<u>Present:</u> John Ackerman, Vladimir Alvarado, David Bagley, Marjorie Bedessem, David Bell, David Dandy, Patrick Johnson, Wyatt Keller, Billy Lew, Kevin Milliman, Aaron Reichl, Mary Shafer-Malicki, Mike Thomas, and Heather Warren (Support Staff).

#### Welcome and Introductions:

Aaron Reichl opened the meeting and welcomed the board. He also introduced Wyatt Keller as a new member of the board.

#### Safety Minute:

- Kyle Winkelman presented the safety minute. He said that if personal protection equipment isn't exactly right, things can go seriously wrong. For many tasks personal protection equipment (PPE) is the only thing that stands between injury or worse. Whether we are talking about respirators, safety glasses, gloves, helmets, steel toe boots, fire resistant clothing or chemical suits, it's not enough to just identify the correct PPE for the hazard at hand. Equipment should properly fit, and be regularly maintained and inspected before use.
- For example, he said, hardhats have expiration dates. A lot of people don't know this. This is for good reason as plastic can get brittle with age. After a while, or once it's sustained a serious blow, a hardhat needs to be replaced.

#### Agenda Approval:

Mary Shafer-Malicki moved to approve the agenda. Kevin Milliman second the motion and all were in favor. Agenda approved.

## High Bay Research Facility Tour

#### **Department Update:** (See Attachment A)

- > Dr. Vladimir Alvarado talked about the focus areas, specialties, and expertise for the department.
- Alvarado reported that the Chemical Engineering department now houses and coordinates the Materials Science and Engineering PhD program. The department will also jointly coordinate the Environmental Engineering MS program with Civil Engineering.
- Alvarado reported that we have gained some space to add to the Unit Operations Lab in B105 and we are also trying to gain space for a Bioengineering Lab.
- ➤ He reported that he is a member of the CEAS Strategic Planning Committee.
- Alvarado went on to talk about the current administrative enabling structure. He reported that Dr. David Bell will become the new Undergraduate Coordinator and that a webinar was not planned for this semester. A newsletter is in the works and will be sent to the Advisory Board when completed. He added that the department is focusing on recruiting.
- Alvarado reported on the CHE Faculty and he also provided statistics on the current number of students currently enrolled for the spring 2017 semester. He reported that there have been a number of students who want to pursue dual degrees in Chemical Engineering and Petroleum Engineering and that the student has to complete one before they can start the other. David Dandy asked if courses are restricted to majors. Alvarado replied yes, but they can make curriculum adjustments for courses they feel are equivalent and each case is looked at individually.
- Alvarado talked about CHE enrollments and reported that the large number for seniors is due to the transfer students. Dr. David Bagley commented that these numbers also reflect senior status based

- on the number of credit hours they've taken. Alvarado said that he was worried about the low freshman numbers. Bagley replied that a lot of students come in with 30+ credits and they are classified as sophomores. Kevin Milliman added that this is a feature not a bug as we recruit a lot of students with AP credit. Billy Lew asked if this is a similar shift in other engineering departments. Alvarado replied yes and that the Dean has set a goal for our department of having 200 students.
- Alvarado reported that the web page is progressing and he's asked Heather Warren to work on this. He will visit SAIT/NAIT in May to talk about recruiting students from these institutions. Milliman asked if he feels we are at the right number of students. Alvarado replied that every faculty should be able to advise 20-25 undergraduates and so the department can reasonably manage about 180-200 students. He said that 300 students would not reasonable with our current faculty numbers. Bagley added that in the past he would use a student-faculty ratio of 25. He said if we want 300 students, then we would need 15 faculty as a planning guide. He said with our current number of 9 faculty, we are at 21. Dr. Patrick Johnson added that we currently have no APLs and the teaching capacity is very low.
- Alvarado went on to talk about growth needs. He said the Dean has given the department permission to hire a Professor of Practice and temporary lecturers. He has asked two graduate students to teach a course. He is also working on a Spousal Accommodation hire where a tenured faculty member on campus' spouse could possibly be hired as an APL. This could be a state line or could be paid by the Tier I funding.
- Alvarado talked about fundraising priorities to help with process fundamentals, staff, equipment, professorships, endowed chairs, and a department endowment. Mary Shafer-Malicki asked how the board can help with this. She said it's harder to get into professorships and endowed chairs, but if they existed, then they could engage industries and companies. She said they can help with other things like process fundamentals and equipment maintenance and this might be more realistic. Bagley agreed that we need more resources to help run the labs more appropriately. Shafer-Malicki added that we need to make sure we are not stepping in a place where we don't belong as there are politics involved. Reichl asked if we are putting more specificity on these things. Shafer-Malicki replied yes. Marge Bedessem asked if we could write a letter.
- ➤ Reichl asked if there is a separate discussion on a Professor of Practice. Alvarado reported that the Dean and UW have gone to great length to approve the Professor of Practice. This person doesn't have to have a graduate degree and the Dean wants one in every department. This would be a senior person where their duties are not just teaching. It would be someone to help network and give reality to our programs so we have examples of different styles. Reichl asked when it will be approved. Alvarado reported that it has already been approved and the Dean approves the applicants directly. This position is not advertised. Reichl encouraged the board to send names of anyone they may know who would fit this mold to Alvarado directly.

Action Item: Board to let Alvarado know of any potential candidates for the Professor of Practice Position.

#### **ABET Update:** (See Attachment B)

- ➤ Bagley gave a brief review on ABET. The department received the results in August 2016 and were accredited through September 30, 2018 with an interim report due July 1, 2017.
- Bagley reported that the department received a weakness in Criterion 4 that showed a lack of documentation. He reported that Dr. Dennis Coon implemented the recommendations. Bagley added that we assessed in spring 2016 and fall 2016 and implemented recommendations from fall

- 2016 courses. He said that we are now in the middle of a full outcome assessment and have assessed outcomes A-K. He is focusing on making sure that there was a specific recommendation from the last assessment to show how we've documented and shown what the results were. This is ongoing.
- For his plan to address this weakness, he's sending out emails to the faculty and asking where they are in the process and then he asks them to follow up. He will then report on the outcomes with recommendations which are due this summer.
- ▶ Bagley showed the board which courses were assessed as well as documenting performance indicators. (See Attachment C) A criterion was identified for each. He said there are four ratings that indicate not meeting the criteria, proceeding criteria, exceeding criteria or meeting criteria. This assessment was done in fall 2014 and the changes were implemented and are now doing better for fall 2016. This has made a difference.
- ➤ Bagley reported regarding Outcome B, the students are still doing well and it's improving. He said we are moving in the right direction and he feels good about how the assessment is going.
- ➤ Bagley reported that the first draft will be due May 15, 2017, the final draft is due June 15, 2017 and then the full assessment report will be submitted to ABET by July 1, 2017. He will be preparing the full assessment. Shafer-Malicki congratulated Bagley and stated that you've come a long way with this. Bagley added that Coon really helped the department move forward as well.

### **Environmental Engineering MS Program**: (Attachment D)

- ➤ Bagley reported that the Environmental Engineering MS program will be a joint program between Chemical Engineering and Civil Engineering. This program was developed over 12 years ago and has been targeted for review. This is due to the low enrollment and graduation rates.
- ➤ Bagley reported that the college team was led by Dr. Bill Bellamy and he worked to develop a plan for enhancement. This plan was submitted to Academic Affairs and the program has been retained. Bagley reported that this program needs to be built back up. Bedessem asked if students who graduate in the program will get a MS in CHE or CE. Bagley replied yes. Bedessem asked how you circumvent that so a student could actually get a MS in ENVE. Bagley replied that this is a good question and that is part of the struggle but this is a good point to remember.
- ➤ Bagley reported that there are two coordinators; Jonathan Brant and himself. They have currently developed a web site and it's live. They wanted it up before advising week so students who are juniors and seniors who are thinking about a Quick Start MS program could see this as an opportunity.
- The admission requirements are posted on the web site and there are program requirements. This is new. He reported that there are 3 required core courses that are taught on a rotating basis and he will be meeting with the group to put together an approved electives list. Bedessem asked who will be teaching the ENVE courses. Bagley replied that paperwork will have to be submitted to help brand the courses and then they will rotate through that. He will be teaching Microbiology in the fall, and Dr. Karen Wawrousek will also teach it. ENVE 5410 and ENVE 5450 are locked in with Bagley and Brant as the instructors. Dandy asked if this is a Plan B MS. Bagley replied yes but it's a project-based degree. Dandy replied that they do the same in his department. He added that you are requiring a fair number of requirements for a MS degree. He's wondering if students will shy away from this.
- > Bagley reported that we've got a Quick Start program and Dr. Paul Dellenback has helped set up the admissions procedure where the faculty will get notified when the applications come in and he and

Brant will make the final decision. The applications will get processed in the department of their supervisor and we don't have to add additional overhead. Reichl asked if these are new or existing courses and if there is other demand for this MS degree. Bagley replied that we have a lot of undergraduate students interested in the ENVE concentration and they can take those as undergraduate electives as well. He added that we want to get the enrollment up so these courses can be offered.

#### Discussion Ensued

## **Student Fees, Honors College, Enrollment, Tier I:** (See Attachment E)

- ▶ Dr. Paul Dellenback thanked the board for their service and for their financial contributions in funding their travel here. He reported that we've been in an interesting time of transition at UW. In those three decades, we have a new President on board who started last May and a new Provost who started late last summer. He reported that one of the charges from the Governor was to trim \$40 million from UW. The Governor spoke to the President on our science initiatives and education initiatives. He reported that we had to surrender, as part of this current fiscal year, 8 faculty positions and 4 staff positions. Because of the priority that was established, we received 2 positions in Computer Science and 1 in Mechanical Engineering.
- ➤ Dellenback reported that they have proposed engineering course fees with a top priority being lab maintenance. He added that at the present the college collects \$430,000 a year from undergraduate fees and this does represent an increase. He said that feedback was received from ABET that our labs are not up to date and so the administration provided monies to upgrade our labs. This is an ongoing approach to show ABET that we are making these upgrades. Also, a lot of this money goes to funding student organization travel.
- There is a new plan under this Dean which was sanctioned by professional societies to include one Professor of Practice. Currently we have 2 in Civil Engineering, 2 in Petroleum Engineering, 1 in Computer Science and 1 in Mechanical Engineering. This idea is to have at least 1 in each department. Dellenback reported that these are persons that we can recognize as having industrial backgrounds of consequence. One who has a distinguished career and are at a retirement phase. These people can help with design of coursework and can bring an industrial perspective. He said they hope to fund 4 more.
- Dellenback talked about a proposal to hire technical communication professionals. These people would help with writing reports and help with presentation development, etc. There is a new model whereby rather than having faculty do academic advising, this could be handled by staff. Then when a student may have a question about careers, a pipeline can be maintained where these types of questions can be answered by faculty. The administration is leaning toward a campus-wide model for advising.
- He reported that we do have a Career placement professional and this position is being paid out of Tier I funding. He also reported that they are moving the machine shop into the new building which is scheduled to open in two years.
- They have proposed charging a fee for every credit hour of engineering coursework and would like to charge \$69/credit hour. He reported that Engineering is not the only program looking at program fees. Math, Science, and the Liberal Arts are as well.

- ▶ Dellenback talked about the cost of a UW CHE degree. He reported that the total cost of the degree is \$27,695. Shafer-Malicki emphasized that this is the best deal in America. Dellenback showed the board a comparison to other engineering programs in the country and only 2 don't have a premium for engineering studies. He said it was proposed to add \$6,960 in program fees for the entire Chemical Engineering degree. This would include engineering, math, science and other course fees. The proposed fees will only be charged to undergraduate students and all of that funding is targeted at improving the undergraduate experience. However, this has been rejected by the Trustees. He said it will be rethought and re-proposed. Reichl asked if there is a concern for students who already signed up. Dellenback replied yes, some. Reichl asked if there could be a grandfather clause where you could keep the current structure. Dellenback replied that this is part of the challenge. Reichl asked if this would impact the Hathaway. Dellenback replied that no, the Hathaway wouldn't increment up as it's based on performance and it is not responsive to how the tuition and fees are changing.
- ➤ Dellenback reported how CHE is showing steady growth and stated that things look good for Chemical Engineering.
- ➤ He reported that they are working on a change in our Honor's Program at UW. This program has been managed by the English faculty. They have a minimum GPA of 3.25. He reported that the new President came in and the Provost came on board and they want to change how this is done. They want to elevate it to be a college level program and there will be a Dean. He also said that they do anticipate that to be the case and there will also be a small staff in the future. He reported that this program works for Engineering and as they proceed forward, 9 credits of the 24 prescribed by the Honor's program will be taken within our college. He thanked Patrick Johnson for his help on the development of this program. He said that they have come up with guidelines where students who are engineering students will take undergraduate research with a faculty member as a mentor. They could also study abroad or take graduate-level courses. The last one would be for the Quick Start program. Dandy asked if it would be allowed to require an undergraduate to take a graduatelevel course. Dellenback replied yes, this would be one option. He added that they are looking for a GPA of 3.5 to maintain eligibility. Dandy asked if they would be expected to do a thesis. Dellenback replied that they do not at present, but that might be coming and that a thesis would be expected as part of an undergraduate research course. Johnson added that one option would be Engineers Without Borders where they would write a report and this would be valid.
- Dellenback reported that the new engineering building is projected to be completed spring 2019. There will be a multidisciplinary fluids lab that undergraduate Chemical Engineering students will utilize and the elements for this are already identified. There will be research lab space for combustion, bioengineering, and hydrocarbons that should benefit CHE faculty research.
- ➤ Dellenback reported of the \$3.5M in Tier 1 funds available, we have used about \$450k each of these past 3 years to fund PhD students who are not in research clusters. This has been done to increase PhD student production. The SER funding stream hasn't changed recently, but the relationship between SER and CEAS has been very much improved since Dean Pishko arrived and the CEAS is benefitting from substantial investments in its faculty research by the SER.
- ➤ Reichl commented that he supports the increase and in the long run, UW is still a great value. Students will still come here. He feels that having these enhancements will encourage enrollment and keep people coming here. He asked what the board needs to do to support these efforts.

Dellenback replied that the board should focus a discussion with the Trustees on explaining that the fees will result in a better student experience. Reichl agreed that this will make the students experience better. Dandy suggested to avoid talking about the fees supporting research quality supported by Tier I and should emphasize the betterment of the student's experience as a better approach. Bagley agreed to focus on the undergraduate experience. Reichl agreed to focus on the experience, good labs, and the right equipment.

Action Item: Advisory Board to contact the Trustees in support of engineering course fees to support undergraduate experience, labs, and equipment.

### **<u>Carbon Engineering</u>**: (See Attachment F)

- > Dr. John Ackerman presented on the Carbon Engineering & Science Initiative. He reported that their hope is to do something with coal to give it some value. He said there is interest by certain refineries.
- Ackerman reported that there is an appropriation of \$2 million by the Legislature to give additional funding to SER. This started July 1, 2016. He reported that Richard Horner is interested in making an industry to support these programs and he is looking for direct relations between research and a product. He said that Idaho National Labs are players as well as others.
- Ackerman reported that the current investment is \$1.5 million. In summary he stated that they are trying to break down coal and build up other molecules that are worth more.

## **<u>Student Success Center and Undergraduate Programs</u>**: (See Attachment G)

- ▶ Dr. Steven Barrett talked about the 2+2 programs. He reported that students who go to a community college typically do a bit better when they come to UW. He added that they are also working with SAIT in PETE and continue to streamline that program to extend to other programs within the college. He said these are hard-working students in Canada and then they transition here and this has been going well. He reported that we currently have 50 SAIT students now in the PETE program. They are going there in a few weeks to talk about adding more departments and they are also going to talk to NAIT.
- ➤ Barrett reported that Teddi Hofmann is over the K-12 program. She visits schools in the state linking engineers with local 3<sup>rd</sup> and 4<sup>th</sup> grade students. This has been very successful. He reported that Cheryl Hilman, our IT specialist, will be recognized for outstanding service at the Tau Beta Pi banquet. Ann Jones is in Career Services and works 2 job fairs twice a year. She works directly with companies to help them find the students they are after. They also work on cover letters, resumes, mock interviews, and how to dress for an interview, etc. Len Lutz is a full time APL and he teaches Engineering Science and also works in Career Services as an industrial professional.
- Shafer-Malicki commented that in working with the community colleges, the new President talks about how much better the connection needs to be with community colleges and credits not transferring. She asked if this is on the right track. Barrett replied that UW is working on this and it's so much better. They have developed a 2+2 with every community college that is interested. Shafer-Malicki commented that half the battle is getting the community colleges on board. Barrett agreed and commented that money is tight and they are trying to do more with less. He said they work so hard to get the students here and then work even harder to keep them here.
- ➤ Barrett reported that Tau Beta Pi provides free tutoring to the students. There are other tutoring programs readily available as well. They also provide free counseling services where a student can

- drop in any time. They have a lot of training for suicide prevention and awareness and provide training on how to help these students.
- ➤ Barrett reported that CEAS Career Services can help students to find internships. This is not required, but about 75% do it voluntarily. He said we'd like it to get to 90%. This helps the students learn valuable skills that they can put on a resume. It also helps them to test drive the company and can help with job placement. They also have renewed emphasis on Coops and they are looking for longer term internships.
- > Barrett reported that the job fairs are well attended. They had 65 companies at the last one.
- He reported that they have an International Engineering Program that provides multiple opportunities for students to study abroad. While they are away, they are still UW students, paying tuition and fees. The only additional cost is getting them over and back. He reported that the Cheney family has provided scholarships to help with travel.
- ➤ Barrett reported that there will be an active learning classroom in the new building. He said that there are a number of initiatives funded by the Dean in active learning now. For example, they have 3D printers, 3D scanners, vinyl cutters, etc. The Dean does not want to wait, so there is a team that are putting a "Makers Space" in the library and this will be open in 3-4 weeks. They have fundraised for it. It will include electronic work stations, Legos, for example. They will also have IT as part of the team.
- ➤ Barrett reported that the enrollment in engineering is up. He credits Kenya Johnson for this. They also have an engineering scholars program. This is a \$6,000 scholarship and 20-30 are given each year. They are merit based. Each incoming freshman with a 4.0 GPA and a 36 ACT can get this scholarship. Dandy asked how they got the endowment. Barrett replied that this came from the engineering initiative and also the Dean has fundraised.
- ➤ Barrett talked about the engineering summer programs that are in progress. They need 36 teachers for them to reach out. Mike Thomas commented that it's amazing what the opportunities are for the students these days.

#### Discussion Ensued

## **<u>AIChE Student Chapter</u>**: (See Attachment H)

- William Duncan identified who the officers are and reported that UW EFE is a major source of funding to help them go to conferences or to help build the Chem Car.
- > Duncan reported that last semester for a service project, they helped someone build a garden. They had over 1000 helpers. They also participated in Safe Treat.
- Duncan reported that they went to the National conference in San Francisco and sent 8 students. They attended workshops and talked with leaders on an industry panel. The panel consisted of members from Exxon Mobile, Chevron, and Campbell's Soup. The panel allowed the students to ask questions. Another event they attended was the Grad Fair. One of their students, Katie Nelson, talked to the University of Delaware on pursuing a PhD. She had a good experience and will now be attending graduate school there. At the conference, they also attended the Chem Car competition and CHEME Jeopardy.
- Duncan reported that this year they toured the Budweiser plant. They have one student who is applying for a job there. Dandy commented that their Brew Master is a CSU Alumni. Duncan reported that they will also go to see the New Belgium Brewery and they will have a representative from TriHydro present. Next week they will have new officer elections.

## **SWE Student Chapter:**

- Sarah Kamphaus reported that they just had officer elections. One of the events that they attended this year was Engineering Girls Day and this was held during Engineering Week. They served coffee and cookies to try and recruit members to SWE. She reported that they sent some members to different elementary schools and did an activity with 3<sup>rd</sup> graders. They also provided a graduate panel at one of their meetings and they discussed research and answered questions about the graduate program in general. They also are hosting a student/faculty banquet and have filled 96 spots. This will be held next week.
- Kamphaus reported that they just went to Nationals. They created a web site for SWE and put a calendar, pictures and events. They have an outreach committee every other Thursday. This is directed to middle school girls and they provide different engineering activities. They try to do 3 outreach events every semester.
- ➤ Kamphaus reported that their national conference was last fall in Philadelphia. They received funding to send 8 members. She said it was phenomenal. There were workshops for resume building and how to interview. There was a job fair with 300 companies. This was a great opportunity.
- ➤ Dandy asked how big their group is. Sarah replied that they have about 30 women signed up and 15 who regularly show up. Reichl asked how many of the members are in Chemical Engineering.

Action Item: Warren to find out how many members of SWE are CHE. Then she will report back to the board.

Shafer-Malicki asked if there is anything they can do for SWE. Kamphaus replied that funding for trips is helpful and promoting more CHEs in SWE. She also said that linking more with CHE professionals would also be good. Also having more women come and talk to the society. Shafer-Malicki encouraged the group to get ahead of the request for funding. Bedessem asked if they have a SWE advisor from the professional SWE. Kamphaus wasn't sure. Bedessem commented that this is a good thing to have that connection.

# Separate for Fundraising Committee and Membership Committee Meetings

#### Membership Committee Report:

- ➤ Milliman reported that they are looking to identify individuals from companies with ties to the university. He reported that under our target in the charter language, we need to add folks to our board. He said they want to ask people who work from companies who have graduate from UW. They want to target companies who have successfully recruited from UW. They can target companies from sectors that are highly underrepresented from job fairs. They'd also like to target companies where we don't have connections and we can work through Career Services to identify UW graduates. We can ask the board at large as well. Once potential members are identified, then a letter could be sent. If someone knows someone personally, they can just ask them.
- Some companies to target could be: Sinclair, Sigma Aldrich, ADM Cargile, Conoco Phillips, BP, Tronox, Wal Gore, and Cody Labs.
- Milliman reported that Biotechnology is a broad category and asked which company would be most valuable in that space. We need to figure out ties to UW and ties to what we hear students are interested in. Alvarado added that Keith Karin has started several successful companies and his

diagnostics were bio. He suggested asking him as he knows a lot of people in that area. Alvarado will contact him.

Action Item: Alvarado to contact Keith Karin about possible Advisory Board membership in the Biotech area or if he has any contacts who would be interested.

➤ Reichl added that if there is anybody else that knows someone from a pharmaceutical company, that would be good. He suggested also asking the faculty for contacts they know. Alvarado stated that ExxonMobil is a good donor on the upstream side, but contacts exists in midstream. They were very organized and supportive. He said we can talk to the Dean and ask him for a suggestion.

#### Discussion Ensued

Milliman added that there are links as to what the fundraising group is talking about as well. Dandy asked if you feel like the Dean's level board has appropriate CHE representation. Alvarado replied that he doesn't think so. Dandy suggested asking him about this and maybe we should think about someone to put in front of the Dean. Alvarado said he will ask. Lew agrees that it would be a good thing to get a CHE on his board.

Action Item: Alvarado to talk with the Dean about having a CHE representative on his Advisory Board.

Milliman reported that the next action he'll take is he'll collect the information and get in touch with alumni. Stay tuned for updates.

Action Item: Milliman to collect potential member information from the board, from the faculty, and from Career Services. He will then get in touch with the alumni and report back to the board.

Lew asked why they targeted biotech. Milliman replied that there has been an expressed interest in that discipline. Lew suggested looking at consumer product companies as well. Thomas suggested looking at the medical side also. Dandy added that it would be good for the department to look into the bio area and look at alumni maybe from Dow Chemical. Some students may have ended up in Michigan doing biochemical fermentation. He said that some companies that are oil and gas here may have branches that would be interested in areas other than the chemical process industry.

#### Fundraising Committee Report:

- Shafer-Malicki reported that typically fundraising is done through the Foundation. She said we need to identify departmental priorities and develop a strategy. She reported that the first action will be that Alvarado and his team will develop a good case to take to the Dean to assure we are not going over his head and to check if we can get his support to see how far we can push this. In conjunction, she'll reach out to the Foundation to see how unusual this is. She'll work alongside Alvarado.
- The second phase will be how we work with the entire board to identify contacts and supporters and where we would target our asking.
- > She had talked with Dr. Joseph Holles, and they had discussed that we could use the opportunity of the students attending conferences to connect them with the local alumni. Holles said they get energized being in a forum with the students. Dandy agreed that this is a total win as they are

- receiving the best and brightest. Shafer-Malicki stated that when we get to the right phase, they'll ask the board to engage with the companies and ask who they want to pursue on the process engineering side of it. She added that process engineering and process control have been identified.
- ➤ She asked the board what other areas they should approach. Alvarado replied that another area would be bioengineering. Reichl commented that for his company, donating is a whole different ballgame than funding research. It's a whole different level of approvals. Alvarado commented that we have to show a return in their investment. Reichl stated that he'll discuss with his organization, asking where the line is when funding something and what the approval process is.

#### Discussion Ensued

➤ Dandy commented that part of the membership recruitment and fundraising are tightly linked and you want these people to be engaged with the department.

#### **Board Administrative Business:**

Reichl asked the board to review the charter and make any suggestions or comments. Comments and suggestions were made. Thomas moved to approve the charter. Milliman second the motion and all were in favor.

Action Item: Reichl to send updated charter to Warren and the board electronically. (Addendum: This has been done)

➤ Reichl asked the board for nominations for new officers. Dandy replied that succession for the chair is by the Vice Chair. Reichl confirmed that Stephen Ftaclas will assume the chair position next fall. He then asked for nominations for Vice Chair. Shafer-Malicki nominated Bedessem for the Vice Chair. Reichl second the motion. All were in favor.

Action Item: Reichl will contact Ftaclas to let him know about him assuming the Chair position and come up with a plan.

#### Feedback and Wrap-up:

- Alvarado asked the board if they liked the work meetings in the afternoon. Milliman said yes. Shafer-Malicki replied that it's a good balance between what is going through the department and the college. She felt having some time to do committee work worked well. Alvarado replied that he'd like to continue this in the fall. He'd also like to bring someone from the Foundation to talk about how we build fundraising.
- Dandy suggested having a lunch meeting with the students like they've done in the past. This can be used as continuous assessment with ABET. It's good to have it once a year. Bagley agreed that this is a good idea. Alvarado will make sure this is included in the agenda next year.

Action Item: Alvarado to include a student/board lunch meeting in next year's agenda.

Meeting Adjourned.

Minutes typed by Heather Warren.

### **Action Item List:**

- Action Item: Board to let Alvarado know of any potential candidates for the Professor of Practice Position.
- Action Item: Advisory Board to contact the Trustees in support of engineering course fees to support undergraduate experience, labs, and equipment.
- Action Item: Warren to find out how many members of SWE are CHE. Then report back to the board.
- Action Item: Alvarado to contact Keith Karin about possible Advisory Board membership in the Biotech area or if he has any contacts who would be interested.
- Action Item: Alvarado to talk with the Dean about having a CHE representative on his Advisory Board.
- Action Item: Milliman to collect potential member information from the board, from the faculty, and from Career Services. He will then get in touch with the alumni and report back to the board.
- Action Item: Reichl to send updated charter to Warren and the board electronically. (Addendum: This has been done)
- Action Item: Reichl will contact Ftaclas to let him know about him assuming the Chair position and come up with a plan.
- Action Item: Alvarado to include a student/board lunch meeting in next year's agenda.