

Minutes of the Faculty  
College of Arts & Science

January 26, 2016

Dean Lauren Benton called the meeting to order at 4:10 p.m. in Wilson Hall 103. Approximately 100 faculty members were in attendance.

1. Approval of the Minutes of the Faculty Meeting of December 8, 2015.

There were no comments or questions, and the Minutes were approved.

2. Memorial Resolution in honor of Ernest A. Jones, Professor of Physics, Emeritus.

Joseph H. Hamilton, Landon C. Garland Distinguished Professor of Physics, presented a Memorial Resolution in honor of Ernest A. Jones, Professor of Physics, Emeritus. Faculty members paid their respects and signified their assent to the resolution by a moment of silence. The Memorial Resolution is appended to these Minutes.

3. Conversation with Provost Susan Wentz.

Provost Wentz explained that she established “Open Dore on Location” last fall and has launched “Conversations with the Provost” this spring, two ways in which faculty members can ask her questions and provide feedback to her. In response to questions from A&S faculty members submitted in advance and posed at the meeting, she stated that the Vanderbilt administration is working hard to enact the **legal split between Vanderbilt University and the Vanderbilt University Medical Center (VUMC)**. Vanderbilt is in the last phase of the legal process of separation, and many service level agreements are being worked out. There are long term strategic and financial benefits to the split for both parties, she explained, including increased debt leverage and lower interest rates, enhancing opportunities for capital spending. The split will also allow the university to focus exclusively on its education mission. It is unlikely, she continued, that Vanderbilt and VUMC will compete with each other for donations; most donors who currently give to both parts of the university would still give to both institutions. A new capital campaign, she said, would probably be launched six months after the separation.

**Life sciences:** As part of the split between Vanderbilt University and VUMC, Provost Wentz explained that there will be a simultaneous split of faculty members between basic science and clinical science. The basic science division will be led by Professor Larry Marnett, senior associate dean for Biomedical Sciences, who will report to the provost. The basic science division will have approximately the same number of faculty members as the School of Engineering, she said, and will not be transformed into a new school within Vanderbilt.

**Vice Provost for Research:** Provost Wentz explained that Padma Raghavan, Vanderbilt's new vice provost for research, will join Vanderbilt from Pennsylvania State University on February 1<sup>st</sup>. Her work will focus on strategic initiatives and on international research, including Vanderbilt's trans-institutional programs and grant opportunities. Her expertise is in high performance computing and research information technology.

**Summer employment:** Provost Wentz deferred to General Counsel the question whether Vanderbilt faculty members are technically Vanderbilt employees during the summer months. She affirmed that the expectation is that faculty members in the summer will be conducting research and pursuing other activities related to their academic responsibilities.

**Graduate Education:** Provost Wentz explained that Vanderbilt has made new investments in graduate education, guided by the final report of the Graduate Education Study Group, chaired by Vicki Greene, Stevenson Chair in Physics (and former A&S Senior Associate Dean for Graduate Education and Research). Vanderbilt has appointed Mark Wallace, professor of hearing and speech sciences and director of the Vanderbilt Brain Institute, as the new dean of the Graduate School. He will be implementing the recommendations of the report, including ensuring competitive stipends for graduate students and strengthening career development services. Dean Wallace began his new duties on January 1<sup>st</sup>, but will not be full time as dean until July 1<sup>st</sup>. The Graduate School has also moved into its new space in Alumni Hall.

**Travel policy:** Provost Wentz explained that the deans of the various Vanderbilt schools unanimously agreed last spring that faculty members are expected to make their Vanderbilt-related travel arrangements through Concur, the travel and reimbursement software program. By using Concur, faculty members are automatically logged into Vanderbilt's liability insurance plan, into Vanderbilt's export control system, and into Vanderbilt's emergency notification system. As a result of feedback from faculty members about Concur, Vanderbilt changed travel agencies last year. At present the Vanderbilt administration is polling the faculty to ascertain whether changing travel agencies has resolved faculty concerns about Concur and whether faculty members are receiving good service from the new travel agency, World Travel.

**The Undergraduate Immersion Experience:** Provost Wentz explained that the Immersion Experience is a component of the Vanderbilt Academic Strategic Plan. Information about the Plan, including the reports and the composition of the faculty committees working on its implementation, is available online. The Immersion Vanderbilt committee has its own website: <http://www.vanderbilt.edu/strategicplan/action/immersion-vanderbilt.php> She stated that approximately half of Vanderbilt's undergraduates are already participating in immersion experiences. This initiative will make it a graduation requirement for undergraduate students entering as of fall 2017. Immersion experiences will likely take one of four forms, or a combination thereof: Study abroad or global education; a research experience on or off campus; a creative project; or experiential learning (e.g. internship, service

project). The immersion experience does not have to be aligned with a student's major. Funding for immersion experiences is still being worked out, she said.

**Campus space:** Provost Wenthe explained that the reorganization of space on campus is a priority of the Board of Trust. Some of the funds for this reorganization will be raised in the upcoming capital campaign. Vanderbilt is also revising its master land use plan in order to design ways to foster interaction and bring groups together. She encouraged faculty members to participate in the land use study.

Faculty members thanked Provost Wenthe for her information.

4. Review of the Minutes of the Faculty Council meeting of January 12, 2016, pending approval of the Faculty Council.

Professor Tiffany Tung, Chair of the A&S Faculty Council, asked if there were any comments or questions about the Council Minutes or the Council-approved new and revised course descriptions; there were none.

5. Approval of the Candidates for Degrees at the end of the Fall Semester, December 19, 2015.

Associate Dean Roger Moore moved that the faculty of the College of Arts and Science recommend to the Board of Trust that it confer upon these candidates their degrees (a list of degree candidates is attached to these Minutes). His motion was seconded and unanimously approved.

6. Original Motion Calendar.

No issues were raised.

7. Good of the College.

Dean Benton reported that five A&S faculty members have been selected as 2016 Chancellor Faculty Fellows; they are Professors Derek Griffith, Julián Hillyer, Catherine Molineux, Betsey Robinson, and Steve Wernke. The faculty applauded these recipients.

Dean Benton also reported that the National Academy of Sciences has announced that Geoffrey Woodman, associate professor of psychology, has been given a Troland Research Award, one of only two persons nationally to receive the prestigious award this year. She noted that Professor Woodman is the fourth faculty member in the Psychology department to receive the award. The faculty applauded Professor Woodman.

Myrna Wooders, professor of economics, encouraged faculty members to re-elect her to the Vanderbilt Faculty Senate. She explained that the Faculty Senate will be voting in March to revise the *Faculty Manual* in order to make the grievance procedure fairer for faculty members. The proposed revision is modeled on the grievance procedure used by

prestigious journals. Professor Wooders stated that if she were re-elected she would help further revise the *Faculty Manual*, especially the section in part three that relates to Vanderbilt's conflict of interest and commitment policy.

8. Adjournment.

The meeting adjourned at 5:17 p.m.

Respectfully submitted,

Robert A. Driskill,  
A&S Secretary of the Faculty

## Memorial Resolution

Ernest A. Jones

1918-2015

Professor Ernest A. Jones passed away on December 19, 2015, at the age of 97. He was born in Columbia, Kentucky on June 5, 1918. He attended Lindsay Wilson Junior College in Columbia and received his bachelor's degree from what is now called Western Kentucky University in 1941 after teaching in one and two room schools to pay his expenses. He received a scholarship to earn his masters in physics at Vanderbilt in 1942. His major professor, Francis Slack, recruited him and several other Vanderbilt students to join his group at Columbia University as part of the highly classified government project, now known as the Manhattan Project. Together this group transformed our world. They invented the barrier used to separate  $^{235}\text{U}$  from  $^{238}\text{U}$  by gaseous diffusion. Professor Jones wrote the paper called the "A1 Barrier" which described how they made this first barrier. Soon after the first implementation, Ernest was hand delivered a letter from the Secretary of War thanking him for his critical contribution. When Professor Jones retired after 35 years on the physics faculty of Vanderbilt, as Department Chair, I asked my colleagues at Oak Ridge National Laboratory if we could have a copy of the "A1 Barrier" paper to display at his retirement. I was told the next day that the Department of Energy considers anything to do with the separation of  $^{235}\text{U}$  and  $^{238}\text{U}$  the most highly classified material they have. They might let Professor Jones see it if he came to ORNL but neither I, nor anyone else could see it. The natural abundance of  $^{235}\text{U}$  is 0.7 % and  $^{238}\text{U}$  99.3%. To make a bomb you need more than 90%  $^{235}\text{U}$  and as fuel for nuclear power plants you need 3-4% enrichment. The barriers were

the heart of the gaseous diffusion process that had to be repeated many, many times to achieve these enrichments. For 45 years the enormous separation plant in Oak Ridge provided the enriched  $^{235}\text{U}$  for nuclear weapons and nuclear power reactors which also produce annually thousands of radioactive isotopes for medicine and industry. The Oak Ridge plant used an amount of electrical power equal to that of the whole state of Texas.

At the end of WW II, he went to Ohio State University where he received his Ph.D. in 1948. He then worked at Oak Ridge National Laboratory for two years where he co-authored a remarkable number of papers on important fluorine containing molecules. He was appointed to the Physics faculty at Vanderbilt in 1950, rising to full professor in 1965. He retired in 1985. He was one of Vanderbilt's first scientists elected to the prestigious fellowship in the American Association for the Advancement of Science in 1952, an honor received by only one other physicist at Vanderbilt. He was also elected to Fellowship in the American Physical Society.

By the 1950s he was a leading expert in Raman and infrared spectroscopy, fields with many applications in industry. He published many research papers in these fields and directed the PhD research of 15 graduate students and 37 Masters theses (most in the department). His research was supported by grants from the then US Atomic Energy Commission. Together with Professor Nelson Fuson of Fisk University, they founded the Fisk Infrared Institute where for three weeks they taught scientists from all over the US and abroad the theory and techniques of Raman and Infrared spectroscopy for 24 years. The school was so successful the US State Department provided the funds to have them put on the school in Brazil. This was the first cooperation between Vanderbilt and Fisk Universities.

Professor Jones was a gifted teacher who taught over 8,000 Vanderbilt students, especially engineers and premedical students. In teaching our physics and engineering beginning courses, he consistently received the highest student evaluations of anyone teaching these courses. He was legendary for his open door policy to help students. It is fitting to quote a few of the student's comments from these evaluations:

“Professor Jones is a fabulous teacher. Dr. Jones is probably the best person and teacher I've ever had.”

“The instructor cares. A very admirable teacher. Any education major would do well to observe his teaching method.”

“He is absolutely the nicest teacher I've had at Vanderbilt. He's interested in each individual student.”

“Dr. Jones is one of the most sensitive as well as intellectually stimulating professors I have ever had. Truly an asset to Vandy and all students.”

“Best instructor I have had at VU.”

Then from letters from graduating seniors or from students several years after graduation:

“If all my professor were like you ... you cannot pay me to leave here.”

“The time you devoted to students like myself was worth more than college tuition.”

“I can honestly say that of all the professor that I had at Vanderbilt you are one of three that truly helped me to learn and enjoy learning.”

“I often think about my days in college at Vanderbilt and I recall with great respect and admiration your skills as a physics professor.”

He generously helped faculty to learn how to do lecture demonstrations for beginning physics. Together we developed and published in *The Physics Teacher* three lecture demonstrations which are still used in our beginning courses every year. When I was Department Chair, he and I split teaching our introductory physics course for over 200 non-science majors for several years. When the Department of Physics and Astronomy initiated the endowed Guy and Rebecca Forman Award for Outstanding Teaching at the undergraduate level, the second award went to Professor Jones. The Southeastern Section of the American Physical Society awarded him their oldest prize, the Pegram Gold Medal for Outstanding Teaching by someone in the Southeast in 1977.

Professor Jones was a very active supporter of the Southeastern Section of the American Physical Society, the oldest and largest of the APS Sections. For over 20 years, he put together the program and abstracts of papers, had them printed in Nashville and sent to members before their meeting. Until his retirement he had the most research papers presented by him and his group at the SESAPS meetings of anyone. He was elected vice Chair of the Section in 1964 and Chair in 1965 and remained on the Executive committee the following year. For his long and dedicated service, the Southeastern Section awarded him their Francis Slack Gold medal for his outstanding service to physics in the Southeast. This award was especially fitting since Professor Slack directed his Masters thesis, brought him to Columbia for the Manhattan Project and hired him to the Vanderbilt Faculty.



Professor Jones carried out exceptional service as a member of various committees at Vanderbilt. He served and was Chair of the University Athletic committee for many years and oversaw many successful hires in the Athletic Department. He was an undergraduate student advisor, and for many years, was Chair of the Premedical Advisory Committee. In 1978 the parents of two of his premed advisees were so pleased with his advising their sons, that they endowed the E. A. Jones Faculty Advising Award. At the A&S last faculty meeting in December, 2015, the E.A. Jones Faculty Advising Award was given for the 38th time. This has been a very coveted award. On the 25<sup>th</sup> anniversary of the Middle Tennessee Science and Engineering Fair held at Vanderbilt, the Chancellor presented him a certificate in which Vanderbilt “recognizes and expresses its appreciation for the outstanding contributions of Ernest A. Jones to the continued success of the Fair.” He is one of only two members of the College of Arts & Science at Vanderbilt ever awarded honorary membership in the Engineering Alumni Association.

Upon his retirement in 1985 when I was Department Chair, I enlisted his family, friends, colleagues, former students, and faculty to endow an undergraduate scholarship to be given to an outstanding sophomore physics major in his honor. Last year the E. A. Jones Scholarship for \$5,000 was awarded to the fortieth physics student.

Professor Jones was married to his Wife Francis in 1943. She preceded him in death in 2011. They had three sons, Elliott, wife Marilyn, Bruce (deceased) wife Marjorie and Phillip, wife Marsha. He leaves behind three grandchildren and five great grandchildren. All three sons went to Vanderbilt undergraduate school with Elliott also receiving his law degree and the other two sons receiving MD degrees from Vanderbilt. Elliott was an outstanding pitcher for

the Vanderbilt baseball team and was drafted by the Pittsburgh Pirates. Elliott's son Warner was Vanderbilt's initial first team All American baseball player after leading the South Eastern Conference (SEC) in batting average at 414, hits, doubles, total bases, and runs batted in. He holds the Vanderbilt season records for hits, doubles, total bases and runs batted in. Warner also received his law degree from Vanderbilt. Professor Jones was a long time Vanderbilt baseball season ticket holder.

Professor Jones and I were close friends for over 50 years. We shared research laboratory space on the third floor of Learned Hall and then the fifth floor of the Stevenson Center building six when Physics moved to the new Science center. Professor Jones also had a great love for fishing. He was one of the five founders of the Cedar Creek Boat Club on Old Hickory Lake. He often took me and my children fishing in different small lakes and Old Hickory Lake as they were growing up. Through those fishing experiences I learned to know the meaning of "That is harder than skinning a cat" as we skinned catfish. In 1965 when Vanderbilt held its first International Physics Conference, Professor Jones hosted an excursion and fish fry for the conference delegates at the Cedar Creek Club. Finally, he loved gardening, and for many years planted a very large garden.

With deep appreciation, Professor Jones' outstanding contributions in research, teaching, and service to his profession and to Vanderbilt are gratefully acknowledged.

Madame Dean, I ask that a copy of this Memorial Resolution be entered into the minutes of this meeting and that copies be sent to his family.

Joseph H. Hamilton, Landon C Garland Distinguished Professor of Physics