

**Marine Science Consortium
Fall Meeting of the Academic Advisory Council
Saturday, September 22, 2012
The Dixon Center, Richards Hall Room 102
Harrisburg, PA
8:30 AM – 4:00 PM**

Attendees:

Dominique Didier – Chair, AAC; Millersville University
Wendy Ryan – Kutztown University
Jay Hunt – East Stroudsburg University
Ajoy Kumar – Millersville University
Adrienne Oakley – Kutztown University
Bob Vaillancourt – Millersville University
Sean Cornell – Shippensburg University
Steve Seiler – Lock Haven University
Nathan Thomas – Shippensburg University
Anne Armstrong – Program Manager, Marine Science Consortium
Ali Redman – College Program Coordinator, Marine Science Consortium

Invited guests:

Tom Tauer – East Stroudsburg University
Anne Boettger – West Chester University
Aaron Haines – Millersville University

AGENDA

- I. Open Meeting; Approval of Agenda
 - a. Any additions to the agenda – some course additions added
 - b. Motion – Oakley, Ryan Approval

- II. Review Minutes of Spring 2012 meeting – Sean Cornell
 - a. Approval of minutes
 - b. Motion – Vaillancourt, Hunt Second – All approved.

- III. Welcome and Introductions
 - a. Welcome new members and visitors
 - i. Introductions: at 8:51 a.m.
 - ii. Aaron Haines, MU, – new faculty– Conservation Biology, Vertebrate Interests.
 - iii. Steve Seiler, LHU, new faculty– Marine Ichthyology
 - a. Anne Boettger –marine science concentration added at West Chester. Express interest in MSC as new members
 - b. Report on passing of Sam Ha (MU Faculty) - Long-term supporter of the MSC; helped to organize MSC's programs and courses. See email handout from Dave Zegers regarding event to be held on Oct 13, 2012 to honor Dr. Ha's contributions. To be held at MU Bio. Department, all are welcome.

- IV. Report on NASA Collaboration Project and New Opportunities – Tom Tauer
- a. Working/collaborating with USFWS, NASA WFF continues to grow and enthusiasm is excellent. Recent efforts to showcase research achievements. 2012 Report of Research Collaborations have been shared with Chancellor's Office, PASSHE Board of Governors, etc.
 - b. Enthusiasm is due for our efforts and hard work at the MSC. Tauer acknowledges and thanks us for our continued contributions..
 - c. Ongoing NASA Collaborative Research Projects:
 - i. Kumar/Hu Project (MU & ESU) on LIDAR has been great and produced an exceptional high-quality data set that is contributing to an assessment of the impact of sea-level rise on Wallops Island.
 - ii. New development will use UAV's to miniaturize LIDAR equip.
 1. Have flown LIDAR targets at Wallops to compare UAV-obtained data to original to see how robust UAV-version is.
 2. Please let Tom Tauer know if anyone is interested in working with these data, he will make the contact for you.
 - iii. CUBE SAT – Kim (ESU) Project.
 1. Grant dollars ran out, support is being sought to continue.
 2. Some aspects/projects continue to be developed.
 - iv. Herpetofauna at Wallops Island – Delis (Ship) Project.
 1. Continues to collect data. Has some great data coming in. New species observed.
 2. Cover board concerns, some were removed from grounds. So communication with J. Mitchell has helped with some removal activity.
 3. Ryan – Comment: Collaborate with other researchers is important – Matt Stone (KU) worl on Terrapins asks that Delis/Hranitz communicate on projects to share expertise.
 - v. Wallops Shoreline Mapping/Monitoring Project (Oakley/Cornell)
 1. Mapping surface and sub-surface features
 2. Supported by funds via MSC. Thanks to NASA.
 3. Initiated Feb. 2011 to assess baseline pre-replenishment conditions to compare to post-replenishment.
 4. Resulted in ~13 student projects, publications/presentations
 5. WCTG – Radio Program “Wallops Island Report” also resulted.
 6. Minor concerns: NASA access issues from time to time, but thanks to Amber Parker we have been able to work through most of these.
 - vi. CASI – (Kumar/Cornell) workshop focused on sea-level and climate change impact on all NASA sites.
 1. RFP, Invitation only meeting in November
 2. Cynthia Rosensweig, keynote speaker, details will be forthcoming.

- d. NASA CONTACT CHANGE: Rob Landis is new contact replacing Scott Schaire – Technical Manager of the Advanced Project Office.
 - i. New ideas/projects please get in touch with Tom Tauer.
 - 1. Distributed Wind Monitoring Project (Jeff Bland, contact)
 - a. Kite project and sensors to give aerial, high-resolution image. – Useful for monitoring shoreline projects.
 - b. Measuring particulate air/quality sensors. (Dr. Rich Clark – at Millersville) possible collaborations?
 - 2. Google Earth Kiosk at NASA Visitor’s Center
 - a. Computer-based project using imagery and educational displays/activities for the VC.
 - b. NASA has some money to support this
 - 3. SLOSH Model Development – Sea-Level Rise modeling.
 - 4. Continued CUBE SAT projects
 - 5. Miniaturization of technologies/sensors
 - a. Jeff Summey – Cal U. – Developed Kite Sensors
 - b. Continue to look for other low-cost technical solutions for instrumentation development.
 - 6. Coastal Zone Research Mapping – continuation of components of Cornell/Oakley project and others.
 - e. (Didier - Comment) Continue to advertise all projects on MSC website
 - i. Please provide abstracts/posters/etc. to Ali, for putting this out.
 - ii. Redman request – Please ask students to help (remotely) on these projects – possible intern for right program.
 - f. Continue to promote collaborations with USFWS (Lou Hinds)
 - i. Grant now submitted awaiting word. Will be to develop a collaborative research database on all data we have collected over the years, so these data can be made available in useful form.
 - g. Many thanks to Tom Tauer for his efforts and helping to ensure the projects we are working on get put out to BOG, Chancellor, etc.. Also many thanks to Darlene Ferris-Labar – ESU Art & Design for putting second annual report together.

V. Academic Programs, Curriculum and Planning

- a. Summer 2012 registration recap
 - i. Problem: intent to enroll form
 - 1. Solution: new form developed
 - ii. Problem: seniors need priority for courses
 - 1. Solution: “seniors only” early intent (e.g., start 10/20)
 - 2. Open intent to enroll begins after seniors register (e.g. 11/1)
 - iii. Problem: duplicate registration by students
 - 1. Solution: students will pay \$200 for every class they register for; due upon registration
 - 2. no double-registration in same session
 - iv. Problem: visiting student form

1. Will be sent to every student once they sign up for a course
 2. Many forms not sent/received (registrar issues); any way we can facilitate this more easily?
- v. Problem: students unclear of expenses
1. Solution: registration pages at each campus (e.g., on MAX) state, “extra fee applies” with link to MSC website
- vi. Problem: Withdrawing from courses at other universities
1. most do this online but students don’t check e-mail from other universities
 2. solution: call the registrar – yes, phones can be used for something besides texting!
- b. To solve 2012 problems, Redman has enhanced intent-to-enroll form for 2013. Significant improvements made in both accessibility of information, generation of reports, improved communication, etc.
<https://msconsortium.wufoo.com/forms/sample-college-registration/#public>
- i. Using wufoo, a paid system (per month fee \$30.00) to be shared amongst all MSC programs. Very robust, customizable system for registering, collecting information on programs.
 - ii. Deposit of \$200.00/course to register (for housing deposit).
 - iii. Ryan – comment/concern: Since this fee collection is different from past –please bring to Council of Academic Administrators for approval.
 - iv. Cornell – comment/concern: Please ensure information about wufoo security is shared so online payment system (i.e. student’s personal information) is secure. Redman – Comment: Might use PayPal system to collect fees.
 - v. Good discussion on improving wording/presentation of pre-enrollment information, looks to be a great program to help resolve our issues for this summer.
- c. **Faculty, please fill out course information for summer 2013** on wufoo so that information is collected easily so that Ali can add to the registration system in a timely manner.
1. To do this goto:
<https://msconsortium.wufoo.com/forms/msc-summer-course-listing/>
 2. Please share boat needs/equipment needs/ logistics/planning/syllabi with Ali as soon as possible
 3. Date for submission of materials via the wufoo form to Ali by **Oct. 5, 2012**
- d. Go live date will be **October 15 for seniors** to begin registering their intent to enroll.
- e. **November 2, 2012** system will open to all.
- f. Big thanks to Ali for working on this system to work on improving the system issues from summer 2012.

- g. Outstanding issues from 2012 - Biggest problem was communication with students!! Most were not prepared for courses, or logistics, etc., because they do not check or respond to their e-mail.
 - 1. Solution: students **must** use e-mail
 - 2. Solution: students provide current e-mail address when intending to enroll. All course information sent there
 - 3. Cannot resolve problem that Universities will communicate via their university assigned e-mail. Suggestions?
 - 4. New idea will be a Facebook group for summer 2013 (has been set-up). Recommend that this Facebook be used for informal communications (finding roommates, general announcements, deadlines, packing lists, check email reminders, etc.)
- h. Proposed courses and tentative schedule for Summer 2013
 - i. New courses:
 - 1. Conservation Biology – Millersville - Haines
 - 2. Herpetology Course recommended – Shippensburg – Delis
 - a. Rather than Intro to Ecology (Honors)
 - 3. Second section of invertebrates – Whitford?/Boettger
 - 4. Digital Imaging Course – Bloomsburg O'Donnell
 - 5. Hydrology of Coastal and Wetland Environments- Shippensburg - Zume
 - 6. Physiology – upper level course ?- Shippensburg – Thomas
 - ii. Possible Courses for 2014?
 - 1. St. Francis (Morra) – Research diver methods?
 - a. Concerns about insurance and access to necessary equipment. – Will ask Amber Parker to look at this.
 - 2. Aquaculture at Greenbackville facility – discussion supports setting goal for 2014 summer.
 - 3. Travel-related courses? St. Lucia course is already offered and it runs each year. Get some more students of ours into these classes
 - 4. Option to teach a course in Fiji for \$3200.00 plus or minus flight.
 - 5. Cornell/Ryan – concern over students enrolling in St. Francis courses for higher tuition there.
- i. Course Changes:
 - i. Biological Oceanography Course Update – Vaillancourt-Ambler course –
 - 1. Will be brought back to MU (taught there not at MSC).
 - 2. Replaced at MSC with advanced/techniques course focused on methodology of biological/chemical oceanography.
 - 3. Change reflects challenge of teaching the theory and field experience.
 - 4. ESU - Hunt – Question: prerequisites? Introductory Oceanography would be sufficient.

5. KU – Ryan – supports change; would be good for students who could take both field methods courses (Kumar’s class).
 6. Any other methods/techniques comments/questions – please send Vaillancourt-Ambler an email.
- j. Developed tentative course schedule for Summer 2013 – see draft document as appendix.
 - k. Cornell – comment; Still need to ensure that each of us prepare students for course equivalencies and helping Registrar’s offices know what courses can be made equivalent. (i.e. Conservation Biology class).
 - i. Travel Courses to help make up some revenue? – Didier recommended we table discussion about courses that would be travel only; however see Lander University model. Take this up at Spring Meeting.
 1. Curacao Course for January Term, 2013.
 2. Contact Cornell for information regarding the Gen-Ed travel course for January, 2013
1. Summer Course “Esprit de Corps” / “quality of life” – Ali & Annie
 - i. Challenges with overlapping summer classes
 1. Logistics and management of courses is difficult at times.
 2. Transitions between sessions is challenging so arrivals/departures will need to be better coordinated.
 3. Students will be asked to depart on Friday when their course ends rather than Saturday.
 - a. Comment- exceptions will be made for legitimate students who have significant travel distances.
 - b. Not for students who want an extra day to “party”
 4. Faculty arrival late Saturday/early Sunday is preferred. Gear/supplies will be delivered by Monday morning.
 5. These arrival times allow staff to prepare housing, deliver gear to labs, clean labs/aquaria etc. Hard to do often in less than a few hours.
 - ii. Staff support for college courses
 1. Will be more staff for summer 2013 –
 - a. College Assistant
 - b. Resident Coordinator
 2. Hard start this year not having assistant stay on early. Came online a bit later in summer so improved support.
 3. Additional staff will help manage field, boat support, etc.
 4. Access to college coordinator will help with access to equipment/support/aquaria support
 5. Improving communication – 7:45-8:15 office hours in office with access to files/computer will help
 - iii. Summer volunteer assistants program (Summer Program Assistants?)
 1. Background RA’s – hard to take a class and be an RA at same time.

2. Will now implement volunteer-status for a session, be an RA during volunteer session. Will work on research projects, aquaria maintenance, equipment maintenance, etc.. Housing would be free during their volunteer time. Then they would get housing at reduced cost during their course session.
 3. Will be an application process and students most able to satisfy the needs of the position will be selected regardless of financial need.
 4. Please encourage responsible, well-rounded, experienced students to apply for this program.
- iv. Resource/Equipment use – lockers/cabinets to store equipment
1. Need space that we can store equipment/supplies in
 2. Hard to constantly bring materials back and forth, but when we leave things, sometimes these are taken/used by others without return. Need to ensure that supplies/gear are protected/secured for when they are needed.
- v. Student mindset & meeting student needs.
1. Welcoming environment for all students need to work on this. Students don't always feel welcome.
 - a. Made some improvements to college lounge and will be dedicating some funds to improve the facilities for students
 - i. Moved CA/RA office into student lounge
 - ii. Will occupy lounge for check-in and activities.
 2. Wireless/Ethernet problems were significant issue for students and faculty.
 - a. Need to work on these concerns as much as possible in the coming months. – MSC will work with KU IT folks to try to improve options.
 - b. Students required to use internet for coursework, and for other uses.
 - c. Need to ensure students don't misuse internet – some illegal downloading occurred.
 - d. All faculty apartments need internet access. Students are required to use email for submission of assignments, etc., faculty need to be able to meet the needs of students in a timely fashion.
 3. Netflix subscription will be in place for student lounge and one Wii will be installed. Getting rid of expensive cable.
 4. Student conduct & communication of expectations/rules
 - a. Needs to starts up-front as students are registering for courses and again at mandatory orientation.

- i. Too many students received incomplete information or misinformation about expectations for courses, rules, etc.
 - b. Important for us to communicate the nature of a “field-station” versus our home campuses.
 - 5. Handling of and training of staff/faculty on emergency situations (related to alcohol, medical emergencies, student conflicts, etc.)
 - a. Were minimal off-campus issues this year, but student choices still impacted staff, other students, and families by their actions.
 - b. As much as possible, we need to pro-actively manage risk and safety by being consistent and following through on policies.
 - c. Focusing on students with orientation, all faculty/staff **STRONGLY ENCOURAGED** to welcome students and possibly to share/express the critical importance of safety/image/responsibility of choices. Ownership of actions is critical; Respect for other students is utmost importance.
 - 6. Provide structure in coursework and structured activities to keep students engaged, less “down-time” is good.
 - a. Faculty-led is encouraged as much as possible.
 - b. RA – CA – led activities will be good too as these come online in 2013.
 - 7. Vaillancourt – comment – Should do “orientation” as an “Ice-breaker” to get all students/faculty/staff together at outset of classes/arrival. Could include orientation components.
- vi. Meals/Access to snacks/resources out of class time.
 - 1. Students are starving by late evening. Can’t store food in their rooms. Students are walking/driving to purchase foods/coffee at Royal Farms where they can also easily access alcoholic beverages.
 - 2. Redman – Plans to convert a kitchen in one of the apartments so it would be available to students to have access to a fridge/microwave. Would be in Resident Coordinator’s apartment so would be oversight.
 - 3. Some snacks can be provided during trips/field work and sack lunches will be improved for students.
 - 4. Coffee & late evening snacks options will be explored.
 - 5. Will not be able to use “cafeteria space” for these activities due to “sanitation” concerns of staff. Discussion about other field stations allowing students to access food later.
 - 6. Possible to stock some snacks in the student lounge for purchase?

- vii. Faculty Apartment Updates (Vallancourt)
 - 1. Mattresses – please do what is possible to get some new mattresses.
 - 2. Room darkening curtains – light/heat reflective?
 - 3. Internet access.

VI. Research Committee Report: Protocols & Guidelines –Cornell, Hunt, Redman

- a. Request for facilities use and research form – review document and move to formally establish protocols
 - i. See handout of form and review checksheet/rubric.
 - ii. Updates necessary to these forms?
 - iii. Needs to get posted online for easy access will explore use of wufoo system for deployment
 - iv. Cornell will work with Redman to get this protocol online.
- b. Some concern regarding IACUC approvals or lack thereof from researchers at Universities without IACUC board.
 - i. See report from sub-committee regarding specific concerns
 - ii. For research proposals with intent to publish, committee suggests IACUC approval is required from home university,
 - iii. if no IACUC approval is available at researcher's institution, will suggest that research should be submitted to partner IACUC board to vet the proposal for compliance with standards and make recommendations.
- c. Education-focused proposals –if handling/sampling vertebrates will be involved, educators will be expected to have course activities approved by home IACUC. MSC staff will assume faculty will have these approvals if the university has an IACUC. Otherwise, these will be reviewed on a case-by-case basis by the research sub-committee for approval of permit use.
- d. Discussion on collecting permits educational use versus research use.
 - i. MSC's permits are for educational use/collection.
 - ii. Specimens collected for educational use are covered by the permit, those being used for publishable research beyond the context of the educational experience are more questionable.
 - iii. For these reasons, committee will recommend that any specimens collected during summer program and retained for education should be announced to MSC staff so that appropriate permits can be requested.
 - iv. Research Permits: Research projects should follow additional requirements (i.e. VA State Laws) and PI should follow these rules. Website is available on request.
 - v. Long-term permits for holding of specimens for display/exhibition: <http://www.dgif.virginia.gov/forms/PERM/PERM-026.pdf> .
- e. Approval of post-facto research projects.

- i. On occasion projects evolve out of the context of a given class. How do we handle these?
 - ii. I.e. collecting specimens at MSC during classes and then retaining these specimens (at home university) for research.
 - iii. See above for details/information.
- f. Additional committee members needed/volunteered
 - 1. Bob Vallaincourt (Millersville)
 - 2. Steve Seiler (Lock Haven)
- g. Research Goals Short-Term Statements of Interest and Long-Term Interests
 - i. In order to enhance our future research directions, need information to be able to:
 - 1. help connect researchers with potential topics that arise from time to time.
 - 2. better plan for our needs in terms of equipment/facilities/collaborations/other resources.
 - ii. Simply ask that faculty identify short-term and long-term research goals, interests, resource needs. Please **provide these by Feb 2013 AAC Meeting** so these can be used during Strategic Planning Process coming up in Spring 2013.
 - iii. Will allow us to make lists of equipment/materials that we need to work to obtain – strategic planning for facilities improvement, etc.
- h. Miscellaneous Research Issues
 - i. Database projects with USFWS and NASA still pending
 - 1. Kumar – L. Hinds initiated discussion on a proposal to put a database together on research collections from all colleagues.
 - 2. Proposal is pending approval, but database is developing
 - ii. Artist in residence – possible to explore this in the future.
 - iii. Faculty/Researcher In Residence
 - 1. Goal is to provide opportunities for faculty to take sabbatical time to do research at the MSC.
 - 2. Will raise profile of research at the MSC, will provide access to facilities/resources in exchange for service to staff/programs, science on the shore, etc.
 - 3. Highly encourage faculty to explore this as an option to initiate new research, complete ongoing projects, etc.
 - 4. Cornell (Ship) has applied for summer/fall 2013 sabbatical as faculty in residence.
 - iv. Publications – Kumar comment. Please continue to **submit your research for publication** and **make your accomplishments known** to the MSC

VIII. MSC reports

- a. See Financial/Attendance Summary Handout
 - a. Comparisons between 2011 and 2012 year to date

- b. Growth in programs is about 12% annually for the last year or two. Might be down slightly this year to about 8%
 - c. Total participants is up some but not substantially
 - d. Pre-college program is doing well, special programs are down due to some advertising changes in Exploritas Program, will not happen again in 2013
 - e. Need to improve spring/fall enrollments – summers are nearing capacity.
 - f. University memberships pending (West Chester) would benefit the budget more significantly.
- b. Updates on programs / plans for new programs - Anne
- i. Overview of current program
 - 1. On the horizon, pre-college targeting growth in Maryland participation,
 - a. Now have environmental literacy requirements for all high school graduates.
 - b. target for MSC activities/advertisement
 - 2. Also targeting some local VA schools to make up for loss of PA schools.
 - ii. New activities
 - 1. Fund-raising Advisory Group – Amber is seeking volunteers to be involved
 - 2. Ryan – comment - ask Emeritus faculty to support this initiative.
 - 3. Alumni network – hard to rely on, but will do what we can.
 - 4. Home schoolers great program interest and likely area to expand
 - 5. 5th grade and winter – non-boat programs are also being planned to enhance financial situation.\
 - 6. Strategic planning to initiate in March 2013 – possibly around Spring Break.
 - a. Ryan comment – must include faculty in this process.
 - iii. Costs and fees
 - 1. See proposed fee structure handout, has not been “approved” by board so not set in stone. Some minor increases in fees
 - 2. Package programs new initiative (see concept handout) idea is to provide several package prices summarized so the full cost of a field trip is easily accessible.
 - a. Standard Package – includes Friday night, Saturday, Sunday morning, one kayak/monitor/guided trip- see prices.
 - b. Budget Package – Saturday/Sunday option.

3. Please feel free to communicate with Ali Redman if you have any thoughts/questions/comments on how to improve package programs, etc.
- b. New activities, resources, environmental impact actions – Ali
- c. Scheduling concerns; booking dates, equipment requests, vans - Ali
 - i. Online forms for course requests; equipment, boats, etc.

IX. New business

- a. Greenbackville Update / Goals For Future
 - i. Single best facility based on location, ought to work to preserve and improve this facility.
 - ii. Improvement of Facilities
 1. Docks – looking at costs/permits for installing removable floating dock system.
 2. Building – updates? Or possible deployment of other housing options.
 3. Indoor Pump/System will be needed for any aquaculture system should we be able to
 4. Limiting erosion
 - iii. Discussion tabled, but Cornell (Ship) – will develop report of ideas/concepts for spring meeting. Will be shared by listserv as soon as it is available.
- b. Kayaks/Resources Stored at Greenbackville.
 - i. Sit-on-top Kayaks will be pursued for use with first-time kayakers, half-day kayak trips etc.
- c. Other equipment purchases/budgeted items/hopeful items
 - i. Collection and observation equipment – masks/snorkels/fins – less impactful activities for use in eel grass beds for instance. Will help us limit our impact there.
 - ii. Large format printer/laminator will be able to use these at low cost.
 - iii. Kestrel, GPS equipment are in hand for improved accuracy of data collection.
 - iv. Ali Redman will put together comprehensive resources and equipment and field site report this winter – really would like some help from students to get this to happen. If you have a student who would be interested in helping out (perhaps over winter break) that would be ideal.
- d. Coastal Zone Symposium – dates? Other participants (VIMS, ODU, UDel, etc.)
- e. Suggested discussion item for Spring Meeting –
 - i. Recommendations to create sub-committees to help improve function flow of AAC meetings
 1. Curriculum Committee, Facilities Committee, Research committee.

- ii. Sub-committees would then generate reports to submit ahead of time to listserv. Discussion would then focus on actionable items in order to improve effectiveness of meetings.

X. Spring 2012 meeting – Harrisburg (2/23/12); Fall 2014 at MSC (Sept. 21?)

Adjourned formal meeting (~4:10 pm) Motion: Vaillancourt – Oakley second.