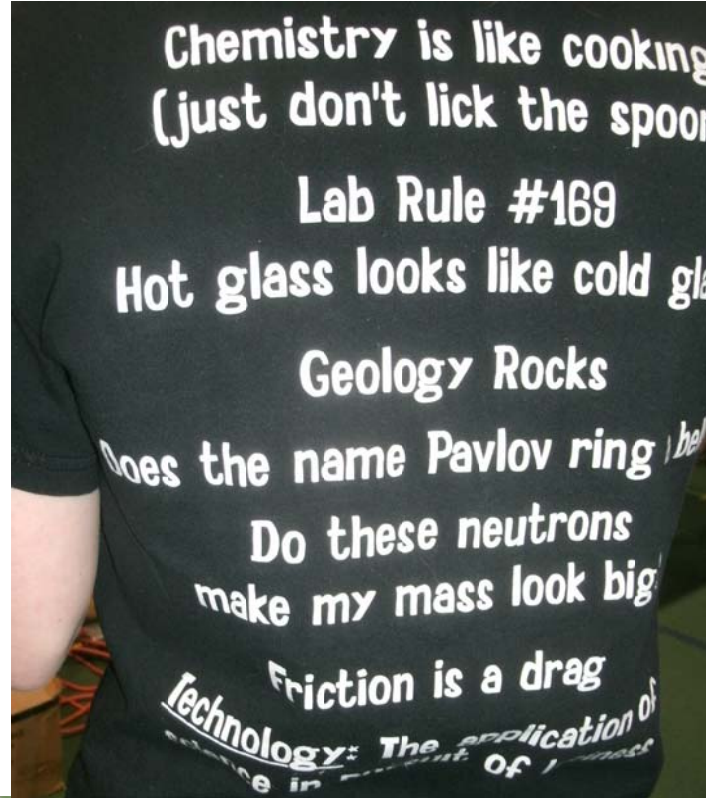
AOAC AWARDS Josh Mathew's study of Triclosan, #3501, above was an AOAC prize-winner, as was Geemitha Ratnayake's work on determining trace constituents of soft drinks, #3401, below.

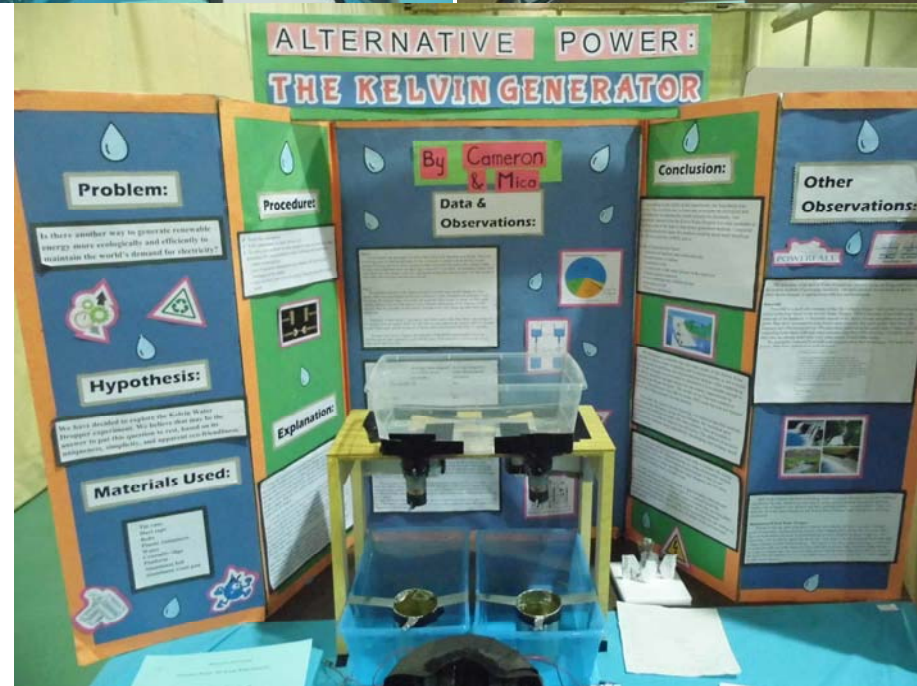
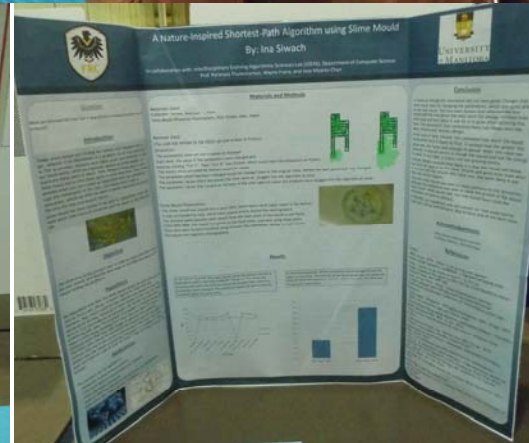
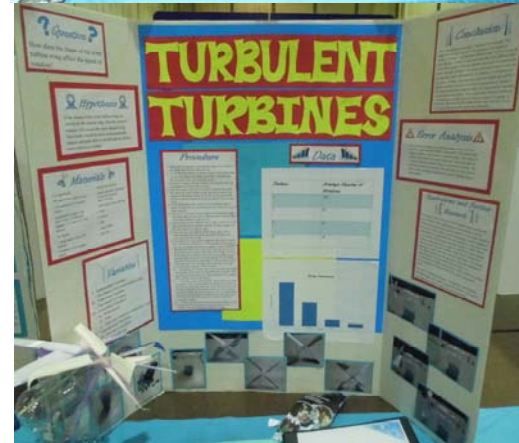
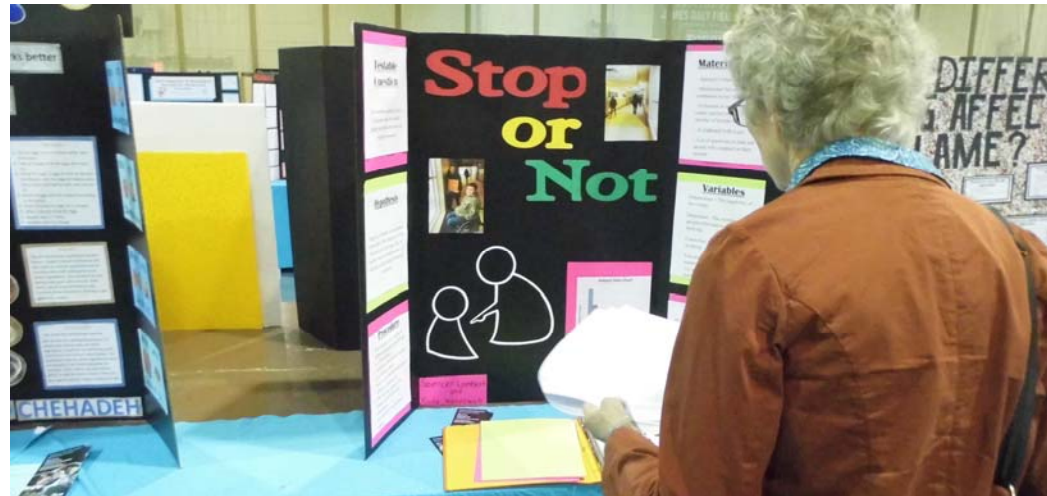


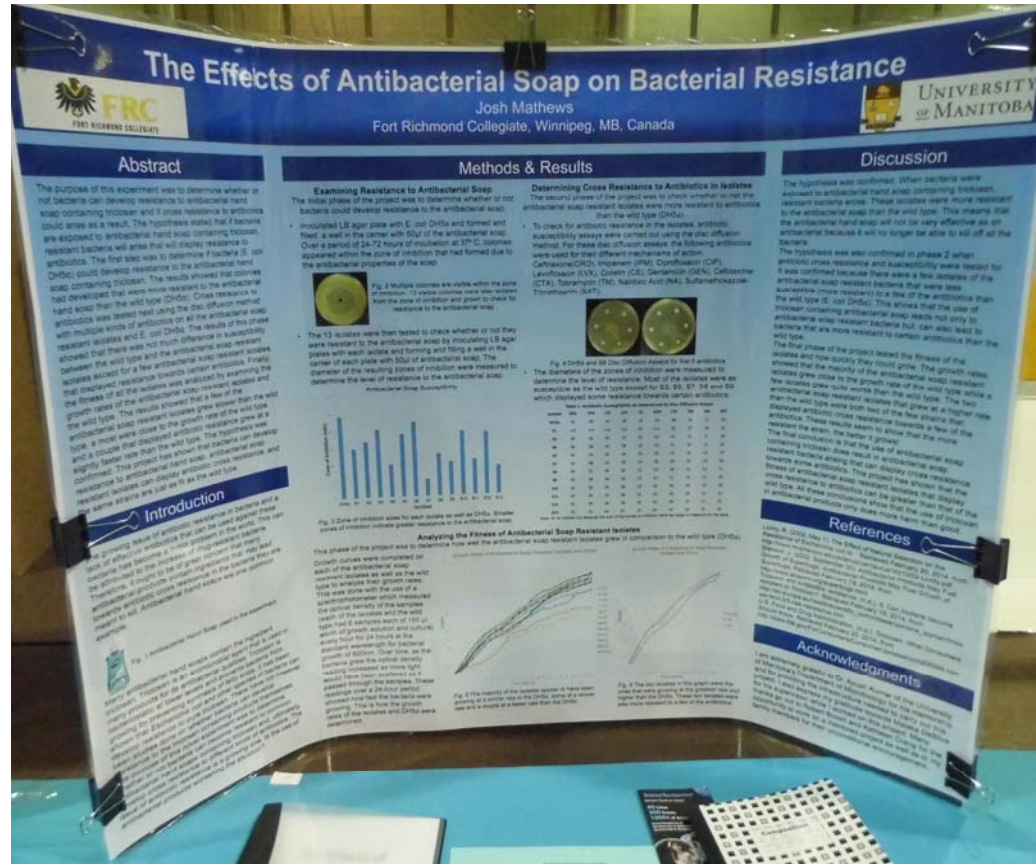
One of the MSSS senior judges wore this very cool tee shirt.

Each cliché is amusing and involves 'insider' scientific terminology.

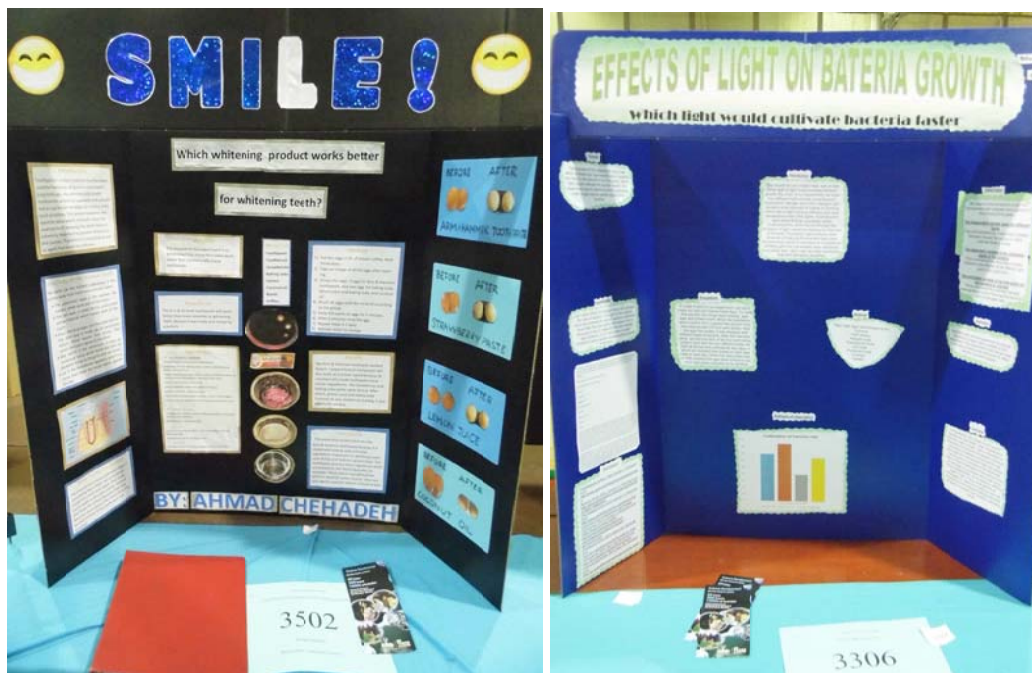
You would be impressed with the high level of investigation on some of the 'monitored projects like the one blow

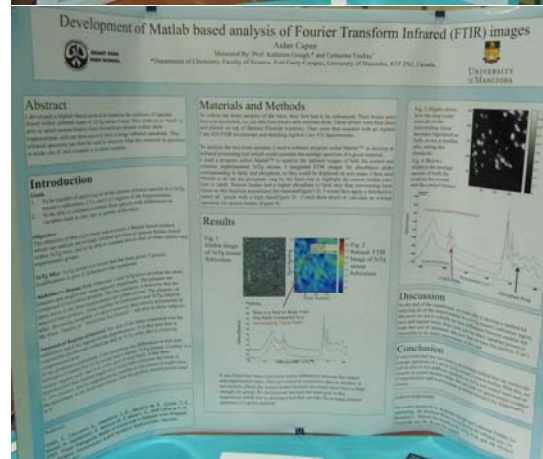
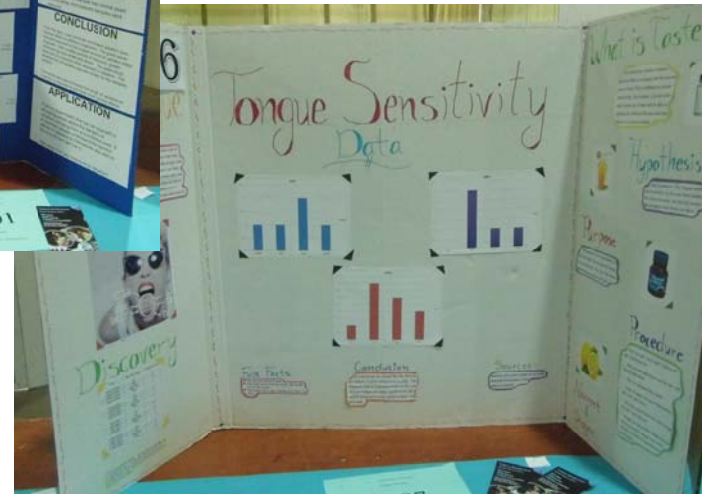


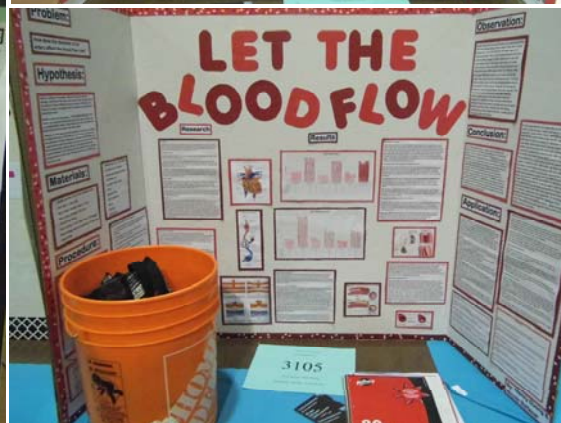
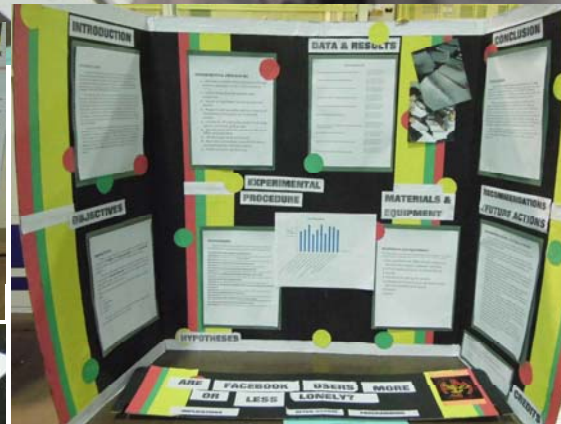
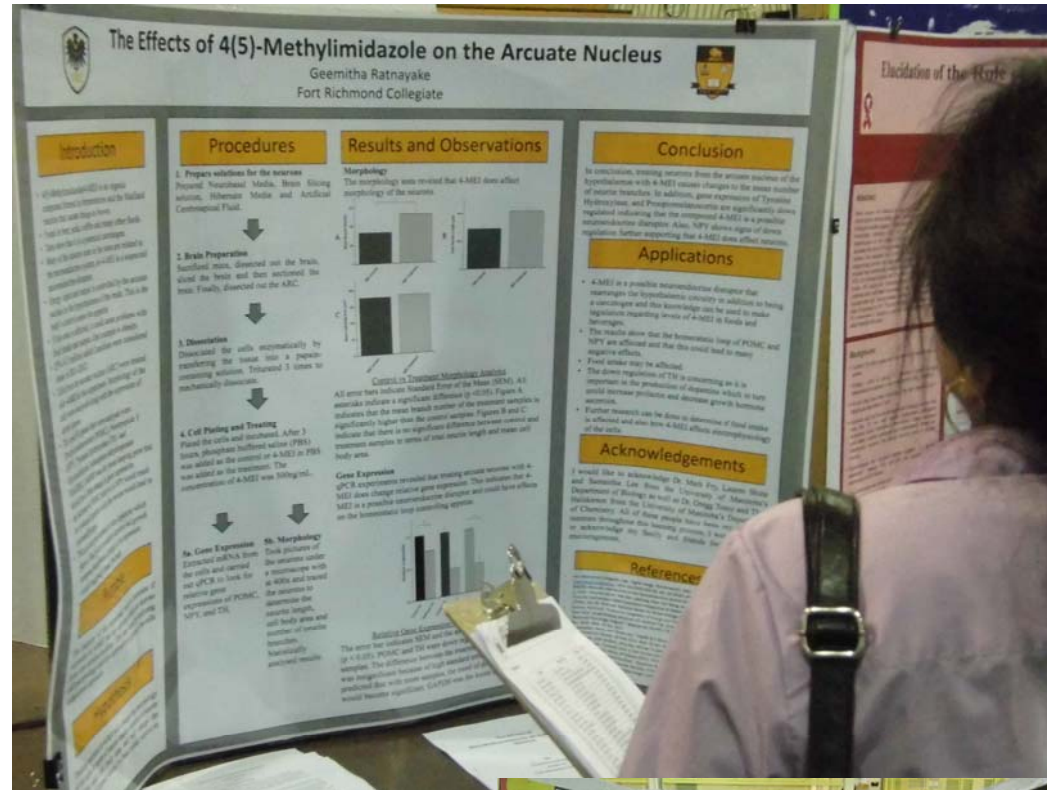


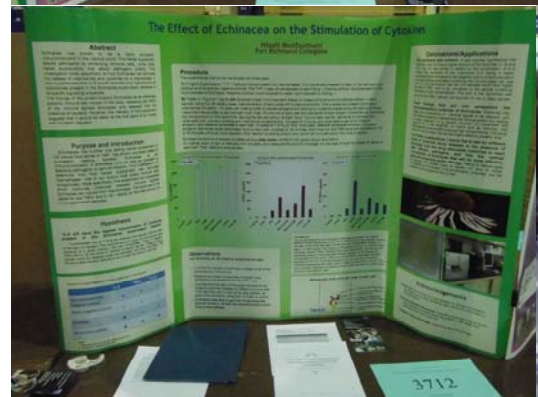
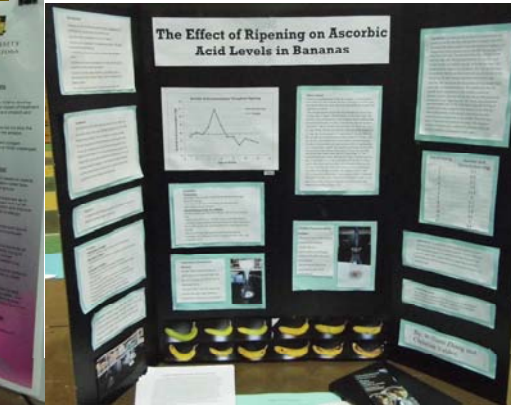
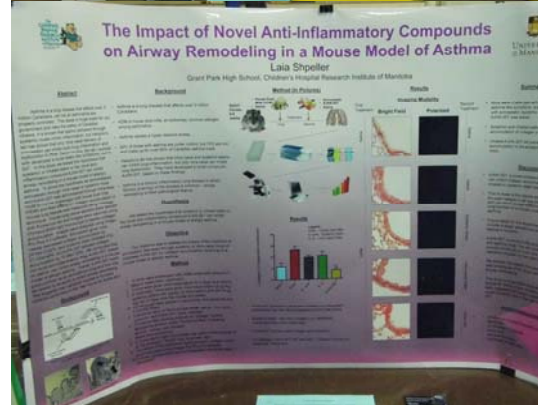
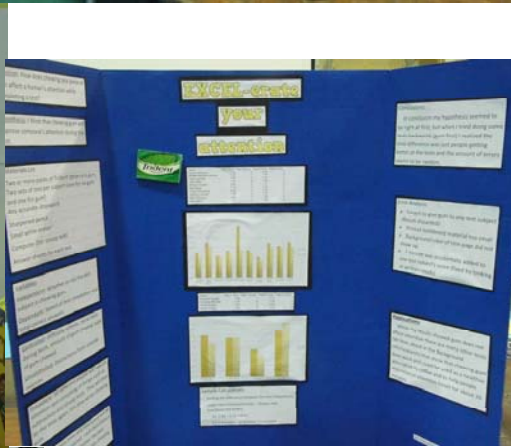
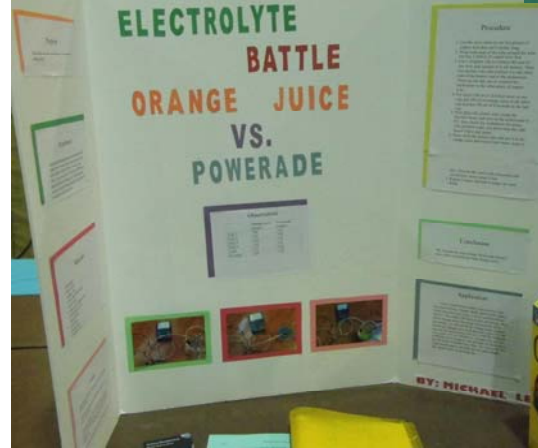
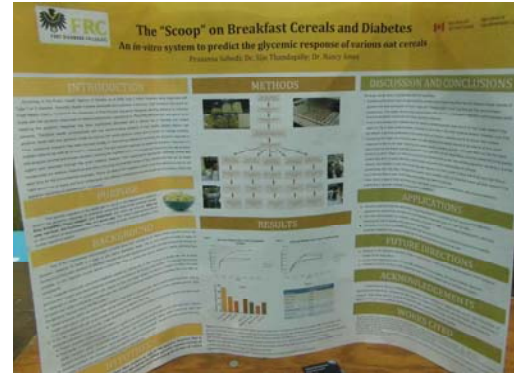


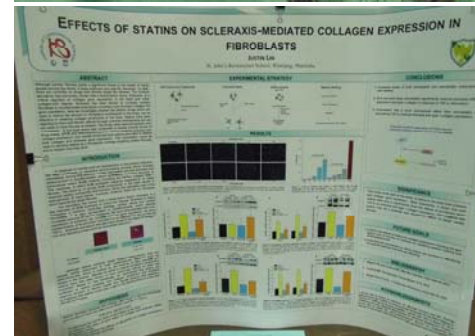
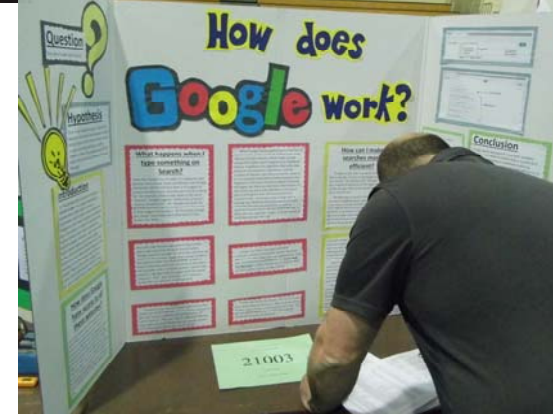
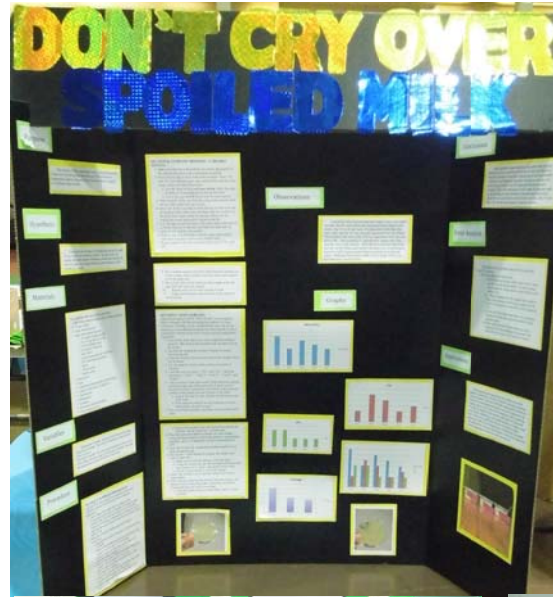
The topic above studies a modern conundrum: do anti-bac soaps make bugs worse? Unfortunate typo in the headline below right...

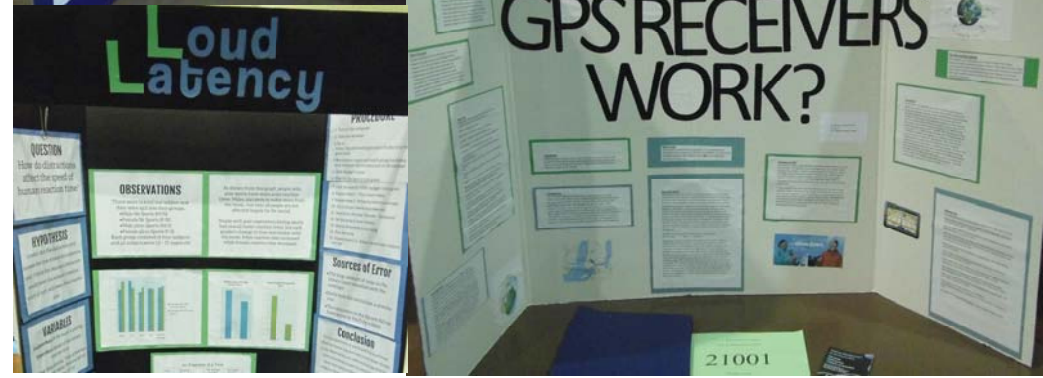
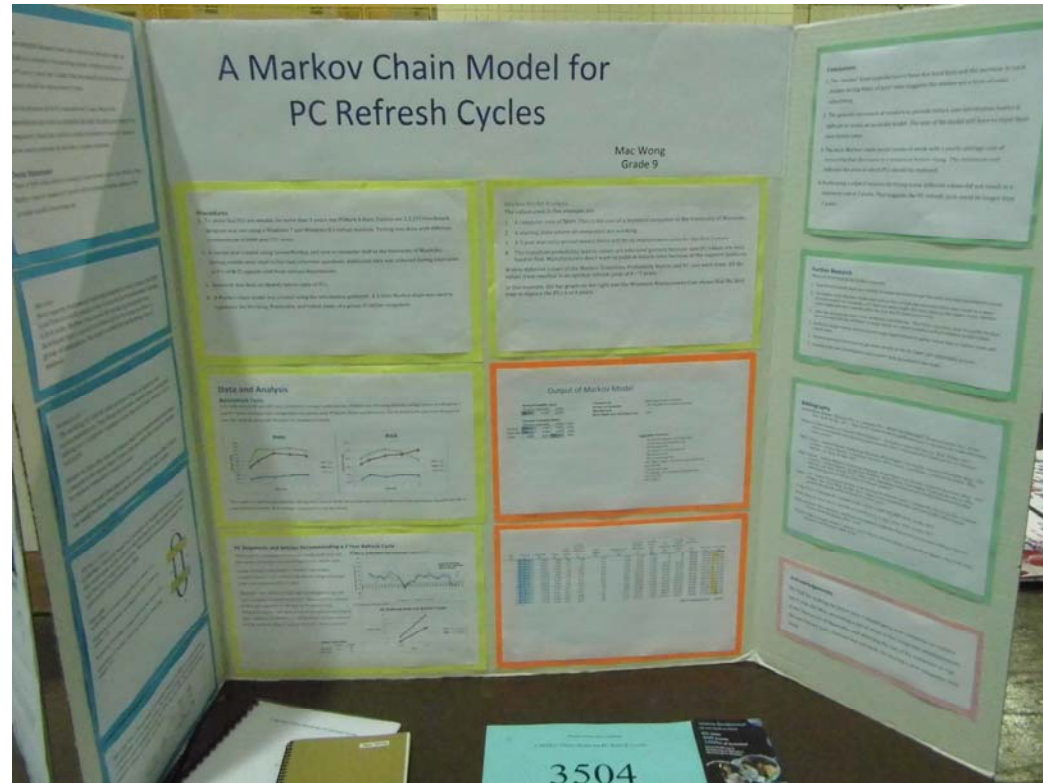


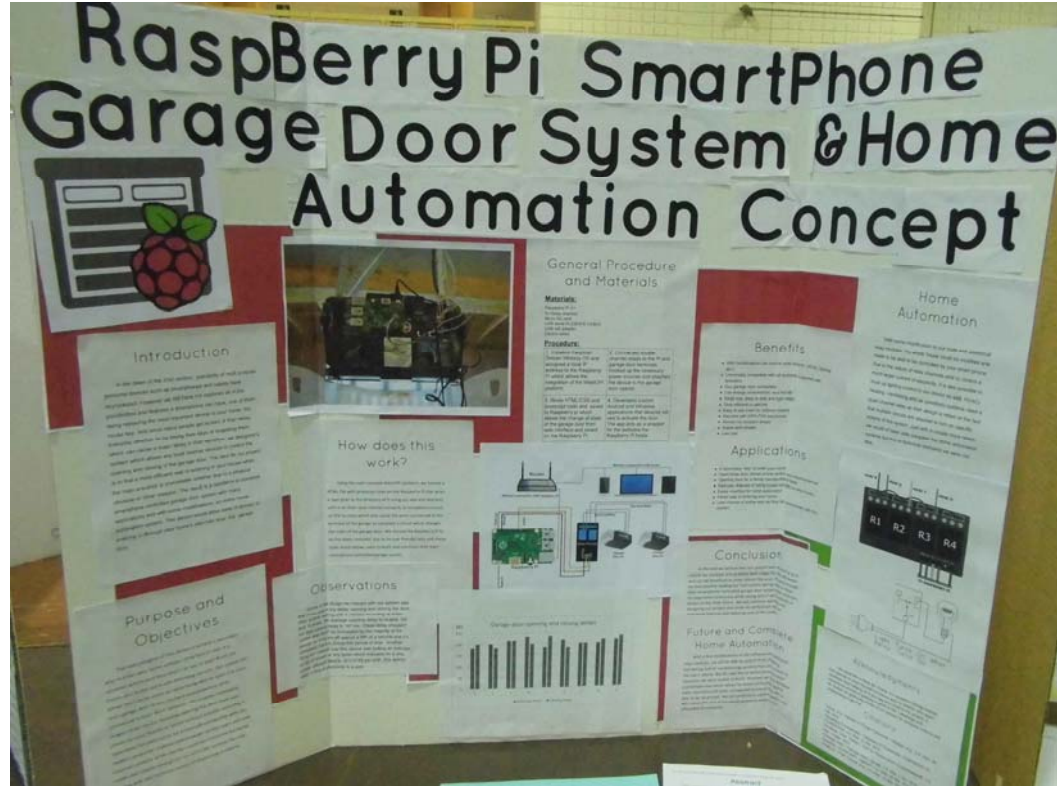
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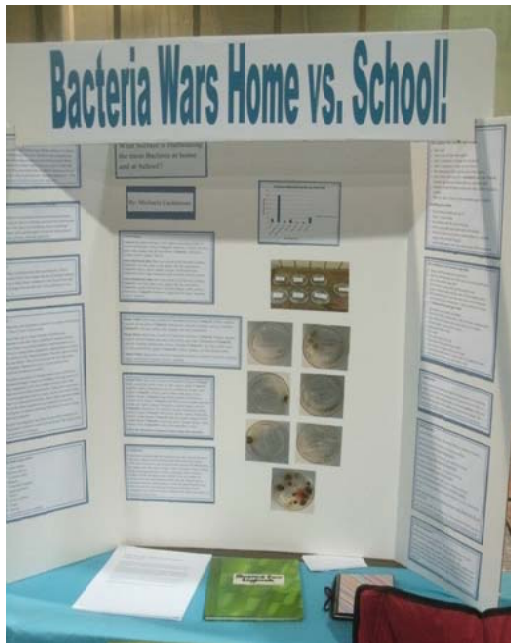


Some advanced engineering in student projects. The team above used the Raspberry Pi technology above, to enable smart phone control of things like an auto garage door opener. This can be done for about \$20 in hardware with no-cost apps. This compares with the store-bought equivalent costing hundreds of \$.



The bicycle at right was fitted with this little gasoline engine. All home-made brackets etc. Even his display board was supported on his welded steel brackets!





In 2014, a plaque and a cheque were awarded to Sydney Mangilit for project #3405, titled "Got vitamin C?" (Sorry no pic now available.) Honorable Mention was awarded to Adam's "Power to Perform" project, above right, and to Nitrates and Phosphates in the Fisher River, by Kelly and Kayla Sutherland.

