



Spring 2018

MCCB NEWS

Letter from the President

As we leave the holiday season and enter the new year, I was able to spend some time thinking about my three decades of college teaching and some of the changes that have occurred during that time. While scanning around on the web, I chanced upon an article regarding community college changes on the MDRC, a social policy website. The opening paragraphs caught my attention as they seem to apply to where we are now as instructional institutions:

Among first-time, full-time degree-seeking students entering public two-year schools, only about 20 percent graduate with a degree within three years. In this context, community colleges are under pressure:

- *to significantly increase the number of students who attain their educational goals (obtaining a degree or certificate or completing a program of study);*
- *to ensure that the college “works” for a diverse group of students (all ages; ethnic, racial, and socioeconomic backgrounds; and college-readiness levels); and*
- *to do so in a cost-efficient manner. (Competition for public funds is fierce and the state funding formulas used to provide most of a community college’s income are changing.)*

(you can read the full article at <https://www.mdrc.org/publication/changing-community-colleges>)



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Letter from the President Continued

I am sure that you folks are seeing the effects of these pressures at your institutions. At Delta College, for example, we have several major initiatives running to bring in a greater number of students, fine-tune our degrees and certificates, and to do so with a continually decreasing pot of money. That means that we are not only hunting for new students, but simultaneously also analyzing our systems and trying to improve retention and graduation rates. Due to fiscal pressures, class size, full-time to adjunct ratios, and face-to-face versus online learning modalities are constantly being re-evaluated. For folks like myself who starting teaching when “presentations” meant overhead projectors, it can sometimes make your head spin!

I don’t have any quick answers, but it seems to me that we need to decide what the ultimate purpose is for community colleges, and then put the best people into positions where they have the greatest impact. For many of us, that means face-to-face instruction with access to a lot of materials to help us with different learning styles. It also means having experienced instructors (whether part-time or full) who are constantly evaluated and given professional development opportunities to improve as student populations change. If you are gifted enough to be a great online instructor, then you should be given the right tools to excel in that environment (since we know that poor hardware/software integration is an immediate turn-off to both older and younger students alike, and that not every instructor is able to do well in that modality). Finally, we shouldn’t be searching for the quickest and best way to get more degrees into students’ hands, but rather do a better evaluation of what their career goals really are semester by semester and then provide more support to keep them enrolled. Every student retained equals another student that needs to be recruited at the front end.

As an organization, MCCB is well positioned to tackle many of these issues as we are a tight-knit group of teachers at various points in our careers (with a wide diversity of experience) and have complete control over the experiences that we

offer at our conferences twice a year. Conference organizers can mix in ‘keynote’ presentations by area experts, hands-on teaching technique demonstrations by talented instructors, and “sharing” sessions where folks actually have the time needed to compare experiences from their various institutions and find some best practices to address issues like these.

In that vein, I would ask you to seriously consider speaking with your colleagues and hosting an upcoming conference. If you want to host at your college, we have all of the support mechanisms to make that happen. If you are a smaller department, and don’t feel that you have the physical resources to have our group come to your campus, please consider working with Susan Dentel to host a conference at the RAM Center in Roscommon (where the food, lodging, and conference rooms are already taken care of for you). In either case, having different colleges acting as hosts enriches the organization, encourages more participation by existing members, and brings in new members when we show up in their back yard.

With that in mind, I hope that you had a blessed holiday season this past year and have a great new year teaching in 2018!

Mark Robertson
Professor of Biology, Delta College
President MCCB (outgoing)



The Robert B. Annis Water Resources Institute hosted the opening night of the 2017 Fall MCCB Conference



Upcoming Events

2018 MSTA Meeting

The Michigan Science Teachers Association Meeting (MSTA) will be held March 2-3, 2018 in Lansing. For more information, check out their website at the following link: <http://www.msta-mich.org/>

2018 ABLE Conference

With the start of the new year, one may be thinking of ways to invigorate their labs and/or careers. What better way than to attend the 2018 ABLE Conference at The Ohio State University June 19-22! Help with the registration fee would be a great benefit to aid in being able to attend this great opportunity to meet and mingle with other like-minded people. Please share the following information with your colleagues.

Charlie Drewes Waiver of Registration Grants

The Association for Biology Laboratory Education (ABLE) has established grants to encourage attendance at the annual ABLE conference by graduate students, post-doctoral fellows, new academic faculty and staff, and faculty & staff from community colleges. A limited number of grants are available to cover the cost of registration at the annual ABLE meeting in a given year. Submission information can be found at:

<http://www.ableweb.org/charlie-drewes-waiver-of-registration-grants/>

Submissions are due annually on the **first Monday of March**, and successful recipients are notified by **early April**. For questions or further information, contact the chair of the [Grants-in-Aid committee](#), Beth Whitaker.

MCCB Spring 2018 Conference

Here we go again! MCCB Spring 2018 Conference (May 18 - 20) at the RAM Center on Higgins lake is shaping up to be great. To make it even better some advance preparation may be helpful for two events being planned.

a) **5th MCCB Photo Contest:** It's the return of the popular photo contest and silent auction. This event is at its best with more photo entries. Please keep your eyes open and camera/phone ready to snap some biological images. The more participation the merrier. See pages 9-10 of this newsletter for the entry form and more information (also on the website). Be sure to check out page 11 for help with suggestions to reduce production cost.

b) **5K Run/Walk:** Enjoy the beautiful scenery of the Higgins Lake Area by participating in the third MCCB fitness event. All are encouraged to participate. Last year about 18 people enjoyed the natural beauty while getting some exercise and everyone had fun. Forms will be available at the Conference, but some might want this advance notice to start training early.

Website Info

Please visit our website at:

<http://www.mccb1.org/>

You will find information concerning conferences, job positions, general information about our organization as well useful web resources on our website.

If any MCCB member knows about biology positions, upcoming relevant conferences, seminars, or workshops being held in Michigan (as well as throughout the U.S.) please email information to:

Isis Arsnøe

mccbmembership@gmail.com

and/or Susan Dentel

sdentel@wccnet.edu

Who Is A Professional?

Here I am wrapping up another semester. 140 students have either finished my anatomy and physiology class or it has finished them. December marks forty six years of teaching A & P at KVCC for me. In spite of my tenure, I still find better ways of doing things each semester that improve the educational experience of my students while keeping me motivated as well. There is no such thing as perfection when you do the “art” of teaching, and no such thing as a person who knows all the answers in that process either. So how do we improve our approach to this profession? One way is collaboration with colleagues. Educators are famous for “stealing” ideas from one another and using them to enhance their teaching experience. The good news is that we all are happy to “share” in that way. There really is nothing new under the sun. It’s simply all about collaboration and innovative application, bending and shaping things that work so well for others to our own needs. So, we are actually an educational collective. Communication between the parts of any collective is a key in keeping that collective efficient and effective. In spite of all the technological methods of communicating these days, there are still things that are best shared hands on and face to face. MCCB is an organization designed and run by professional educators in biology (your colleagues) like you, which enables the face to face communication so critical to being a professional educator. It promotes this goal in fun and friendly ways during our twice yearly conferences hosted by various community colleges around the state. These conferences mix fun and academics for a couple of rewarding days of interactions with our colleagues and experts in various fields who give presentations. Food, friends, educational colleagues, topic experts, field trips, and seeing other campuses while all the time enhancing our own professionalism as educators. It doesn’t get any better than that for me. I would love to see you at our next conference. Whether you are full time, part time or adjunct, spread the word, become a member. Invite your colleagues to do the same, then car pool to the next exciting conference coming up in the spring. I can tell you from personal experience that you will be invigorated in this pursuit of educational excellence and this will directly benefit your students as well. Most schools financially support faculty travel for such professional development. We even have raffles for prizes and financial support for future conference attendance. If you are already a member, become a more active member. Good dynamic leadership is essential to successful organizations. If you are not a current member, come join up and expand your collaboration with your colleagues around the state. Networking is a great advantage to all participants. But there has to be participants for maximum benefit. The more, the better. What you get in return is well worth the cost. You might even consider hosting a conference at your school or at a satellite location like the RAM Center in Roscommon where we often have our spring conference. I look forward to meeting you at the next MCCB conference. I know you have something you’re willing to let me “steal”!

See you soon!

Darrell Davies / Treasurer MCCB

Fall MCCB Conference a Success!



On Friday, September 29th, members attending the Fall 2017 MCCB meeting in Muskegon got the opportunity to explore Lake Michigan on a working scientific vessel. Participants enjoyed a 2-hour cruise aboard Grand Valley University's research and education vessel, the *W.G. Jackson*. Members got to see sampling techniques, the on board lab, and the real-time sensor based observing system buoy being used for research by Muskegon Community College Instructor, Scott Kendall. Since 1986, thousands of students and others have experienced hands-on science on Lake Michigan and adjoining waters through the Water Resources Outreach Education Program of GVSU's Robert B. Annis Water Resources Institute.



Many thanks to Muskegon Community College for hosting the Fall conference!

Summary of:
Agriculture - Utilizing Michigan's Rock Star Industry to Teach Biology
Presentation by Clarence Rudat, Program Coordinator
Michigan State University and Muskegon Community College
Institute of Agricultural Technology

The Agriculture in the Classroom session gave participants an inside look regarding various activities community colleges undertake to encourage students to pursue a career in agriculture. Contrary to "popular" belief that a career in agriculture means you will do the same farming your grandfather did, Michigan State University partners with community colleges across the state to teach students how agriculture has evolved over the past 60 years, and how STEM is intimately involved in the many facets of the field. The certificate program available at 8 Michigan community colleges offers an affordable option to obtain an IAT (Institute of Agricultural Technology) certificate through MSU.



Clarence Rudat addressing MCCB participants at Muskegon Community College.

The session's goal was to bring to light the modern disconnect many students have to our food system (chocolate milk comes from brown cows), and how to tackle this challenge by involving students in courses designed around a living agriculture lab. How better to teach students about agriculture than immersing them into a hydroponics lab or teaching them how hops are grown and used? Clarence explained how students in this field study and manage a beehive, tend a greenhouse and orchards, learn modern hydroponics technology, and many more modern food crop and animal husbandry techniques. The courses in this program marry agriculture science with all facets of STEM ranging from microbiology to engineering, and every subject in-between. Actively training students in this highly technical side of food production will further prepare individuals to meet the needs of our increasing population, and address the environmental and health challenges that accompany that global growth.

Summary of: Progress and Challenges in Parkinson's Disease
Presentation by Dr. Kathy Steece-Collier
Translational Science and Molecular Medicine
Michigan State University College of Medicine in Grand Rapids

Levodopa for many years has been the standard form of treatment for Parkinson's patients, but unfortunately, many patients after having been on Levodopa for a number of years suffer from side effects such as dyskinesias. Dr. Collier gave a general overview of Parkinson's disease and then highlighted some of the work that has been done by Dr. John Sladek (University of Rochester) regarding dopamine neuronal death. Her current work concerns the re-purposing of FDA drugs (tricyclic anti-depressants, high blood pressure medications and asthma medications) that are already approved and show promise in slowing the progression of Parkinson's disease. Her team was also looking at how genetic variability affects therapeutic responsiveness.

Summary of:
Use of Small Herbarium and Field Work for Introductory General Biology Students
Presentation by Theresa Van Veelen, M.S.
Muskegon Community College

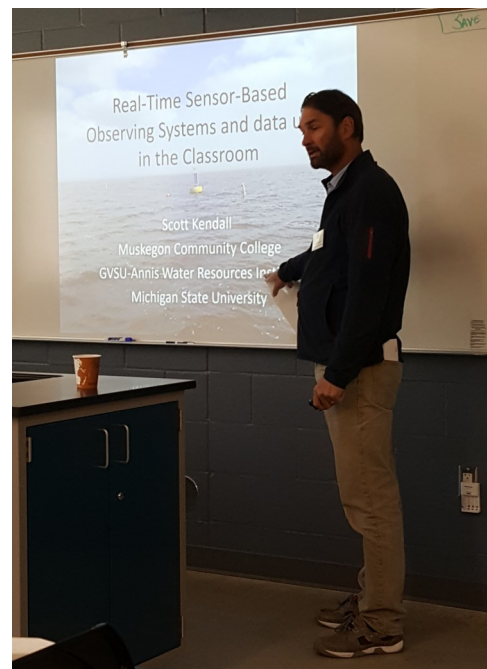
Theresa began by taking us on a quick tour of several new science classrooms. Great design features included custom lab bench cabinets for microscopes, USB ports along with standard plugs, a snorkel (snake-like hood over central lab bench). She took a sabbatical semester to begin the process of organizing and digitizing the Muskegon Community College herbarium. The bulk of her time was spent organizing specimens into current taxonomical groups and special collections and then applying bar codes and taking digital images. Along the way, she found specimens over 100 years old and observed contributions by individuals who went on to be prominent in science or the local area – a great connection to the community. Theresa found www.tropicos.org and www.michiganflora.net helpful in verifying scientific names and taxonomy. In the future, the identification of almost 1700 plant specimens will be verified and the digital and classification information will be uploaded to the Michigan Consortium of Botanists (www.micob.org/MIHerbarium.html). Much of her work was assisted by independent study students.

MCC currently uses herbarium sheets in their General Biology and Environmental Science courses as well as some 1 credit Flowering Biology courses. They have not had a plant science class in the past but should have one in the near future. Students create sheets as well as learn from existing sheets. Theresa has found that laminating the herbarium sheets works quite well even though it is not the preferred method by botanists. One example of an activity she does with students uses the jigsaw technique. Each student (from a group of 4) examines a different group of 4-5 similar looking specimens (i.e. ferns or oaks) and briefly sketches, describes, or photos them. Groups reassemble and head outside as a class. Each student is then responsible for helping the group with identification as they observe plants outside.



Members enjoy a guided nature hike through Kasey Hartz Natural Area

Lori Garrett (right) of Parkland College shares her lessons to improve student learning in A&P.



Scott Kendall presenting his research to MCCB members

MCCB Officers

Mark Robertson
(President)

Leigh Kleinert
(Past President)

Lynnda Skidmore
(President Elect)

Susan Dentel
(Secretary)

Darrell Davies (Treasurer)

Isis Arsnoe
(Membership Chair)

Tim Periard
(Nominations Chair)

Erica Staton
(Newsletter Editor)

December 15, 2017 MCCB Executive Board Meeting Notes

1. President's Report (Mark Robertson):

- Is it feasible to have the website allow individual user login to view their history and update their personal information (including email, phone, address, and payment status? What about viewing institutional membership status? Automatic email response when a transaction is completed? Mark will contact Ryan Bodary (webmaster) to ask these questions.
- We need to think of ways to increase membership and to personally contact colleges to recruit conference sponsors.

2. Treasurer's Report (Darrell Davies):

- Our organization is in good standing at: \$18,165.00
- Fall 2017 Muskegon Conference (deficit of \$1447.09)

3. Secretary's Report (Susan Dentel):

- Summer 2017 meeting notes approved.
- Will coordinate with Glen Oaks to get the process going for the Spring 2018 RAM conference, May 18-20th.

4. Newsletter Editor (Erica Staton):

- Looking for new submissions for winter newsletter.

5. Membership Chair (Isis Arsnoe):

- 49 members currently paid, the number of members is higher, but many are not up to date with paying membership dues.

Mission of MCCB:

MCCB (Michigan Community College Biologists) serves as a state-wide forum for sharing instructional techniques and new ideas for teaching college-level biology. The organization fosters communication, friendship, and unity among the biologists of the twenty-nine community colleges in the State of Michigan. Two state-wide meetings are held annually.

Founded in the early 1980's, MCCB began as an offshoot of COSIP (the College Science Improvement Program). Two COSIP groups were originally created in Michigan: a southern group of colleges (associated with the University of Michigan/Dearborn and directed by Dr. Hertzler) and a northern group of colleges (associated with Central Michigan University and directed by Dr. Carl Scheel). The initial meeting to form a statewide organization of community colleges occurred at Delta College in 1981. The first slate of officers was elected at that time, with Eldon Enger as President and Janet Dettloff as Vice-President.

- To promote interest in biology.
- To improve the teaching of biology by providing opportunities to share and discuss instructional techniques and teaching methods.
- To provide opportunities for updates on current topics and trends in biology.
- To facilitate the exchange of ideas and foster communication, friendship and unity among the community college biologists in Michigan

Calling all Nature Photographers!



This is your chance to share your best photos with other biologists.

*Subjects can be anything related to biology - landscapes, scenery, macro photography, animals, flowers, micro photography, etc.

*Each person may submit 1, 2 or 3 photographs (photo size either 8 x 10 or 11 x 14 mounted on a stiff material (Matte board or foam board)).

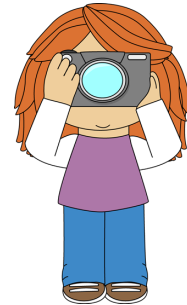
*Bring your photo(s) and Registration form to the Spring 2018 MCCB Conference. Print off the form from the www.mccb1.org website or below in this letter and fill it out.

*Prizes will be awarded as determined by attendee voting. Each conference attendee may vote twice by tickets. Voting ends Saturday afternoon with awards given during dinner.

*All submitted photos will be entered in a silent auction with earnings donated to MCCB. Bidding will start at \$5 and at the end of the auction (Saturday afternoon) highest bidders will be determined. Hopefully many people will be able to take home a beautiful photograph.

On page 3 of this document are some suggestions to reduce cost of

Enter the 5th MCCB Photography Contest Registration Form



Your Name: _____
School: _____
Contact phone: _____
Contact email: _____

- * Photo Entry #1 Title:
- * Photographer's Name:
- * Check the category
of your photo: ____ animal ____ plant ____ Scenery ____ misc./other
Shooting/Subject Information:

- ** Photo Entry #2 Title:
- ** Photographer's Name:
- ** Check the category
of your photo: ____ animal ____ plant ____ Scenery ____ misc./other
Shooting/Subject Information:

- *** Photo Entry #3 Title:
- *** Photographer's Name:
- *** Check the category
of your photo: ____ animal ____ plant ____ Scenery ____ misc./other
Shooting/Subject Information:

Ways to Reduce Cost to Photographer:

Printing photographs and mounting and framing them can all be expensive. There are some ways to reduce the cost of the whole process. Here are some suggestions;

- * If you have a color printer at home you can purchase photo paper at Office Depot, Staples, Meijer, etc. and print your own at home.
- * Have the photograph printed somewhere else and then you attach it to a matt board or foam board cut to the same size with spray adhesive (from Michaels, JoAnnes or other craft stores).
- * Sign up with Walgreens, CVS, Meijer or Costco, etc at their photo dept. Easily done online. They will send discount coupons for printing almost every week. You can upload your photos, select size and pick them up at a nearby store. I like Walgreens as they have 40% off prints (no quantity limit) a few times a month.
- * Watch Sunday papers for circulars for Michaels or JoAnnes (craft stores). They often have 50% off coupons for items. Buy a precut matt at the reduced price and behind your photo include a same size mat or foam board. You create 3 layers: the precut mat on top, your photo and behind it the backing board. (Walmart and Meijers also sell stand-
- * With enough lead time, thrift stores, garage or estate sales often have inexpensive frames for sale. Purchase them often for less than \$5. Frames are not required for submission of photos, but they do improve the presentation.

