

University Senate
November 10, 2008

The University Senate met in regular session on Monday, November 10, 2008 in the Auditorium of the W. T. Young Library. Below is a record of what transpired. All votes were taken via a voice vote unless indicated otherwise.

Immediate Past Senate Council Chair Kaveh Tagavi (Chair Tagavi) called the meeting to order at 3:02 pm. Chair Tagavi explained that Senate Council Chair Dave Randall was teaching in Arizona for the week, and Vice Chair Stephanie Aken had not been able to attend the first part of the University Senate (Senate) meeting.

Chair Tagavi reminded senators to give their name and departmental or college affiliation prior to speaking. He noted that due to the Presidential Election holiday, the Senate agenda had not been sent out six days in advance, as required by *Senate Rules 1.2.3*. He solicited a motion to waive that rule, to allow the meeting to continue.

Hayes **moved** that the University Senate waive *Senate Rules 1.2.3* for the November 2008 Senate meeting. Anderson **seconded**. There being no discussion, a **vote** was taken and the motion **passed** without dissent.

1. Minutes from October 13 and Announcements

Chair Tagavi noted that no changes to the minutes from October 13 had been received. Hayes **moved** to approve the minutes from October 13 as distributed. Houtz **seconded**. There was no discussion so a **vote** was held; the motion **passed** without dissent.

Chair Tagavi referred to his previous mention of Randall's absence.

The nomination period for election of senators to the Senate Council (SC) began at noon on November 10, and would be open for nominations through close of business on Friday, November 14. Chair Tagavi urged senators to nominate prior to the end of the nomination round.

Kate Seago, parliamentarian, was unable to attend so the chair of the Senate's Rules and Elections Committee, Doug Michael, agreed to serve in that position in Seago's absence.

The Academic Approvals Workgroup would hold the first of many meetings in December as the group looks for ways to streamline the approval process.

As part of the Kentucky Blood Center's annual Big Blue Crush, there would be another competition between the Staff Senate and University Senate. Chair Tagavi urged senators to donate during the week.

2. Big Blue Crush Presentation – Kentucky Blood Center

Chair Tagavi introduced the chief economic officer for the Kentucky Blood Center, Bill Reed, and invited him to share information about the Kentucky Blood Center with senators. He spoke for a couple minutes; there were no questions from senators. Chair Tagavi thanked him.

3. [UK December 2008 Degree List](#)

Chair Tagavi explained that as a result of actions by elected Faculty Senators, a handful of undergraduate and graduate students were removed from UK's December 2008 degree list, three undergraduate students were added, two name spellings were corrected and a couple of typos were fixed. In addition, one late name from the College of Law was communicated to the Office of the Senate Council after the handouts had been prepared; the student's name was on the PowerPoint slide.

Wood **moved** that the elected Faculty Senators approve UK's December 2008 degree list with the added student (J. N. O., from the College of Law) for submission through the President to the Board of Trustees, as the recommended degrees to be conferred by the Board. Thelin **seconded**. There being no discussion, a **vote** was taken and the motion **passed** without dissent.

4. [Proposal for Nursing Early Admissions](#)

Chair Tagavi explained that the College of Nursing had received approval for a one-year trial period for early admission, but that approval for semesters subsequent to fall 2008 required Senate approval. He invited Pat Burkhart (College of Nursing Associate Dean for Undergraduate Studies) to share information about the proposal.

Guest Burkhart explained that nursing programs nationwide were very competitive; most schools had a prerequisite year when students completed the prerequisite courses before entering professional programs. To attract the top high school students into their programs, many of UK's benchmarks (and the University of Louisville) had begun guaranteeing early admission.

Hayes asked about the number of students who might be attracted by early provisional admissions. Burkhart responded that the number was hard to pin down, especially since the college had doubled enrollment as of the previous year, but that such numbers would be easier to come by after the current year. Burkhart added that she knew anecdotally of several top-notch students who wanted provisional admission guaranteed up front.

Thelin **moved** that the Senate approve the College of Nursing's proposed early provisional admissions, effective immediately. D. Anderson **seconded**. There being no further discussion, a **vote** was taken and the motion **passed** without dissent.

5. [Proposal to Change Business and Economics College Standards](#)

Chair Tagavi explained that two aspects of the proposal had been approved for a one-year trial in spring 2008. The entire proposal had been approved by the Undergraduate Council, the Senate's Admissions and Academic Standards Committee and the SC. He then invited the associate dean of the

undergraduate center, Nancy Johnson, to share information about the proposal. Guest Johnson explained that the changes were straightforward, and restated the rationales from the proposal itself.

Hulse **moved** that the Senate approve the Gatton College of Business and Economics proposed changes to the college's admission standards, effective immediately. Hatcher **seconded**. There being no questions or comments, a **vote** was taken and the motion **passed** without dissent.

6. Proposed New Kentucky Diabetes and Obesity Center

The Chair suggested that Lisa Tannock, MD (Medicine/Internal Medicine) explain the proposal. Guest Tannock introduced herself and explained that she was the division chief of endocrinology in the College of Medicine. She said that the proposal for the Kentucky Diabetes and Obesity Center (Center) was intended to create a multidisciplinary center in diabetes and obesity, and be a partner to facilitate education. Tannock explained that there were over 60 faculty members from eleven colleges who were doing some facet of diabetes and/or obesity research – she added that there would also be a partnership with allied health providers. She said that the funding for the clinical component would be supported by UK HealthCare, with the remaining support coming from the National Institutes of Health (NIH) and endowment funding. Tannock added that one of the faculty involved had just been awarded a \$10.5 million grant in obesity and cardiovascular disease; the desire was for the Center to facilitate comparable funding.

In response to a comment by Hayes, Tannock explained that the Center would be a virtual center; those involved hoped for expansion and a physical building in the future. At the current time, however, things such as care for persons with diabetes was provided at so many locations on campus that it would be difficult to consolidate into one place. Hayes asked about Institutional Review Board (IRB) training for faculty members, as well as commented upon Tannock's service as director. Tannock replied that only faculty involved with human research would be required to fulfill IRB training – other research would be in the basic sciences. Regarding the directorship, Tannock was quick to note that she was serving as acting director, and that there was a prominent, soon-to-arrive (and full professor) physician scientist who she expected would serve as director upon his arrival.

Rieske-Kinney expressed concerns with what she referred to as the "restricted inclusiveness" of the proposal. She noted that public health implications were identified as a goal of the Center, but there was no mention of any faculty member from the College of Public Health within the proposal. She also questioned the template of a medical center-style model for the Center, stating that the NIH had acknowledged that such a model was not helpful in reducing incidents of obesity. She said that there were many interested individuals who had not been invited to be a part of the Center; the College of Agriculture (CoA) had not in any way been included.

Dean Perman said he appreciated Rieske-Kinney's comments and that he felt badly about them. He explained that when the idea for such a center first began, the idea was circulated among all the deans; it had been discussed with the CoA dean and associate deans. He went on to say that there had been no intention of excluding anyone – anyone interested in a partnership would be welcomed. Tannock added

that some faculty members for the College of Public Health had since become involved and reiterated that she and others were actively seeking a diverse inclusion of diabetes and obesity interests.

Rieske-Kinney said that she would share names of interested faculty with Tannock after the meeting. Rieske-Kinney noted that the proposal failed to take advantage of CoA's network within Kentucky – there were 120 extension offices that theoretically could provide the Center with an effective venue for disseminating its work. Tannock thanked Rieske-Kinney and restated the desire to partner with people of other colleges and to reach out statewide. She invited information regarding specific faculty members who wanted to be involved with the Center be directed to her. Tannock said that there was a true desire for a multidisciplinary approach and also that the next generation of researchers, physicians, etc. were also in need of such training.

Wermeling commented that the proposal might benefit from meshing with the clinical and translational science awards; parties involved with clinical, translational or epidemiological research might align very well. Tannock thanked him for the suggestion.

Snow asked Tannock to comment on the external advisory board and its purpose. Tannock replied that those who put together the proposal wanted to have physicians and scientists of national repute, but that until the Center was in existence, the advisory board could not exist. She acknowledged that the names of possible members, many of whom led diabetes centers at their own institutions, were very skewed to College of Medicine-type individuals – she said that might need to be addressed.

Sawaya **moved** that the Senate approve the proposed Kentucky Diabetes and Obesity Center and send it to the Board of Trustees for final approval. Humphrey **seconded**. There being no further discussion, a **vote** was taken and the motion **passed** without dissent.

7. [Gen Ed Curriculum Discussion – Learning Outcomes \(first reading\)](#)

Chair Tagavi noted that there was little need to recap the extensive history of efforts to revise UK's general education program, as the history generally well known to senators. Chair Tagavi reminded senators that after the Senate approved the Design Principles in May 2008, the process had been handed off to the General Education Reform Steering Committee (GERSC), which had been jointly appointed by the Senate Council and the Provost. Their charge, also available on the gen ed website, was to come up with learning outcomes and a curricular framework for a new gen ed. Chair Tagavi noted that senators received an update on the learning outcomes in the September meeting; the procedure mentioned then was that GERSC would go to faculty in colleges and departments anywhere on campus to discuss the Learning Outcomes (LO). Chair Tagavi further explained that GERSC subsequently visited all undergraduate colleges (and then some) and as a result, brought to the Senate modified LO. He added that without Senate approval, the LO could not be implemented.

Chair Tagavi said that the LO were outcome-based; the discussion at hand was not about what courses should be taught, but rather about what learning outcomes an assembly of courses should achieve. The day's business was discussion only – as a major proposal, the LO required a first reading, to be followed

by a second reading and vote in December. He asked that senators introduce themselves prior to speaking and that non-senators ask the Chair for permission of the floor.

Chair Tagavi had one last comment before opening up the floor for discussion – he requested that the Design Principles not be discussed because they had been already been approved by the Senate. If anyone initiated comments regarding the Design Principles, Chair Tagavi said he would have to rule the comments out of order and move on to discussion of the LO. He introduced the convener of GERSC, Susan Carvalho.

Guest Carvalho gave a brief presentation to senators regarding the LO and the significant changes made by GERSC since the September meeting. She said that she would go over the points quickly and asked that with the exception of requests for clarification, senators hold their questions until the end.

After Carvalho's presentation, Chair Tagavi noted that he was obliged to allow every senator an opportunity to speak once before any senator would be allowed to speak a second time. He suggested that senators discuss the LO one at a time.

Dan Breazeale (Arts and Sciences/Philosophy) asked how he could be allowed to ask a question pertaining to a Design Principle (DP) not being addressed by any of the LO – Chair Tagavi replied that after the fourth LO had been discussed, he would return to Guest Breazeale so he could ask his question.

Seegerstrom asked about the extent to which gen ed reforms were driven by data, versus being driven by just a hope that aspirations would succeed. Chair Tagavi said that Carvalho could answer the question, but noted that if generalizations were going to be discussed, there would not be sufficient time to discuss each LO. Carvalho replied that the entire framework of the proposal for a revised gen ed was assessment oriented and involved measurable outcomes, with an intention to assess from the outset. Many universities were paying greater attention to tracking the efficacy of programs; part of UK's process would include a review of the included courses every two years, and also assessment at the program and course level to see if goals were being met. Carvalho went on to say that after the vote on LO, the information gleaned would be given to curricular teams, staffed by experts in the field and non-experts; those faculty would bring knowledge of their field to the teams, given the context of a particular discipline.

Seegerstrom wondered if UK could utilize any portion of some other gen ed program. Carvalho replied that nothing ready-made would fit with UK's needs, although ideas and pieces from others had been incorporated.

Chappell asked about the phrase from LO#1, "multiple dimensions of a good question," and whether or not such objectives could be accomplished by a lower division course, or if it should be a course taken by upper division students as they proceeded through their academic tenure. Carvalho replied that GERSC had not looked at that degree of detail – she said the courses were primarily envisioned as foundational,

so the courses would be designed for lower-division students. Members of GERSC did not think students could wait until the upper level to learn these particular skills – the courses would help address the transition from high school to college.

Snow asked if there was any input from students regarding the LO. Carvalho replied that students offered some of the most influential and important input. She said the students who came for their forum were amazing. Some students had been concerned that there was an implication that the University Studies Program (USP) was inferior, some students asked about a phase-in over time, and others asked if they could opt into the new gen ed. Students asked some hard questions about going down to 30 credit hours and what other benchmark institutions did. Snow opined that many of those aspects pertained more to the DP than to the LO – she asked if students had commented at all about the LO. Carvalho explained that the students were largely focused on what specific courses would be included in a revised gen ed, as were many faculty.

There being no further comments on LO#1, Chair Tagavi suggested that senators move to LO#2. Senators did not offer any comments/concerns pertaining to LO#2. Carvalho noted that there were different assessment measures that were being looked at, different types of exams that measure different kinds of outcomes. Steiner asked a question about whether assessment for each course would be conducted after the senior year. Chair Tagavi asked that Steiner ask his question after all four LO had been individually discussed.

Chair Tagavi called for questions and comments regarding LO#3. D. Anderson asked about the foreign language requirement. She said she thought it was somewhat weak and wondered about GERSC's rationale. D. Anderson said she would like to see students coming out of college with a second language. Carvalho replied that she agreed that the foreign language component was weak and that GERSC as a whole wanted more than what had been included. The crux of the matter, though, was thinking about the goal of gen ed and how much foreign language was required for engaged citizenship. Carvalho noted that developing fluency ability levels in college was difficult with the current high school level of instruction; two years of foreign language in high school was roughly equivalent to two semesters of foreign language instruction at the college level. She said that even after two semesters of college, a student would remain at the novice level – high novice, but still novice.

Steiner opined that an intellectual grasp of other emerging areas of science were also critical. Chair Tagavi said that GERSC members, some of whom were present, were welcome to respond to questions with Carvalho. Carvalho answered by identifying the DP on which it was based – she said that GERSC agreed that more needed to be done, but that the DP required courses lay a foundation. She said that a course with an environmental focus could be included if it met the required objectives, but not any course on the environment.

Moving to LO#4, Campbell said that colleagues from the Department of History had expressed some concern about the use of “contemporary.” Yanarella, GERSC member, said that the emphasis on modernity was a touchstone, but drew Campbell's attention to the additional topic of societal and

institutional “change over time.” He said that all that was requested was that a course gesture to and open up to a contemporary scene.

Janacek commented upon the emphasis on cultural aspects – he supported the use of the term “multilingual” but lamented that its force had been weakened. Carvalho replied that GERSC had been told the revised gen ed was being too cultural as often as GERSC was told it was not being cultural enough. She said that GERSC did not want to maintain a framework in which only culturally-oriented classes would count, but rather wanted to embrace a range of disciplinary opportunities. Just because something was not explicitly mentioned in the LO, though, did not mean that such a course would not be a part of the new gen ed – while the faculty teams would be responsible for ensuring a course met requirements, the faculty member would be responsible for the content.

Hallman expressed support for the comments regarding a historical perspective. She said that a few word changes could add a sense linking the past to the present. Carvalho said she would take that suggestion back to GERSC.

Suarez noted that the list from which cultural differences could arise could be endless, but she asked that nationality be included with ethnicity, since nationality would be more of a reflection of what happened in local communities. Carvalho said she would take that suggestion back to GERSC.

Starr-LeBeau spoke in support of the earlier comments on a historical perspective – she suggested striking “contemporary.” GERSC member Jeff Rogers [Arts and Sciences/Modern and Classical Languages, Literature and Culture] said that a course on ancient Rome could count, since it was not a matter of historical depth, but rather of teaching the course in such a way as to relate to issues that are contemporary to students. He said the important aspect was how students related to a historical understanding; “contemporary” referred to how meaning related to students’ lives. Carvalho explained that GERSC spent a lot of time making sure students would see a connection to modern times in, say, a course on ancient Rome.

Yanarella said that “contemporary” was not an attempt to focus learning on the present. He said that GERSC wanted a depth of historical connections in all such courses and that the balance would be determined by the faculty curricular teams that would follow GERSC.

Denison asked if GERSC had given any thought to how to assess whether the objectives of a new gen ed were being accomplished and how it could be determined that things were going well. Carvalho replied that assessment would occur at both the course and program level. At the course level, there would be a requirement that students demonstrate a reasoning ability to grapple with essential issues. The final product would have to demonstrate that students could understand difference, evaluate ethical dilemmas, etc. She said that perhaps the product of the final assignments could be reviewed to determine if the LO were being enforced.

Steiner returned to an earlier comment – he stated that it would be very difficult to reinforce government through science courses. The general population was rather illiterate when it came to issues pertaining to science, and the proposed LO would not do anything to change that. He said that excluding a scientific component in LO#4 would make it difficult for any scientific courses to be included.

Chair Tagavi again invited GERSC members in attendance to take part in the discussion. Yanarella opined that the articulation of LO#4 did not have the effect of marginalizing issues of scientific literacy or the role that facts play in the development of informed choices. He said that the four LO interacted with each other and mutually enriched each other. He noted that LO#1 focused on just one form of inquiry – scientific inquiry – and the role of advancing quantitative reasoning. Carvalho explained that specific to LO#1 was an understanding of how different disciplines approach problem solving, and how few problems could be solved without science.

Chair Tagavi noted that about half the allotted time for the gen ed discussion had been spent on individual LO – he suggested that it would be appropriate for senators begin making overall comments, if so desired.

Wermeling asked if GERSC had considered how the new requirements would affect admission into pre-professional programs. GERSC member Ruth Beattie introduced herself (Arts and Sciences/Biology) and noted that many students from her department were in pre-medicine, pre-dentistry, pre-pharmacy programs and that the proposed gen ed model would fit well with the current biology program, allowing completion of all the required components for the professional schools. Wermeling expressed concern about the gen ed proposal requiring changes to professional program prerequisites – about 10% of the College of Pharmacy's students were from other states or other countries – and wondered how he could be ensured that there would be no need for change to Pharmacy's program as it pertained to transfer requirements. Dean Blackwell said that there was a huge course equivalency database available to help with transfer credit questions, but that that matter was separate from anything pertaining to gen ed. She said that equivalency discussions would take place in the same manner as done currently.

Wermeling asked for confirmation that he could report to College of Pharmacy faculty that there would be no impact on the pre-professional pharmacy entry requirements. Carvalho stated that that was indeed her understanding, but she urged him and other Pharmacy colleagues to look at what was included in the University Studies Program (USP) and what would not be included in the new gen ed program, and make accommodations, if necessary. Chappell said that there were other programs, such as pre-veterinary, which required very explicit classes to satisfy USP, which might now be missed. He said Wermeling's comments should be given full consideration. Carvalho asked that any concerns from pre-professional programs be directed to her.

Chair Tagavi recognized Dan Breazeale (Arts and Sciences/Philosophy, acting chair). Guest Breazeale said he was concerned with the omission of philosophy. He said that the first DP incorporated a process of inquiry and development of critical thinking skills – in the best possible world, all courses would incorporate some aspect of that. He noted, though, that none of the courses singled out for study

constituted an education on how to identify a sound or valid argument, which had been a foundation stone for general education at UK for years. Breazeale said it was important to learn about rhetorical and deductive reasoning and how to construct a good argument. He said without a course in philosophy, the proposed gen ed program was fatally flawed.

Carvalho said that GERSC discussed a logic requirement and agreed on its importance, but it would not follow the tenor of the rest of the proposed curriculum, which was teaching by a variety of standpoints. She said that no matter how it was arranged, requiring a philosophy course always turned into a philosophy requirement; she wondered who would teach all those students if philosophy was made into such a requirement. A course in philosophy could fit into LO#1, which had to do with intellectual inquiry – it would be an ample rubric for incorporating logic courses. No member of GERSC argued against the importance of philosophy and logic, but GERSC was not inclined to make a philosophy course the only free-standing requirement.

Janacek spoke in sympathy with the faculty from Philosophy. He suggested that a philosophy course be included in LO#3, so that the emphasis would not be limited to quantitative and statistical reasoning. Carvalho explained that GERSC followed the DP very closely –the DP had been written with a focus on numbers, so it could not be included in LO#3.

Snow wondered if GERSC could go back to the chalkboard and write in a study of evolution and an incorporation of logic into the LO. Provost Subbaswamy noted that the Senate was in the fourth year of a process of studying and reexamining the USP program. He commented on his personal opinion that there should be a requirement of a physics course for students, but noted that the best wisdom of the Senate was expressed in the DP. Considering all the complexities and views, opening up the DP would revert back at least one to two years. The task of translating outcomes through curriculum committees and how they alter relationships with different majors, as well as figuring out the financial impacts and implementations, had not yet been begun. Nadel opined that there was not enough emphasis on assessment, and that resources should be allocated to a revision of gen ed prior to moving further.

Yanarella said that of course the faculty would need to be reassured at some point down the pike that there would be sufficient resources to implement, but he said he appreciated the Provost's dilemma – how could one determine the necessary resources until the framework was identified? Relating to Nadel's comment on assessment, Yanarella said that assessment had been at the forefront of all the gen ed discussions – without appropriate assessment, any new gen ed program would result in another USP, which grew like topsy without any assessment to ensure outcomes were being met.

Hallman commented on Snow's comments about refining the language. Hallman commented that it would not require going back a year or more to change language, since other important inclusions were being considered. She wondered why a topic about scientific-based environmental literacy could not be included in a LO. Chair Tagavi clarified that the comment about going back two years pertained to changing the DP, not changing the LO.

Roorda commented upon the biology statements. He said he had not thought about it previously, but he strongly suggested tinkering with the language in LO#4 because the other three LO referred to skills or method-based thinking, while only LO#4 included a provision for content knowledge, which was phrased for cultural diversity. Roorda spoke strongly in favor of having environmental literacy included in content knowledge as essential to engaged citizenship.

Breazeale offered a follow up comment – he said that he did not support revoking the DP, but commented that there were seven DP, but only 4 LO. The teaching of critical thinking was not satisfied by the current four LO, so LO#4 should be changed to include reasoning, which would not require changing the DP. Carvalho asked if he was suggesting a potential alternative, since the DP required the quantitative aspect – was Breazeale suggesting one course in quantitative reasoning and one in philosophy? Breazeale responded that a student also could take two courses in quantitative reasoning and none in philosophy with such a change. Carvalho said that GERSC looked that the issue for a very long time, but that it was thought that the second paragraph of LO#4 could not be satisfied by just one course. She said she would bring the matter back to GERSC again.

Sawaya asked about implementation of a new gen ed and how resources could be affected. Chair Tagavi opined that it would have to be phased in over four years, to allow students who entered under USP to finish under USP. Provost Subbaswamy said that he could only estimate costs when he had an idea of how many existing courses could be used, how many new ones would have to be developed, what the class sizes would be, etc. He said there would be no way to estimate the cost of offering the new curriculum until the process continued to the next steps.

Wood said that the current plan was to approve the LO in December, and that a more substantive piece of the curricular package would return to the Senate in the spring. She wondered if a discussion on resources would take place at that time. The Provost replied that he did not know, but suggested that things continue to move forward with flexible timelines. He said that if the Senate did not think a new gen ed could be implemented with integrity, then the Senate would have the authority to not ultimately approve a new gen ed. Provost Subbaswamy reminded senators that the Senate suspended the oral communications requirement for similar concerns. He said he hoped that the faculty curriculum committees would be close to finished by the end of the spring semester, but said it would continue as long as reasonably necessary.

Wermeling said that he understood that benchmarking had been done regarding a new gen ed's design, but said he was astounded that no sense of cost had been identified. Guest N. Johnson said she thought it would be hard to estimate the cost, since the enrollments would drive the cost. Breazeale wondered if there were any estimates of cost from institutions that had undergone similar change. Carvalho replied that since all universities started from such varied different places, it would have been difficult to look at their data and apply it in any way to UK.

Provost Subbaswamy said that he had been unable to come up with a way to get 4,000 students to take a logic course with current financial and feasibility constraints. The overall way in which USP courses

have been delivered would remain more or less the same – the framework was not looking at a 100% increase in cost of delivering the courses, but rather a 10-20% increase. He said that aspects such as the type of instructor (TA, lecturer, professor), the type of course (e.g. lecture with recitation) would be determined by the faculty curriculum teams. He said that offering a set amount of money to enact the change would not have made much sense.

Snow stated that she appreciated the work of GERSC. She said that Carvalho had presented ideas to a roomful of scholars who each had comments, and that everyone appreciated their efforts.

Chair Tagavi instructed senators to talk to their constituents about gen ed and communicate any concerns to GERSC prior to the December Senate meeting.

The meeting was adjourned at 5:06

Prepared by Sheila Brothers on Monday, December 1, 2008.

Absences: Adams; Aken; Andreatta; Arnold; Arrington; Atwood; Barnes*; Bernard; Blades; Bollinger; Brown, J.; Brown, S.; Bush; Crofford; Desormeaux; Diedrichs*; Effgen*; Enlow; Etensohn; Fox; Gonzalez*; Graham; Hardesty*; Hardin-Pierce; Hazard; Heller*; Hoffman; Hopenhayn*; Hughes; Jackson; Johnson; Jung; Kelly; Kidwell*; Kirschling; Kovash*; Leibfreid; Lester; Lorich; Luhan*; Marano; Martin; McCorvey; Mendiondo*; Miller, B.; Miller, J.*; Mobley; Moise; Moliterno*; Montell; Nardolillo; Nieman*; Nokes; Palmer*; Parker*; Parrot; Patwardhan; Pauly; Perman; Perry*; Piascik; Randall*; Rauf; Ray*; Richard; Roberts*; Seales*; Shay; Smith; Speaks*; Subbaswamy; Sudharshan; Telling*; Terrell; Thompson, A.; Todd; Tracy*; Troske; Turner; Waterman; Webb; Williams, G.; Wiseman; Witt; Wyatt.

* Denotes an absence explained prior to the meeting.