Hi Jeri,

No Senior Olympic news this time although the national competition is coming up in July next year in Cleveland.

I just finished reading the Fall 2012 issue of Manchester. You and the staff really do a great job on this publication, lots of interesting news about Manchester University, looks great too, nice photos in general. It still seems strange to speak about Manchester University instead of Manchester College.

However my wife and I did note a problem with this issue of Manchester, both of us being chemists and having laboratory safety issues pounded into us for many years working in industry. That problem is that several photos show people in laboratory situations without eyeglasses or eye protection. Some of the photos do show people with eye protection, page 11 (very good, safety goggles), page 17, and some on page 25, but on the front cover and some on page 25 show examples of extremely unsafe laboratory practices. Having seen laboratory practices in both industry and academia I am well aware that in general laboratory safety practices are taken much more seriously in industry than in academia. But eye injuries in university laboratories are just as painful and devastating as those that might occur in an industrial lab.

I’m not sure if good pharmaceutical laboratory safety practices are as stringent as the practices in other chemical laboratories, but I would think they are or should be. Maybe non-chemists don’t appreciate the importance of eye protection in a chemical laboratory, but most chemists certainly do. Photos such as on the cover of this issue give a poor image of the safety concerns of MU.

In the future I hope that more attention is paid to showing a better image of MU laboratory safety concerns.

Maybe you have already heard from others about this issue, but I wanted to make sure you hear about it.

Best wishes for future outstanding issues of Manchester.

Wendell

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Hi Wendell!

I'm pleased you are enjoying Manchester magazine and I hope you still are leaping high and long in Senior Olympics. I am thinking about returning to running, inspired by you. It has been years, and I so loved it. (I despised cross country; I wanted to get places far more quickly.)

It took me a while to reply to you today because I wanted the most-thoughtful response I could get. So, I put your question to members of our College of Pharmacy faculty. This was a good exercise for me, as I
continue to do public relations and magazine stories about our pharmacy lab experiences. I am going to give you exactly what their response was, authored by Michael DeBisschop, Pharm.D. He is our executive associate dean, who oversees all aspects of the academic program and teaches pharmacy practice.

"Our students (and faculty) wear safety goggles when handling hazardous chemicals (or in the case of students, hot liquids as well). The student on the cover is in our pharmaceutical compounding lab class, and is pouring a finished and cooled oral solution into a vial for dispensing. This procedure does not require safety goggles. In the compounding lab, we teach students to make compounds that they might
Front cover (http://magazine.manchester.edu/)
make in a retail pharmacy. Most of the time, safety goggles are not required or necessary for these compounding practices and so we do not require them at all times in the pharmaceutical compounding lab. Students do wear goggles when heating liquids. Actually, all the pictures of students in the magazine were in the compounding lab."

I then asked him if pharmacists in a retail setting, for example, would wear safety goggles:

"I think those would be very rare for typical pharmacy practice. I've worked a lot of retail and done a lot of compounding and never wore safety goggles. I could see them being used when preparing injectable chemotherapy agents in the hospital, however."

Thanks for your questions, Wendell! We do, indeed, want to put Manchester University students in the best possible light, and the safest positions! And, for sure, I will select photos for our publicity with additional scrutiny in the future.

Take care!

Jeri

*Jeri S. Kornegay***
Hi again Jeri,

Thanks for your checking and thoughtful response to my comments. I suspected that what Michael said might be the case and most of the time no problems arise. I hope and assume that procedures that one would think do not require eye protection would be given extra thought as to what might happen in unusual circumstances. What if another student bumps the student pouring the liquid on the cover of the magazine and causes the liquid to be thrown upward? I know one can go overboard on safety precautions to the point of not getting anything accomplished, but better safe than sorry. The young lady in the upper right photo on page 25 is subject to even more of a hazard with her face close to another person apparently working with material in a syringe. She is even wearing rubber gloves implying that she is working with a material she does not want to get on her hands. She probably would not want to get
the material in her eyes either. However, maybe the rubber gloves are to avoid getting something from her hands into a solution or something she is preparing, but one cannot tell from the photo.
The problem is that the casual reader probably doesn't know that the procedure being carried out does not require eye protection and may get the same impression that we did. Maybe there is some way to comment or convey the message that the procedures are being done in a safe manner and don't require eye protection.

I'm glad that I have at least caused you (and maybe the pharmacy faculty) to be more aware of what you are showing to readers of Manchester.

Wendell

Attachment 36

Chemical and Engineering News
Volume 90 Issue 44 | pp. 21-23
Issue Date: October 29, 2012

PARTNERING ON SAFETY
Dow teams up with universities to SHARE IDEAS, BEST PRACTICES
JYLLIAN KEMSLEY, C&EN WEST COAST NEWS BUREAU

Industrial researchers run their labs with much more attention to safety than do academic researchers, or so holds conventional wisdom. Dow Chemical is now tackling that disparity head-on in a pilot safety collaboration with chemistry, chemical engineering, and materials science departments at the University of Minnesota (UMN), Pennsylvania State University, and the University of California, Santa Barbara (UCSB).

Part of Dow's mission is to support research at universities, both to develop new technologies and to ensure a strong workforce pipeline, William F. Banholzer, Dow's chief technology officer, said in an April 30 statement announcing the program with UMN. To that end, the pilot safety program “leverages our strength in laboratory safety, which is a continuing challenge for universities everywhere,” Banholzer said. A Dow analysis of 2010 Occupational Safety & Health Administration injury and illness data shows that colleges, professional schools, and universities had 2.2 injuries per 100 workers that year. Dow had only 0.33 injuries. (The numbers are not specific to research laboratories.)

The Dow-university safety partnerships so far have all followed a similar pattern. Dow approached UMN first in the spring, then Penn State shortly after. UCSB engaged in July. Each university formed a safety team composed principally of students and postdocs from the different departments involved. That's because students and postdocs are the ones actually working in labs, says William B. Tolman, chair of the chemistry department at UMN. Tolman adds that the students at UMN have risen to the challenge and taken responsibility for the safety program and for driving it forward. “It's awesome and exactly what you want as chair of a department,” Tolman says.
Dow representatives toured the schools and met with focus groups of students and postdocs, faculty, and safety staff on each campus to understand the current safety culture. Then, teams from each school visited Dow’s site in Midland, Mich., for two days of workshops and facility tours, with all expenses covered by Dow. Returning from Midland, the teams from each school set priorities and plans to improve the laboratory safety culture at their institutions.

The three universities are among those benefiting from a program Dow announced last year: The company is investing $250 million over 10 years to support research at 11 academic institutions (C&EN, Oct. 10, 2011, page 9). The new safety effort is independent of that program but builds on the relationships established between Dow and the departments, says Pankaj Gupta, senior strategy leader for research and development at Dow.

When Dow representatives visited the schools, “housekeeping was the number one issue we found,” Gupta says. Dow representatives generally thought that containers were inadequately labeled and that labs were cluttered with old chemicals and equipment. The number two concern was people not wearing proper personal protective equipment (PPE), such as the correct gloves or eye or face protection.

The workshops Dow held in Midland included a mix of seminar-style presentations to discuss high-level principles, such as the need to assess hazards when planning reactions, coupled with lab walk-throughs to see Dow chemistry research in action, says Lori Seiler, associate director for environmental health and safety in R&D at Dow. Dow also developed workshops on topics such as how to pick appropriate gloves or inspect glassware for flaws.

Tolman went along on the visit to Dow, and he found himself “sort of stunned” by the cleanliness and neatness of the labs, even when it was clear there was a lot of chemistry going on, he says. The other thing that stood out for him was the level of attention and commitment to safety exhibited by the Dow team, which included Gupta, Banholzer, and UMN alumni. “They didn’t sound like they were just spouting platitudes,” Tolman says. “They live it and believe it.”

UMN chemistry graduate student Kathryn A. McGarry’s reaction was similar to Tolman’s. What hit home for her was the high level of safety awareness that seemed to permeate the culture at Dow, she says.

Those reactions are informing the projects that UMN’s safety team is now executing. The team started by coming up with a list of 10 guidelines for safe lab operation, including wearing basic PPE, properly storing chemicals and waste, and both writing standard operating procedures and conducting an annual review of them.

From there, the team developed posters for hallways and signs for labs to promote the
guidelines. Additionally, co-opting a Dow idea, the team put together a video demonstrating the effectiveness of different forms of eye protection by splashing colored water on balloon "heads."

The UMN safety team is also encouraging all individual lab safety officers to hold “safety moments” at the start of group meetings, so they or other group members can discuss questions or problems specific to the group’s research. In her group’s meetings so far, McGarry has gone over the new lab signage and proper PPE.

Tolman and his chemical engineering counterpart, Frank S. Bates, also instituted safety moments at the beginning of department seminars. Tolman held the first one in his department, for which he assembled a slide show of good safety practices that he observed around the department. Before a subsequent seminar, McGarry’s adviser, Christopher J. Douglas, talked about how people in his lab wear yellow armbands when they’re doing something particularly dangerous, as a visual cue to lab mates to be aware of what’s happening.

**Going forward**, UMN chemistry and chemical engineering will have a cleanup week to declutter the labs and biannual student-led lab inspections. The safety team, whose budget is currently $5,000, is developing its own version of Dow’s “safe operating cards,” which researchers post on hoods with basic information about who’s running a reaction, what it is, and its hazards. Additionally, the team wants to develop safety training workshops on topics such as handling pyrophoric materials or cryogens. Also on the agenda is incident or near-miss reporting so people in the department can better learn from others’ experiences.

Penn State chemistry researchers’ reactions to their visit to Midland were slightly different from those of their UMN counterparts. Chemistry professor John B. Asbury’s big takeaway was that Dow has created a program in which even people who don’t have good safety awareness can still be safe. Dow managers have “identified what are the critical thinking processes to ensure that people are safe, codified that, and trained their people to follow those procedures,” Asbury says. He points in particular to Dow’s requirement that researchers discuss experiment hazards with colleagues during experiment planning.

Asbury was also struck by the positive reinforcement program Dow uses to promote safe lab behavior. Small rewards can be things such as gift cards for gas. Larger rewards include group trips to attend local Minor League Baseball games, with seats in Dow’s box at Dow Diamond.

Graduate student Robert Stewart noted the integration of safety with chemistry at Dow and how it’s seen as an essential, integral part of research rather than as an additional, separate burden. Conversations with Dow employees also made it clear to Stewart that Dow won’t fire employees if their science fails, but the company will fire employees who don’t work safely, he says.

Unlike UMN, where the departments of chemistry and of chemical engineering and materials
science are in the same college and are working in tandem on their safety program, Penn State chemistry, chemical engineering, and materials science are in three different colleges and are starting from different safety cultures. Going forward, each department has prioritized different projects to pilot.

The chemistry department has begun a near-miss incident reporting system to serve as a learning tool. Safety officers prepare and submit forms to Asbury, who ensures that all identifying details are removed before he posts them on an internal department website. One recent report documented how a student tried to fix a dripping faucet and in the process created a worse leak. Chemistry personnel caught the problem quickly so it caused no significant damage. The lesson: Don’t try to fix something yourself, instead call the facilities manager. So far, Asbury says, feedback on the reports has been positive.

Other efforts that students are working on include publishing a monthly safety newsletter, the Stall Street Journal, to be posted in bathrooms. It will include announcements, highlight some learning experiences, and cover various safety resources and whom to contact with questions or problems. Longer term, Penn State’s safety team will develop its own safe operation cards and may start doing lab inspections. Asbury is also contemplating how to reward safe behavior. Overall, the chemistry department has devoted more than $2,000 to the effort so far.

For its part, the Penn State chemical engineering department is instituting a colored labeling system akin to one that Dow uses. Chemicals transferred out of their original containers will get a green, yellow, orange, or red label, for nonhazardous up to highly hazardous materials (waste is labeled separately).

And materials science and engineering is instituting safety moments before department seminars, akin to UMN’s. That department was already a campus leader for laboratory safety, says Kate Lumley-Sapanski, assistant director of environmental health and safety at Penn State. Even before the interactions with Dow, it had its own Stall Wall newsletter, monthly student-led lab inspections, and annual required safety training.

UCSB started working with Dow several months after the other two schools, so it is not as far along in its program. UCSB chemical laboratory safety officer Alessandro F. Moretto worked as a medicinal chemistry researcher in the pharmaceutical industry before moving to the university last year, but he still learned a thing or two from visiting Dow. “I’ve worked for three different large companies, and Dow far exceeded them all” with its safety program, Moretto says. “They’re very rigorous in documenting their hazard analysis.”

Postdoctoral researcher Vishal Patil and graduate student Donald Wenz were both impressed by what they saw as the empowerment of lower-level employees to enforce safe lab behavior. “Even the
lowliest tech has the power to tell a senior person to put on a lab coat,” Wenz says. “I think that if you can establish that kind of safety culture in every lab, it’s a tremendous boost to safety to have everyone actively watching out for everyone else.”

UCSB’s initial push is communication and awareness campaigns using posters and newsletters, as well as safety moments, Moretto says. Next up will be improving training, implementing hazard analysis as part of experiment planning, and near-miss reporting. So far, Moretto has budgeted $650 for initial printing costs.

The hazard analysis component will be facilitated by software that the University of California is developing as part of an agreement with the Los Angeles County district attorney to establish standard operating procedures for hazardous chemicals used in laboratory research (C&EN, Aug. 13, page 34). Researchers will input their reaction conditions, and the software will tell them whether basic chemical safety principles suffice or whether they need to read or develop a standard operating procedure with more detailed safety instructions, says Kenneth Smith, laboratory safety manager for the UC system. He hopes to have a prototype of the software done by January 2013, with full adoption sometime later that year.

It’s not just the schools that have benefited from the interactions between Dow and the universities. Dow has changed one of its practices as well, Gupta says. Dow recruiters are now asking questions about safety in on-campus interviews, looking for people who have taken leadership positions or tried to emphasize safety in their own work.

Going forward, Dow plans to continue meeting regularly with the universities through at least the end of this year to talk through ideas and share experiences. Depending on where things stand then, the company may stick with the original three or expand to other institutions. The company is working on converting its on-site workshops into digital form so they’re readily available to schools, Gupta says.

The challenge for the schools, everyone agrees, is ensuring that all the effort actually changes laboratory culture so that safety becomes integral to research, and not allowing the effort to die out as the initial rush of enthusiasm fades. Ensuring that departments manage safety team turnover so that veteran knowledge gets passed on to new members will be key, as will committed and sustained leadership from department chairs and deans, Seiler and Gupta say.

Long-term sustainability “is a critical issue,” acknowledges UMN’s Bates. If the programs can take root, though, he thinks staff and faculty support will ensure that a true culture change is effected—a change that’s deep and permanent. “They’re responsible for oversight,” he says, and making safe work practices inherent to laboratory work will ease that burden.
To: Haoyu.Zhang
From: Wendell Dilling <dilli1wl@cmich.edu>
Subject: Mid Sect ACS Expenditure Report
Attachment: Historian Expense Form, 7-2-12.doc:

Haoyu,

Attached is an expenditure report to be paid.

Wendell

Attachment:

A.C.S. Midland Local Section
EXPENDITURE / INCOME REPORT FORM

NAME: Wendell Dilling
TELEPHONE NUMBER: 989-631-1621    DATE: 7-2-12
FAX NUMBER: 989-774-3883          E-MAIL: dilli1wl@cmich.edu
TRANSACTION TYPE: EXPENDITURE X or INCOME ___   AMOUNT: $20.15
PURPOSE (describe) Binding of 4 volumes for Section archives (2011 Annual Report, 2011 Minutes of the Board of Directors’ Meetings, 2011 Web Site Information, & 2011 The Midland Chemist & E-Mail Updates)
COMMITTEE/CATEGORY (please choose from (x) one of the following, or explain):

1 Nominations and Elections
1 Councilor travel
1 ACS Day at the Fair
X Historian
1 Publicity/website
1 Awards
1 Midland Chemist
1 Sci-Fest/NCW
1 Earth Day
1 Science Literacy (BSTL, Pittcon)
1 Project SEED
1 Chemistry Olympiad
1 Weyenberg Student travel
1 Kids in Chemistry
1 Fall Scientific Meeting
1 Turner Alfrey Program
1 MMTG
1 YCC/student affiliates
1 Program
1 Designated funds: KiC
1 Designated funds: Program
(inc science café)
1 Education Day
1 ACS Science Coaches
1 2013 Regional Meeting

EXPLAIN: ____________________________________________________________
COMMITTEE CHAIR: Wendell Dilling
CHAIR'S SIGNATURE: Wendell Dilling
MAKE CHECK PAYABLE TO: Quick Reliable Printing
MAIL CHECK TO: (name) Quick Reliable Printing
ADDRESS: 94 Ashman Circle
_________Midland, MI 48640

This expense was charged to the Midland Section ACS account.
You should get a bill from Quick Reliable Printing, Invoice no. 42639, Invoice date 6-26-12.

(Attach original receipts to this form for expenditures)
(Attach listing of checks or cash to this form for income)

~~~~~~~~~~~~~~ Do not write below this line ~~~~~~~~~~~~~~~~

Received: _______________ Processed: _______________________________
Check Sent: ______________ Check Number: ___________________________
Category: _______________ Treasurer: _______________________________

From: "Zhang, Haoyu (H)" <HZhang6@dow.com>
To: Wendell Dilling <dilli1wl@cmich.edu>
Subject: RE: Mid Sect ACS Expenditure Report
Date: Mon, 2 Jul 2012

Wendell,

Thanks for the form. I will send the check once I received the bill.

Attached is the new expense form and you can use it in the future.

Regards,

Haoyu

Haoyu Zhang
Treasurer, ACS Midland Section
5907 Woodview Pass
Midland, MI 48642
Phone: (989) 941-1935
E-mail: haoyuzhangosu@gmail.com
http://www.midlandacs.org/
A.C.S. Midland Local Section
EXPENDITURE / INCOME REPORT FORM

NAME: __________________________________________

TELEPHONE NUMBER: __________________________ DATE: __________

FAX NUMBER: ___________________________ E-MAIL: __________________

TRANSACTION TYPE: EXPENDITURE ___ or INCOME ___ AMOUNT: ___________

COMMITTEE/CATEGORY (please choose from (x) one of the following, or explain):

☐ Nominations and Elections
☐ Councilor travel
☐ ACS Day at the Fair
☐ Historian
☐ Publicity/website
☐ Awards
☐ Midland Chemist
☐ Sci-Fest/NCW
☐ Earth Day
☐ Science Literacy (BSTL, Pittcon)
☐ Project SEED
☐ Chemistry Olympiad
☐ Weyenberg Student travel
☐ Kids in Chemistry
☐ Fall Scientific Meeting
☐ Turner Alfrey Program
☐ Earth Day
☐ YCC/student affiliates
☐ Designated funds: K&C Program
☐ Designated funds: Program
☐ Education Day
☐ ACS Science Coaches
☐ 2013 Regional Meeting

IS THIS EXPENSE TIED TO AN EVENT? If so, name the event: __________________________

If yes, an event form must then be completed for reimbursement; please contact the chair or co-chair, Lisa Thackery or Tina Leaym to have this done, and attach a note that says it’s completed.

If no, EXPLAIN the reason for the expense: _______________________________________

COMMITTEE CHAIR: __________________________

Committee chair or CHAIR’S SIGNATURE:

________________________________________________________

MAKE CHECK PAYABLE TO: __________________________

MAIL CHECK TO: (name) __________________________

ADDRESS: __________________________________________

________________________________________________________

_____________________________________________________________________

________________________________________________________________________

(Attach original receipts to this form for expenditures)
(Attach listing of checks or cash to this form for income)

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ Do not write below this line ~~~~~~~~~~~~~~~~~~~~

Received: ______________________ Processed: ______________________

Check Sent: ____________________ Check Number: ____________________

Category: ____________________ Treasurer: ______________________

7-6-12

To: "Zhang, Haoyu (H)" <HZhang6@dow.com>
From: Wendell Dilling <dilli1wl@cmich.edu>
Subject: RE: Mid Sect ACS Expenditure Report
Cc: Steve.Keinath

Haoyu,

I suggest that you have the old expense report form that is on the Section web site replaced with your new one (Word file); you can send it to Steve Keinath. The old form is a pdf file that I could not fill out (electronically) because I only have Adobe Reader. I converted the pdf file to a Word file so I could fill it out. I'll use the new form in the future. Thanks.

Wendell

From: "Zhang, Haoyu (H)" <HZhang6@dow.com>
To: Wendell Dilling <dilli1wl@cmich.edu>
CC: "Keinath, Steve" <keinath@mmi.org>
Subject: RE: Mid Sect ACS Expenditure Report
Date: Fri, 6 Jul 2012

Wendell,

Thanks for your suggestion. We may still need to discuss the content of the expense form in the board meeting, but I think we should replace the old one with the attached form on our web site.

Steve, Could you help us to upload the current form to the web?

Thanks
Haoyu

Attachment 38

10-8-12
To: Haoyu.Zhang
From: Wendell Dilling <dilli1wl@cmich.edu>
Subject: Expense for Midland Section ACS Historian Committee
Cc: Frank.Boles
Attachment: Hist expense rept, 10-12.doc

Haoyu,

Please send a check for $100.00 to Frank Boles, Clarke Historical Library, as noted on the attached expense report. Thanks.

I have only Adobe Reader software on my computer so I converted the report form to a Word file. Hope this is OK.

Wendell

Attachment:

A.C.S. Midland Local Section
EXPENDITURE / INCOME REPORT FORM
NAME: Wendell Dilling
TELEPHONE NUMBER: 989-631-1621 DATE: 10-8-12
FAX NUMBER: 989-774-3883 E-MAIL: dilliwl@cmich.edu
TRANSACTION TYPE: EXPENDITURE X or INCOME ___ AMOUNT: $100.00
PURPOSE (describe) Contribution for storing historical records during 2012
COMMITTEE/CATEGORY (please choose from (x) one of the following, or explain):
X Historian

EXPLAIN:________________________________________________________________________________

COMMITTEE CHAIR: Wendell Dilling
CHAIR'S SIGNATURE: Wendell Dilling
MAKE CHECK PAYABLE TO: Clarke Historical Library, Central Michigan University
MAIL CHECK TO: (name) Frank Boles
ADDRESS: Park Library 142B, Central Michigan University, Mt. Pleasant, MI 48859

(Attach original receipts to this form for expenditures)
(Attach listing of checks or cash to this form for income)
Wendell,

Thanks for the form. It will be just fine. Attached is the word file for the expense/income form for your future use.

Haoyu

10-8-12
To: "Zhang, Haoyu (H)" <HZhang6@dow.com>
From: Wendell Dilling <dilli1wl@cmich.edu>
Subject: RE: Expense for Midland Section ACS Historian Committee

Haoyu,

It probably would be worthwhile to have the Word form put on the web site in addition to the pdf form so that other committee chairs could use it.

Wendell