NOTICE OF MEETING
Tuesday, October 16, 2018, 3:30 p.m.
Liebow Auditorium, Biomedical Sciences Building, 2nd Floor

ORDER OF BUSINESS

(1) Minutes of Meeting of June 5, 2018 .......................... 5

(2-7) Announcements

(a) Chair Robert Horwitz ........................................... Oral
(b) Chancellor Pradeep Khosla ..................................... Oral
(c) Cross-Campus Alignment of Research Scientist Academic Review and Establishment of Research Scientists CAP (RS-CAP) Elizabeth Simmons, Executive Vice Chancellor for Academic Affairs Sandra Brown, Vice Chancellor for Research Oral
(d) Facilities & Administration (F&A) Funding / Indirect Costs (IDC) & New Federal Requirements for Grants Sandra Brown, Vice Chancellor for Research Oral
(e) Introduction of Campus Benefits Team & Open Enrollment Caprece Speaks-Toler, Senior Director of Compensation & Benefits, Human Resources Oral

(8) Special Orders

(a) Consent Calendar
   Committee Annual Reports
   • Committee on Academic Personnel 204
   • Committee on Research (including Research Grant Committees) 206
   • Educational Policy Committee 214
   • Graduate Council .............................................. 216
   • Undergraduate Council ..................................... 219
(b) Committee on Committees Temporary Appointments Oral

(9) Reports of Special Committees [none]

(10) Reports of Standing Committees

(a) Committee on Senate Awards, Adam Burgasser, Member Oral
   • 2018-19 Faculty Research Lecturer Awards

[Any member of the Academic Senate may attend and make motions at meetings of the Representative Assembly; however, only members of the Representative Assembly may second motions and vote.]
(b) Graduate Council, Sorin Lerner, Chair; and Craig McIntosh, Professor, School of Global Policy and Strategy;
- Department of Economics and School of Global Policy and Strategy, Proposal to Establish Five-Year Bachelor of Arts/Master of Public Policy (BA-MPP) Program and Amend San Diego Senate Regulation 706, Requirements for the Master of Public Policy

(c) Committee on Academic Freedom, Sarah Schneewind, Chair, Dana Nelkin, former Chair
- Academic Freedom

(11) Reports of Faculties [none]

(12) Petitions of Students [none]

(13) Unfinished Business [none]

(14) New Business
### Ex Officio Members:

<table>
<thead>
<tr>
<th>Position</th>
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<tr>
<td>Chair of Division</td>
<td>Robert Horwitz</td>
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<td>Chancellor</td>
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### Representatives:

#### Elected Members

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Advisors:

- Research - General Campus
- Research - Health Sciences
- Research - Marine Sciences
- Undergraduate Student
- Undergraduate Student
- Graduate Student
- Graduate Student

Parliamentarian: Gerry Mackie
Chair Ackerman called the meeting to order. A quorum was present (see attached attendance sheet), along with other Academic Senate members and guests. Chair Ackerman welcomed everyone and introduced Senate Vice Chair Robert Horwitz and Professor Gerry Mackie, Parliamentarian. Chair Ackerman introduced the Academic Senate staff members who were present: Ray Rodriguez, Director of the Academic Senate Office; Hillary Flocke, Assembly Recorder; Trevor Buchanan, Applications Programmer and technical support; Tara Mallis, Senate Analyst; and Andrew Flores, Executive Assistant. Chair Ackerman reviewed the Academic Senate Bylaws governing membership, privileges of the floor, and voting.

**MINUTES OF THE MEETING OF APRIL 3, 2018**
There were no objections and the minutes of the meeting of April 3, 2018 were approved.

**ANNOUNCEMENTS BY THE CHAIR OF THE DIVISION**

Chair Ackerman noted that this meeting would be his last as chair of the San Diego Divisional Academic Senate and he thanked the faculty and administrators for their participation in the Representative Assembly in the 2017-2018 academic year. Chair Ackerman also thanked the Senate staff for their support and Senate Director Ray Rodriguez for his guidance throughout the year.

**Systemwide Updates**

**Update on Academic Council**
Chair Ackerman reported that the Academic Council has continued its discussions of faculty salary increases and budget allocations. There continue to be positive developments in these areas. There continue to be concerns about Governor Jerry Brown’s final review of the budget and potential impacts to the University.

**Open Access**
It is anticipated that the issue of Open Access publications and general availability of scholarly works will be a major topic of discussion in the upcoming academic year. Chair Ackerman shared that he has agreed to continue serving on the UC Academic Planning Council, a joint committee of the systemwide Academic Senate and UC Administration, which evaluates initiatives such as Open Access as well as other UC policies related to the University’s academic mission.

**Local Updates**

**Senate Elections**
Chair Ackerman shared the San Diego Divisional Senate election results for the 2018-19 year as follows:

Vice Chair (Chair Designate) of the Division for a two-year term, effective September 1, 2018 through August 31, 2020. The first year will serve as Vice Chair and the second year as Chair of the San Diego Division:

- Mary Corr (Professor, Medicine)

Divisional Representatives to the systemwide Assembly of the Academic Senate for a two-year term, effective September 1, 2018 through August 31, 2020:

- Amy Bridges (Professor, Political Science)
- Seth Cohen (Professor, Chemistry & Biochemistry)
Member of the Committee on Committees for a three-year term, effective September 1, 2018 through August 31, 2021:

- Kim Barrett (Professor, Medicine)
- Lei Liang (Professor, Music)
- Rachel Klein (Associate Professor, History)
- Olga Dudko (Professor, Physics)

An email announcing the results of the Divisional Senate elections was sent to the members of the Academic Senate on May 15, 2018.

Student Course Feedback by Week Six
Chair Ackerman reminded faculty that a revision to San Diego Senate Regulation 500, Grading Policy, and 501, Adding and Dropping Courses and Withdrawal was approved by Representative Assembly on June 6, 2017; and starting in the Fall 2018 quarter, the withdrawal deadline for undergraduate students will move from the end of week nine to the end of week six. A notice was also sent to faculty on April 2, 2018 from Administrative Records.

At the close of the announcements, Chair Ackerman introduced Chancellor Khosla and invited him to address the Assembly.

[Note: Chair Ackerman addressed the withdrawal deadline at the conclusion of Chancellor Khosla’s announcements.]

ANNOUNCEMENTS BY CHANCELLOR PRADEEP KHOSLA
Chancellor Khosla thanked Chair Ackerman for the opportunity to address the Assembly and thanked him for his service. Chancellor Khosla provided a brief update on recent developments at UC San Diego.

Budget Meeting with UC President Napolitano
Chancellor Khosla shared that he, Chair Ackerman, Executive Vice Chancellor Simmons, Chief Financial Officer Ouillet, and Chief Executive Officer of UC San Diego Health Patty Maysent presented the annual campus budget update to President Napolitano. Chancellor Khosla highlighted the six priority areas that UC San Diego has been working on and continues to develop as part of the campus strategic plan.

Student success is the top priority and all campus investments and initiatives are oriented around this goal. Chancellor Khosla described the factors that impact student success including faculty hiring, advising, housing, time-to-degree, and student information systems infrastructure.

Another priority area is diversity and inclusion and Chancellor Khosla highlighted the campus’ progress. The campus has seen unprecedented growth in the number of underrepresented faculty and students, in addition to significant growth in the number of first generation college students. Chancellor Khosla acknowledged recent anti-Semitic activity and reaffirmed that such behavior is despicable, unacceptable, and will not be tolerated.

In the areas of research and innovation, Chancellor Khosla highlighted that UC San Diego’s research portfolio will close this year with a value of 1.2 billion dollars. He shared that one of the campus goals is to build multiple, large centers, similar to the Center for Aerosol Impacts on Chemistry of the Environment, that allow for multidisciplinary, collaborative work in addition to individual research.

In the area of campus and regional transformation, Chancellor Khosla explained that UC San Diego is undergoing a significant physical transformation in the next five years. The construction of undergraduate housing and new academic buildings are underway. Chancellor Khosla pointed out that this construction is mainly funded by the campus.
In the area of the UC San Diego health enterprise, looking forward, the goal is to transform the primarily research-oriented enterprise into one that is also clinically-oriented.

Chancellor Khosla briefly commented on the financial landscape and noted that while 2018-19 is expected to be a strong year, significant fundraising efforts will be needed going forward. The campus is pursuing a number of creative options to generate funds.

**Update on Faculty Salaries**
Chancellor Khosla provided an update on the strategy to reduce the compensation gap between the University and the eight comparator institutions in addition to the compensation gap among the UC campuses. The current systemwide plan is to increase on-scale salaries by 4% with no corresponding increase to off-scale salaries. However, this does not preclude campuses from implementing additional strategies at UC San Diego. The plan at UC San Diego is for both on-scale and off-scale salaries to be increased by 4%. In addition, the Career Milestone Salary Incentive program that awards incremental increases when a faculty member passes a major milestone will remain in place at this time to allow more faculty to achieve the milestones and reduce the salary differential.

**Fundraising Campaign for UC San Diego**
The campus is six years into the ten-year Campaign for UC San Diego and so far 1.57 billion dollars has been raised. Chancellor Khosla noted that the campus is on track to reach the $300 million fundraising goal for the 2017-2018 fiscal year and shared that the endowment has gained one billion dollars since 2012. The funds are being reinvested in new programs and infrastructure. Chancellor Khosla highlighted that 67 of the 101 campaign cabinet members are either parents or alumni. Chancellor Khosla shared that there have been questions about the impact of donors on the direction of teaching and research and he confirmed that while these funds enable faculty, they do not influence the direction of teaching or research.

Chancellor Khosla thanked Chair Ackerman and the representatives for a productive year. At the close of Chancellor Khosla’s presentation, the floor was opened to questions and comments. There were no questions and Chair Ackerman thanked Chancellor Khosla for his announcements.

[Note: The slides from Chancellor Khosla’s presentation are attached to these minutes as Enclosure A.]

**Reordering of the Agenda**
Chair Ackerman announced that unless there were objections, he would like to reorder the agenda to proceed to the reports of the standing committees to ensure there was sufficient time for discussion of their proposals. The presentations by Director of Campus Planning Robert Clossin and Assistant Vice Chancellor Joel King would occur after the reports of the standing committees. Chair Ackerman asked if there were any objections. There being none, the agenda was reordered.

**SPECIAL ORDERS** [None]

**REPORTS OF SPECIAL COMMITTEES** [None]

**REPORTS OF STANDING COMMITTEES**

*Senate Council*

**Proposal to Grant Academic Unit Status to Halicioğlu Data Science Institute (HDSI)**
Chair Ackerman introduced Vice Chair Robert Horwitz, Professor Jeffrey Elman, and Professor Rajesh Gupta to discuss the proposal to grant academic unit status to the Halicioğlu Data Science Institute (HDSI). Vice Chair Horwitz introduced Professor Jeffrey Elman to present the proposal.

Professor Elman shared an overview of the goals, history, and the motivation to create the HDSI. He noted that UC San Diego has been a leader in data science and this field of study allows for the improvement of health and
quality of life. Professor Elman explained that data science can be an effective tool for understanding the biggest societal problems; however, students must be trained to work on multidisciplinary teams, integrate data across multiple disciplines, and understand the meaning and context of the data they investigate. In 2016 and 2017, Professor Elman and Professor Gupta met with individuals and departments across campus to assess the data science needs and they shared that there is a need for data science training across disciplines. In December of 2017 the University received a major gift to create the HDSI, which aims to prepare data scientists and build upon the existing data science program at UC San Diego. Professor Elman commented that data science will not be a siloed unit but will build connections across disciplines. He noted that the HDSI aims to eventually offer the data science major, create non-degree programs, and promote research.

Vice Chair Horwitz, on behalf of Senate Council, made a motion for approval to grant academic unit status to the HDSI. Chair Ackerman noted that because the motion was made on behalf of a standing Senate committee no second is needed and he opened the floor for discussion.

An attendee asked for more information about the donor who funded the creation of the HDSI. Professor Gupta shared that the donor is an alumnus who has been a lecturer in the Computer Science and Engineering Department and has a strong commitment to giving back to the University and supporting the educational mission. Another attendee asked how the HDSI plans to balance theoretical study with the applied aspects of data science. Professor Elman explained that the HDSI will teach a mixture of theory and foundational research, using problem solving as a vehicle for innovation.

Another attendee asked what it means for the HDSI to be an academic unit versus a traditional department and Professor Elman explained that interdisciplinary centers exist within the UC system and noted that UCLA has similar centers that the HDSI has used as models. The focus will be on interdisciplinary instruction and research unlike departments whose primary focus is necessarily their subject area. In addition, academic unit status means that the HDSI will be able to offer degrees, hold faculty appointments, and will be held to the standards and expectations of the Academic Senate. Professor Elman noted that the Organizational Research Unit (ORU) model was not ideal as ORUs cannot hold faculty appointments or provide instruction. The attendee followed up to ask about faculty hiring, questioning what would prevent faculty from leaving their home departments and going to the HDSI. Professor Elman explained that the HDSI would hire faculty that serve as connectors between departments and noted that there will be 0% appointments too.

An attendee asked how ethical approaches to data science will be incorporated into the curriculum. Professor Gupta answered by sharing that the HDSI plans to require an upper division ethics course in the data science curriculum. Professor Elman also noted that the first distinguished lecture and the first workshop hosted by the HDSI centered on ethical questions in data science. Professor Elman pointed out that the HDSI’s focus on ethics is a distinguishing feature. Another attendee shared that the UC San Diego has been growing in the areas of math and data science, but not in statistics. The member asked if the HDSI would incorporate and promote statistics and consider hiring statisticians. Professor Elman responded that the HDSI is supportive of statistics.

An attendee noted that the Senate standing committee letters raised concerns about the leadership structure of the HDSI. The attendee explained that the procedure of the HDSI co-directors reporting directly to the Executive Vice Chancellor (EVC) instead of a Dean could create an imbalance in shared governance, and the member asked if the HDSI co-directors would be willing to report to a rotating council of Deans. The attendee also asked the senior administrators about the precedent-setting nature of the faculty hiring into the HDSI, questioning if, in the future, most FTEs will go to centers, not Deans. Chair Ackerman suggested that EVC Simmons respond. EVC Simmons explained that the HDSI governance structure was partly modeled after similar centers in the UC system in which either an EVC or Associate Vice Chancellor (AVC) oversees the interdisciplinary center. The HDSI co-directors will report to the incoming AVC for Academic Affairs, holding a parallel role to the Deans in standard departments. EVC Simmons noted that there will also be an advisory board that will serve as an oversight board during the formation process. She explained that this advisory board will have broad membership with
representation of faculty and Deans. Chair Ackerman addressed the precedent-setting issues raised by the HDSI by explaining that the Senate regards the HDSI an experiment to be monitored and assessed.

At the conclusion of the comments and questions, Chair Ackerman called for a voice vote. The motion for approval to grant academic unit status to the HDSI was passed by a majority.

[Note: The slides for Professor Elman’s and Professor Gupta’s presentation are included with the minutes as Enclosure B.]

**Educational Policy Committee**

**Proposed Revisions to Divisional Senate Regulation 600, Campus Graduation Requirements – (A)(3) Double Majors & (C) Maximum Unit Limitation**

Chair Ackerman introduced Professor Stephanie Mel, Chair of the Educational Policy Committee (EPC) to present the proposal to revise Divisional Senate Regulation 600, *Campuswide Graduation Requirements – (A)(3) Double Majors & 600(C) Maximum Limitation*.  

Professor Mel gave a brief overview of the proposal, which shifts the approach for measuring student progress from academic units to time (quarters) to keep students on track to graduate and improve graduation rates. Under the proposed policy, incoming freshman would have twelve quarters to complete graduation requirements and transfer students would have six quarters. Professor Mel shared that helping students graduate with their class year would reduce students’ debt, support the UC goals of keeping UC education more accessible to Californians, create campus communities based on graduating year, and improve time-to-degree. Professor Mel also noted that the College Advisors are prepared to navigate the policy changes with students.

Professor Mel noted that the current policy is not implemented consistently across the departments and colleges and College Advisors use both quarter and unit metrics when creating curriculum plans with students. The proposed policy would offer uniformity by aligning colleges and departments by using the metric of quarters. Professor Mel also explained that the existing policy imposes an upper limit on the number of units a student can accrue and involves complex unit calculations, which are confusing to students. Professor Mel shared that the proposed policy is simpler and more transparent and would not penalize ambitious students by restricting the number of units they can take. Professor Mel explained that the revised policy is designed to be flexible to accommodate students who need additional time (such as students in the Engineering majors, double majors, and students facing class sequencing issues or difficult personal circumstances). Professor Mel noted that students requiring additional time would submit a completion plan to their college before registering for another quarter.

At the close of Professor Mel’s presentation, she invited Professor Judy Kim to join her in responding to the discussion and made a motion on behalf of EPC to approve the proposed amendment to Divisional Senate Regulation 600, *Campuswide Graduation Requirements – (A)(3) Double Majors & 600(C) Maximum Limitation*. Chair Ackerman opened the floor for discussion.

An attendee asked if students will still need to count units as each course has a specific number of units attached to it. Professor Mel explained that students would still have to follow the regulations of minimum progress by completing a specific number of units per year and she called on Dean of Academic Advising at John Muir College, Doug Easterly, to further explain. Dean Easterly responded that under the proposed policy students will need a minimum of 180 units to graduate. Dean of Academic Advising at Thurgood Marshall College, Leslie Carver, added that students struggle to understand the maximum unit limitation, but not course units or minimum progress units. Dean of Undergraduate Education John Moore remarked that this proposed regulation change demonstrates advisors’ willingness to work toward a student-centered university, supporting students at an early stage by having focused, intentional conversations. Dean Moore also highlighted the potential benefit of students seeking advising at an earlier stage.
An attendee voiced strong opposition to the proposal and he expressed concern that ultimately this proposal would be unfair to students with limited financial means. The attendee highlighted potential loopholes in the proposal that would be inaccessible to disadvantaged students, such as Summer Session not counting toward the quarter limit. The attendee noted that a significant number of students require more than four years to graduate and expressed concern that a disproportionate number of underprivileged students could be disadvantaged by this proposal. The attendee commented that more students will need exceptions to the proposed quarter limitation policy than the existing maximum unit limitation policy. The attendee suggested that students would have to rely upon the flexibility of the proposed policy to complete the graduation requirements. The attendee noted that junior and senior students seek advising services at the departments, but EPC mainly consulted College Advisors.

Professor Kim acknowledged the concerns of the attendee and noted they were raised in a letter from the CRJ faculty included in the Representative Assembly meeting materials, but also pointed out that EPC’s responses to those concerns were also available in the meeting materials. Professor Kim underscored that the proposed policy is designed to be transparent and encourage students to seek advising services early. She shared that the new policy is intended to reframe the concept of student success and noted that the advising staff is prepared to address the changes with students. In addition, Professor Kim responded that EPC communicated with departmental advisors, particularly within the Department of Engineering, to gain their perspectives on the proposed policy change. She pointed out that the faculty and Administration are aware that many students do not graduate within four years, but explained that the proposed policy is designed to help.

An attendee spoke in support of the proposed policy, commenting that it would be a positive change for students who want to take additional coursework outside of their requirements since they would not be penalized for exceeding the maximum unit limitation. Similarly, the attendee noted that the proposed policy could assist students who decide to change majors.

Another attendee mentioned that students who reach the allotted number of quarters should be prohibited from registering for the next academic quarter until they submit a completion plan. Professor Kim and Professor Mel clarified that that plan is already a component of the proposed policy.

At the conclusion of the comments and questions, Chair Ackerman called for a voice vote. The motion to approve the proposed amendment to Divisional Senate Regulation 600, Campuswide Graduation Requirements – (A)(3) Double Majors & 600(C) Maximum Limitation was passed by a majority.

[Note: The slides from Professor Mel’s presentation are attached to these minutes as Enclosure C.]

Graduate Council

Proposed M.S. & Ph.D. Degrees in Electrical & Computer Engineering (Machine Learning and Data Science)
Chair Ackerman introduced Professor Sorin Lerner, Chair of Graduate Council (GC), and Professor Alon Orlitsky from the Department of Electrical and Computer Engineering (ECE), to present the proposal to establish the M.S. and Ph.D. degrees in Electrical Engineering (Machine Learning and Data Science).

Professor Orlitsky provided a brief overview of the ECE Department and explained that the department has twelve fields of study and they are periodically updated to add emerging academic areas and remove outdated fields. Professor Orlitsky discussed the need for the addition of the Machine Learning and Data Science field of study, noting that the ECE Department is responding to both market demands as well as student interest. Professor Orlitsky pointed out that this new specialization is available with the addition of only two new courses in the department. He shared the feedback and evaluation letters from peer institutions and noted that they were all supportive.

Professor Lerner made a motion on behalf of the Graduate Council to approve the proposal to establish the M.S. and Ph.D. degrees in Electrical Engineering (Machine Learning and Data Science). Chair Ackerman noted that no
second is required for a motion made on behalf of a Senate committee. The floor was opened to questions and comments. One attendee noted that it would be nice if students in the Division of Biostatistics & Bioinformatics had access to some classes offered in the Machine Learning and Data Science specialization and Professor Orlitsky explained that he would be happy to discuss this arrangement. At the conclusion of the comments and questions, Chair Ackerman called for a voice vote. The motion to approve the proposal to establish the M.S. and Ph.D. degrees in Electrical Engineering (Machine Learning and Data Science) was passed unanimously.

[Note: The slides for Professor Orlitsky’s presentations are included with the minutes as Enclosure D.]

PRESENTATION BY ROBERT CLOSSIN, DIRECTOR, CAMPUS PLANNING – CAMPUS LONG-RANGE DEVELOPMENT PLANS
Chair Ackerman invited Robert Clossin, Director of Campus Planning, to address the Assembly to provide an update on the Long Range Development Plans (LRDP). Director Clossin noted that this plan is driven by campus growth and is being updated with long-term strategic goals and development in mind. He explained that the LRDP is a high-level land use document and policy guide, currently in its fifth iteration. The LRDP includes an Environmental Impact Report (EIR), which analyzes the impact of growth and outlines the actions the campus must take to mitigate the impact of such growth.

Director Clossin reported that the total campus population is expected to grow to 65,600 by 2035. He explained that increased, affordable on-campus housing is important for students’ success and a main goal of the LRDP is to double the number of student beds on campus. He pointed out that current housing areas are already built out so the plan to expand student housing requires repurposing and renovating existing spaces for better space utilization. Director Clossin shared that multiple transportation options including the Light Rail are important to alleviate traffic and congestion issues and assist in meeting the campus’ carbon neutrality goals.

Director Clossin pointed out that Campus Planning is nearing the end of the review and approval process, noting there will be a 45-day public review period and public hearing for the EIR. He also shared that a goal is to get the Regents’ approval in November for both the LRDP and EIR.

Chair Ackerman thanked Director Clossin for his presentation and explained that questions and comments will be held until the conclusion of Assistant Vice Chancellor and Campus Architect Joel King’s presentation.

[Note: The slides from Director Clossin’s presentation are attached to these minutes as Enclosure E.]

PRESENTATION BY JOEL KING, ASSISTANT VICE CHANCELLOR AND CAMPUS ARCHITECT–NORTH TORREY PINES LIVING & LEARNING NEIGHBORHOOD PROJECT
Chair Ackerman invited Assistant Vice Chancellor (AVC) and Campus Architect Joel King to update the Assembly on the status of the North Torrey Pines Living & Learning Neighborhood (NTPLLN). AVC King explained that this project will be built over a two-year period and his presentation provided an overview of the construction plans. AVC King shared that 50% of students currently live on campus and at the conclusion of this project, he expects 60% of students to live on campus. The NTPLLN will function as a permanent home to Sixth College, add 2,000 undergraduate beds, increase general assignment classroom spaces, and increase parking spaces.

AVC King shared slides showing the construction phases and projected progress over the next two years. This project is scheduled to develop 1.6 million square feet in two years, as well as three levels of underground parking. The NTPLLN is scheduled for completion by the fall of 2020.

AVC King concluded his presentation and opened the floor to questions regarding his presentation as well as Director Clossin’s. An attendee pointed out that the LRDP did not mention the Hillcrest campus. Director Clossin explained that the Hillcrest campus has its own LRDP, which is being updated.
Another attendee asked Director Clossin about the projected growth in the campus population. The attendee noted that Director Clossin predicts an increase in staff and affiliates by 2035, but the figures did not address faculty hiring. Director Clossin responded that the projected staff hires are associated with research enterprise and health enterprise, which is experiencing increased growth. Director Clossin also noted that the projected growth of administrative staff is not as sharp as it has been in the past ten years. The attendee commented that seeing the projected numbers for administrative staff hiring would be preferable. Chair Ackerman shared that for the past three years the Academic Senate has been monitoring the hiring of administrative staff and the Senate is pleased with the findings. It was suggested that UC San Diego’s Chief Financial Officer Pierre Ouillet could speak to the Assembly in the next academic year to discuss administrative hiring.

Another attendee asked how many parking spaces would be lost during construction on the La Jolla campus. AVC King responded that 900 spaces will be lost and will be replaced with 1,200 spaces. AVC King also mentioned that the new Osler parking lot will provide 1,350 spaces. Another attendee asked if faculty and staff parking would be impacted as a result of the construction workers. AVC King responded that the construction workers will park at the Glider Port in a dedicated area so they will not impact campus parking or the current parking at the Glider Port. AVC King added that Glider Port parking would be expanded too.

An attendee asked if the campus plans take into account the ability of the existing roads to absorb the increased traffic. Director Clossin clarified that as part of the planning process for both NTPLLN and the LRDP, Campus Planning conducted EIRs, which cover traffic impacts and modifications to improve traffic flow.

[Note: The slides from AVC King’s presentation are attached to these minutes as Enclosure F.]

**REPORTS OF FACULTIES** [None]

**PETITIONS OF STUDENTS** [None]

**UNFINISHED BUSINESS** [None]

**NEW BUSINESS** [None]

Chair Ackerman called for new business. There being none, the meeting was adjourned at 5:23 p.m.

Hillary Flocke, Senate Analyst
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<td>Joshua Kohn (Chair, Committee on Admissions)</td>
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<td>Shirley Meng (Chair, Campus Community Environment)</td>
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<td>Kimberly Prather (Chair, Committee on Committees)</td>
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<td>Rommie Amaro (Chair, Committee on Diversity and Equity)</td>
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<td>Stephanie Mel (Chair, Educational Policy Committee)</td>
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<td>C.K. Cheng (Chair, Committee on Faculty Welfare)</td>
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<td>Sorin Lerner (Chair, Graduate Council)</td>
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<td>Sandra Brown (Vice Chancellor, Research)</td>
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| **Elected Members [Alternates in square brackets]**                  |                                                                         |
| Robert Kluender / [(Divisional Representative (at-large))]           | +                                                                       |
| Elizabeth Komives / [(Divisional Representative (at-large))]         | +                                                                       |
| Joseph Pogliano / [(Divisional Representative (at-large))]           | +                                                                       |
| Gourishankar Ghosh / [Charles Perrin] (Revelle College)              | [+][+][+][+]                                                          |
| Rick Firtel/ [Darren Lipomi](Revelle College)                       | [+][+]                                                                |
| Joshua Figueroa/ [LelliVan Den Einde](John Muir College)            | [+][+]                                                                |
| Adam Burgasser/ [JamesNeh](John Muir College)                       | [+][+]                                                                |
| Julian Betts/ [ShengXu](Thurgood Marshall College)                  | +                                                                     |
| Dan Hallin/ [Christine Hunefeldt](Thurgood Marshall College)        | [+][+]                                                                |
| Yuri Bazilevs/ [Ella Tour](Earl Warren College)                     | +                                                                     |
| John Hildebrand/ [DougNitz](Earl Warren College)                    | +                                                                     |
| Gershon Shafir/ [CharlesTu](Roosevelt College)                      | +                                                                     |
| Babak Rahimi/ [RichardBiernacki](Roosevelt College)                  | +                                                                     |
| Lei Ni/ [(Sixth College)                                            | +                                                                     |
| Robert Pomeroy/ [HaimWeizman](Sixth College)                        | +                                                                     |
| Mark Appelbaum/ [Henry Powell](Emeritus Faculty)                    | +                                                                     |
| / [(Anesthesiology)                                                 | +                                                                     |
| Margaret Schoeninger/ [GuillermoAlgabez](Anthropology)              | +                                                                     |
| Gert Cauwenberghs/ [PrashantMali](Biomedical Sciences)              | +                                                                     |
| Li-Fan Lu/ [CarolynKurle](Biomedical Sciences)                      | +                                                                     |
| Eduardo Macagno/ [JamesWilhelm](Biomedical Sciences)                | +[,+][+]                                                             |
| Wendy Huang/ [PradiptaGhosh](Biomedical Sciences)                   | -,,[+],[+]                                                           |
| Navtej Toor/ [Mike Tauber](Chemistry & Biochemistry)                | +                                                                     |
| Patricia Jennings/ [(Chemistry & Biochemistry)                      | +                                                                     |
| Gedeon Deak/ [AngelaYu](Cognitive Science)                          | +                                                                     |
| Olga Vasquez/ [ElanaZilberg](Communication)                         | +                                                                     |
| Rajesh Gupta/ [(Computer Science & Engineering)                     | +                                                                     |
| Hovav Shacham/ [(Computer Science & Engineering)                    | +                                                                     |
| Bryan Sun/ [AnnaDiNardo](Dermatology)                               | +                                                                     |

**Key:** + representative present; [+] alternate present; - not member or advisor at the time of meeting
### REPRESENTATIVE ASSEMBLY 2017-2018 MEMBERSHIP

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<td>Roland Lee</td>
<td>Radiology</td>
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<td>David Dubowitz</td>
<td>Jiang Du</td>
<td>Radiology</td>
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<td>Rossen Valkanov</td>
<td>Craig Mc Kenzie</td>
<td>Rady School of Management</td>
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<td>Dwayne Stupack</td>
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<td>Andrew Allen</td>
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<td>James Day</td>
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<td>Sarah Purkey</td>
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<td>Jane Willenbring</td>
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<td>Mary Blair-Loy</td>
<td>Jeffrey Haydu</td>
<td>Sociology</td>
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<td>Akos Rona-Tas</td>
<td>Martha Lampland</td>
<td>Sociology</td>
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<td>Bradley Moore</td>
<td>Dionicio Siegel</td>
<td>SSPPS</td>
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<tr>
<td>John McCartney</td>
<td>Chia-Ming Uang</td>
<td>Structural Engineering</td>
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Key: + representative present; [+] alternate present; - not member or advisor at the time of meeting
### REPRESENTATIVE ASSEMBLY 2017-2018 MEMBERSHIP

<table>
<thead>
<tr>
<th>Representative</th>
<th>Surgery</th>
<th>Theatre and Dance</th>
<th>Urology</th>
<th>Visual Arts</th>
<th>Research - General Campus</th>
<th>Research - Health Sciences</th>
<th>Research - Marine Sciences</th>
<th>Undergraduate Student</th>
<th>Graduate Student</th>
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<tr>
<td>Justin Brown</td>
<td>[Rebecca White]</td>
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<td>Andrew Baird</td>
<td>[Mark Onaitis]</td>
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<td>Robert Castro</td>
<td>[Victoria Petrovich]</td>
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<td>Alan Burrett</td>
<td>[Marco Barricelli]</td>
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<td>Christina Jamieson</td>
<td>[Ithaar Derweesh]</td>
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<td>John Welchman</td>
<td>[Grant Kester]</td>
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<td>Ruben Ortiz</td>
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<td>Amarnath Gupta</td>
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<td>Ellen Breen</td>
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<td>Kate Pham</td>
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<td>Mark Derdzinski</td>
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<td>Vladimir Jovanovic</td>
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<td>Parlamentarian</td>
<td>Gerry Mackie</td>
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Key: + representative present; [+] alternate present; - not member or advisor at the time of meeting
Campus News & Updates

• **Summary of 2018/19 Budget Briefing with UC President**
  
  – **Student Success:** Top campus priority; Predictive analytics show 4 year graduation improving; Continuous focus on advising and on curriculum design and delivery
  
  – **Diversity and Inclusion:** Taking advantage of growth to improve URM and female representation; Continue to work on retention
  
  – **Research and Innovation:** Successful interdisciplinary research culture and increased importance of industry and non-profit
  
  – **Campus and Regional Transformation:** Light Rail connection allows complete transformation of the campus and regional integration
  
  – **Health:** Complete resource realignment and focus on profitable growth will deliver financial sustainability while positioning UC San Diego as a global destination
  
  – **Infrastructure and Finances:** Focus on administrative streamlining and revenue diversification will allow much-needed investment in teaching and physical infrastructure but investment plans are at risk with a tuition freeze

• **Update on Faculty Compensation**
The Campaign for UC San Diego
Progress as of May 30, 2018

CAMPAIGN LEADERSHIP
Total confirmed: **101 including 67 alumni and parents**

We are on track to reach our $300 M FY 17-18 goal for the Campaign.
The proposal:

To grant academic unit status to the Halıcıoğlu Data Science Institute

(meeting materials, p. 53)
Data have always been with us.

What has changed?
1. Scope and scale of data that can be collected
Fitness Tracking

The improved sports algorithm can intelligently identify your movement states.

- Steps
- Distance
- Calories

HALICIOĞLU DATA SCIENCE INSTITUTE
1. Scope and scale of data that can be collected

2. Development of sophisticated analytic tools
1. Ubiquity and scale of data
2. Development of sophisticated analytic tools

Use of data in ways not previously imagined
Santa Rosa fire, October 2017

http://wifire.ucsd.edu
Big Pixel Initiative Develops Remote Sensing Analysis to Help Map Global Urbanization

From left, Big Pixel Initiative research assistants Karlo Yee-Amezaga and Stephanie Vaillancourt study high-resolution satellite images with Ran Goldblatt. Photo by Erik Jepsen/UC San Diego Publications.
Data Science is about connecting the dots...

...to create new knowledge

...improve quality of life

...protect the environment around us
There are very serious challenges
• Integrating data across very different domains and disciplines
• Understanding that data are not dimensionless numbers
• Ensuring rigor and replicability
The accuracy, fairness, and limits of predicting recidivism

Julia Dressel and Hany Farid*

Algorithms for predicting recidivism are commonly used to assess a criminal defendant’s likelihood of committing a crime. These predictions are used in pretrial, parole, and sentencing decisions. Proponents of these systems argue that big data and advanced machine learning make these analyses more accurate and less biased than humans. We show, however, that the widely used commercial risk assessment software COMPAS is no more accurate or fair than predictions made by people with little or no criminal justice expertise. We further show that a simple linear predictor provided with only two features is nearly equivalent to COMPAS with its 137 features.
FB data
Psychographic data
Browsing data
Public databases
Voter registration
Tweets

Personality traits
Race & ethnicity
Political views
Religious views
Sexuality
Profession

...and more
These are the opportunities and the challenges that the HDSI is designed to address.
2012: Data Science Undergraduate Program first raised informally
2015: Formal proposal submitted to Academic Senate
2016: DS Undergrad Program approved
2017: DS Undergrad Program launched (FA 2018 will have >550 majors)
2016: Chancellor issues all-campus call to meet “Challenge of Data Science“

2016-2017: Town halls, White Papers, internal discussion

2017-2018: Chancellor asks Gupta & Elman to lay foundation for an Institute

> 500 meetings with stakeholders across campus; consideration of multi development of HDSI structure

2017: Major gift provided by alumnus Taner Halicioglu for new institute

March 1, 2018: Halicioglu Data Science Institute formally dedicated
HDSI is the glue...

...it is what connects the dots across campus

HDSI is a fundamental part of the campus imperative to be more interconnected and interdisciplinary
HDSI will enable the campus to make progress on strategic goals through...

...innovative educational programs
...undergraduate scholarships
...graduate fellowships
...student internships
...and more
...cross-campus Research Clusters
...seed funds for new research
...supporting cross-unit collaborations
UC San Diego has the most creative and cross-cutting of any existing program
The proposal:

To grant academic unit status to the Halicioglu Data Science Institute

(meeting materials, p. 53)
Thank you
Units to Time:
Monitoring Progress Towards Graduation

Two Primary Objectives

*To better support students and keep them on track towards timely graduation*

*To improve graduation rates – will benefit graduating students as well as enrollment of new students*

*New policy shifts the outlook for measuring progress from units to time, helping to define a clear path to graduation*
Proposed Policy: Units to Time

Current Policy: **Maximum Unit Limitation**

Proposed Policy: Switch to **Quarter limit**

- 12 quarters for freshmen
- 6 quarters for transfer students

* with **flexible provisions to extend enrollment for students who need additional time***

Advising will be focused on:

- **4 year plans** as freshmen
- **2 year plans** as transfers

If need more time to graduate, students will submit a **completion plan** with colleges.
<table>
<thead>
<tr>
<th>Current Policy Language in SD 600 (C)</th>
<th>Proposed Policy Language in SD 600 (C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>An undergraduate student may register for no more than 200 course units. An exception is permitted for candidates for B.S. degrees in engineering, for whom the limit is 240 units in Revelle and Eleanor Roosevelt Colleges and 230 units in all other colleges. Other exceptions will be granted only for compelling academic reasons and only with the approval of the college provost and the concurrence of the Educational Policy Committee.</td>
<td>An undergraduate student...will be allowed to enroll for 12 quarters to complete all requirements for a degree; if a student reaches this quarter limit and needs additional time to complete those requirements, they will be required to submit a completion plan and have it approved by their college prior to enrolling for additional quarters to continue work towards the degree.</td>
</tr>
</tbody>
</table>
Proposed Policy: Benefits for Students

Uniform student advising between departments and colleges

Current Policy
• All departmental advising plans are based on quarters but monitoring progress to graduation is based on units

Proposed Policy
• Aligns existing 4 year departmental plans (https://plans.ucsd.edu) with graduation requirements and progress to degree
• Departments, colleges and involved faculty will now speak the same language
Four Year Plans

Muir College's Provost and faculty are confident that courses and advising are available to ensure you can complete your degree requirements in 4 years with a little planning during your first year at UCSD. The "Four Year Plans" are designed to help you start planning now to graduate from UC San Diego in 4 years for any given major.

Major requirements vary, and individual patterns are subject to change.

Note: The four year plans are sample planning guides for Muir College students. Changes may occur throughout your four years at UC San Diego. To stay on track:

1. Check the quarterly online Schedule of Classes to see when courses are offered.
2. Review course descriptions and prerequisites for the courses you wish to take in the online catalog.
3. Check your major department's website for the most current information regarding major requirements.
4. Complete the Academic Planning Worksheet (pdf) to personalize your academic plan, taking into account coursework already cleared by AP credits, and transfer coursework.

Advisors at John Muir College and the in the academic departments are there to help you keep track of changes in requirements, plan for prerequisites, and verify when courses you need are offered. Communicate with us on a regular basis to stay on track.

Please visit the Four Year Plans site to view available plans.

For more information and strategies for graduating on time, visit Timely Degree Completion.
Proposed Policy: Benefits for Students

More transparent, easier for students to monitor progress

Current Policy
• Complex unit calculations confusing and not meaningful to students (e.g. AP units counted towards degree but not included in max unit calculation)

Proposed Policy
• More productive advising conversations focused on degree planning rather than on complex unit calculations
• Time is a simpler, more useful frame of reference
• Ambitious students not penalized - no maximum unit cap for double majors/minors
Proposed Policy: Benefits for Students

- Better sense of community for students ("class of 2022")
- Less Student Debt
- Supports UC goals of keeping UC education accessible to more Californians
- Improved Time to Degree
Reassurances

*Flexible provisions to extend enrollment for students who need additional time*

Common reasons why students might need to enroll for additional quarters:

• High Unit Majors (Engineering)
• Completion of a Double Major
• Scheduling Conflicts
• Personal Circumstances
Proposed

Machine Learning and Data Science

Field of Study

at the

Electrical & Computer Engineering Department
ECE

- Size
ECE

• Size

• 1,200 Undergraduates
ECE

- Size
  - 1,200 Undergraduates
  - 500+ Masters, 300+ Ph.D.
ECE

• Size
  • 1,200 Undergraduates
  • 500+ Masters, 300+ Ph.D.

• Breadth
ECE

- Size
  - 1,200 Undergraduates
  - 500+ Masters, 300+ Ph.D.

- Breadth
  - Photonics, Circuits, Robotics, Communications, Signal Processing
ECE

• Size
  • 1,200 Undergraduates
  • 500+ Masters, 300+ Ph.D.

• Breadth
  • Photonics, Circuits, Robotics, Communications, Signal Processing
ECE

- **Size**
  - 1,200 Undergraduates
  - 500+ Masters, 300+ Ph.D.

- **Breadth**
  - Photonics, Circuits, Robotics, Communications, Signal Processing
ECE

• Size
  • 1,200 Undergraduates
  • 500+ Masters, 300+ Ph.D.

• Breadth
  • Photonics, Circuits, Robotics, Communications, Signal Processing

• Catalog: 85 Graduate courses
ECE

• Size
  • 1,200 Undergraduates
  • 500+ Masters, 300+ Ph.D.

• Breadth
  • Photonics, Circuits, Robotics, Communications, Signal Processing

• Catalog: 85 Graduate courses

• → Specialization
Fields of Study
Fields of Study

- Twelve: Devices and Materials, Computer Engineering, Communication Theory and Systems, ...
Fields of Study

- Twelve: Devices and Materials, Computer Engineering, Communication Theory and Systems, ...

- Determine: admission, classes, faculty, cohorts
Fields of Study

- Twelve: Devices and Materials, Computer Engineering, Communication Theory and Systems, ...

- Determine: admission, classes, faculty, cohorts

- Periodically updated
Fields of Study

- Twelve: Devices and Materials, Computer Engineering, Communication Theory and Systems, ...

- Determine: admission, classes, faculty, cohorts

- Periodically updated

  - Recently added: Medical Devices & Systems
Fields of Study

- Twelve: Devices and Materials, Computer Engineering, Communication Theory and Systems, ...

- Determine: admission, classes, faculty, cohorts

- Periodically updated

- Recently added: Medical Devices & Systems

- Removing: Radio & Space, Ocean Science, Magnetic Recording
Fields of Study

- Twelve: Devices and Materials, Computer Engineering, Communication Theory and Systems, ...

- Determine: admission, classes, faculty, cohorts

- Periodically updated

  - Recently added: Medical Devices & Systems
  
  - Removing: Radio & Space, Ocean Science, Magnetic Recording

- This request
Fields of Study

- Twelve: Devices and Materials, Computer Engineering, Communication Theory and Systems, …
- Determine: admission, classes, faculty, cohorts
- Periodically updated
  - Recently added: Medical Devices & Systems
  - Removing: Radio & Space, Ocean Science, Magnetic Recording
- This request
  - Add: Machine Learning and Data Science
Data Science
Data Science

• Vast recent increase
Data Science

• Vast recent increase

• Machine learning capabilities
Data Science

• Vast recent increase

• Machine learning capabilities

• Data driven applications
Data Science

- Vast recent increase
  - Machine learning capabilities
  - Data driven applications
- Market demand
Data Science

- Vast recent increase
- Machine learning capabilities
- Data driven applications
- Market demand
Data Science

• Vast recent increase
• Machine learning capabilities
• Data driven applications
• Market demand
• UCSD response
Data Science

- Vast recent increase
  - Machine learning capabilities
  - Data driven applications
- Market demand
- UCSD response
  - New undergraduate major
Data Science

- Vast recent increase
  - Machine learning capabilities
  - Data driven applications
- Market demand
- UCSD response
  - New undergraduate major
  - Halıcıoğlu Data Science Institute
Data Science

- Vast recent increase
- Machine learning capabilities
- Data driven applications
- Market demand
- UCSD response
  - New undergraduate major
  - Halıcıoğlu Data Science Institute
  - Graduate student interest
Data Science

- Vast recent increase
- Machine learning capabilities
- Data driven applications
- Market demand
- UCSD response
  - New undergraduate major
  - Halıcıoğlu Data Science Institute
  - Graduate student interest

![Job Trends from Indeed.com](image1)

**ECE 271A - Machine Learning**

![Enrollment Trends](image2)
Expertise
Expertise

• 21 ECE faculty work in Data Science
Expertise

• 21 ECE faculty work in Data Science
  • Analytics: Probability, Machine Learning, optimization
Expertise

- 21 ECE faculty work in Data Science
  - Analytics: Probability, Machine Learning, optimization
  - Algorithms: Deep learning, architecture, scalability
Expertise

• 21 ECE faculty work in Data Science
  • Analytics: Probability, Machine Learning, optimization
  • Algorithms: Deep learning, architecture, scalability
  • Applications: Vision, Robotics, Bioinformatics, Networking
Expertise

• 21 ECE faculty work in Data Science
  • Analytics: Probability, Machine Learning, optimization
  • Algorithms: Deep learning, architecture, scalability
  • Applications: Vision, Robotics, Bioinformatics, Networking
• 16+ courses already taught in the area
ECE Data-Science Expertise

Summary of data-science expertise, interests, and recent projects of ECE faculty

Nikolay Atanasov: Theoretical and computational aspects of control theory, optimization, and machine learning and their application to sensing, estimation, planning, and control in robotics. Particular focus on autonomous information collection (metric, semantic, topological) using teams of ground and aerial robots in applications such as mapping, security and surveillance, and environmental monitoring.

Massimo Franceschetti: Network science, network representations from data, data mining and analysis, social networks, network structure and organization, contact processes on networks, phase transitions, filtering, prediction, estimation, causality, classification.

Vikash Gilja: Applications of data science to basic neuroscience, clinical measurements of behavior and physiology, and neural engineering. Statistical signal processing, generative models, and neural network based approaches applied to high-dimensional time series measurements for data exploration, hypothesis generation, clinical diagnostics, and real-time neural decoding for prosthetic applications.


Young-Han Kim: Information theory and data science. Universal probability and its applications to data science such as compression, portfolio selection, prediction, filtering, estimation, denoising, classification, and recommendation. Causality. Network information flow. DNA/RNA classification.

Farinaz Koushanfar: Digital signal processing, real-time and low power data mining/analytics, deep neural networks/deep learning, stream sketching, online probability density function (PDF) estimation, real-time and low overhead time-series analysis, real-time causal modeling/MCMC, software and/or hardware-based acceleration of data analytics, GPU and FPGA acceleration, model assurance, privacy-preserving data-analytics, applications of learning in security and computer vision.


Gert Lanckriet: Machine learning, optimization, deep learning, information retrieval, multimedia, recommender systems, wearable sensors, context awareness, computer audition.

Bill Lin: Computational aspects of data science, including efficient algorithms and system architectures for processing and learning from big data. Applications include data analytics problems in various domains.

Siavash Mirarab: Application of data sciences to biology, and particularly, understanding evolution. Methods scalable to hundreds or thousands of genomes. Projects (all collaborative) include: inference of a tree-of-life of bacteria from tens of thousands of genomes and its applications to microbiome studies and inference of HIV transmission networks from genomic data.

Truong Nguyen: Data science applications to image/video processing and analysis. Recent projects include machine learning methods for object detection, semantic segmentation, instance segmentation, denoising, super-resolution, sign language (gesture) recognition and 3D reconstruction.


Piya Pal: Statistical information processing of high dimensional signals. Design and analysis of new energy-efficient sensing and sketching techniques for big data, and development of computationally efficient robust algorithms (convex and non convex) with provable performance guarantees. Specific applications include sensor array signal processing for localization and tracking, data sketching and high dimensional time series analysis, tensor decomposition, super-resolution microscopy and ill-posed inverse problems in biomedical imaging.

Bhaskar Rao: Digital signal processing, single and multi-channel time series analysis, compressed sensing and sparse signal recovery, Bayesian methods, microphone arrays and multi-antenna wireless communications.

Paul Siegel: Algebraic, probabilistic. and constrained coding for data transmission and storage. Information theory of data storage systems. Recent projects include: Algebraic coding techniques for computer memories and distributed data networks. Graphical models, probabilistic inference algorithms, and optimization techniques applied to decoding of graph-based error-correcting codes. Matrix analysis and Markov chain theory applied to graphical structures, with applications to coding for constrained systems. Information-theoretic models of data storage devices and systems, analysis of theoretical storage limits.

Alexander Vardy: Coding for reliable and efficient data transmission and storage, with emphasis on advanced coding techniques for distributed data retrieval systems. Current research focuses on regenerating codes for efficient repair of failed nodes in distributed data-storage networks, availability codes for simultaneous access to "hot" data by multiple users, and local recovery coding for data-management systems (e.g. Apache Hadoop). Other recent projects include private information retrieval from distributed databases and coding for emerging memory/storage technologies.

Nuno Vasconcelos: Computer vision, machine learning, and multimedia. Current research emphasizes deep learning for object recognition and detection, action understanding, scene classification, image semantics, image retrieval, image hashing, models of saliency and attention, smart cars, and various other problems in computer vision. Work on the foundations of deep learning included the design of loss-functions, regularization, network architecture, transfer learning, low-precision networks, etc. Video analysis, including action recognition, american sign language translation, video surveillance, crowd counting, etc. Other work includes generative modeling, Bayesian inference, linear dynamic systems, the foundations of boosting, cost-sensitive learning, and biologically plausible architectures for computer vision.

Michael Yip: Application of data sciences to robotics and medical imaging. Reinforcement learning for teaching expert skills to surgical robots and for robots to learn to manipulate objects and themselves. Image-based, 3D spatial reasoning, localization, and 3D scene reconstruction using neural network approaches.
Proposed Program
Proposed Program

- Attract students from diverse ECE specialties
Proposed Program

• Attract students from diverse ECE specialties

• Quickly bring them up to speed
Proposed Program

- Attract students from diverse ECE specialties
- Quickly bring them up to speed
- Teach analytics, algorithms, applications
Proposed Program

- Attract students from diverse ECE specialties
- Quickly bring them up to speed
- Teach analytics, algorithms, applications
- Emphasize ECE topics
Curriculum
Curriculum

- Twelve courses, standard load
Curriculum

• Twelve courses, standard load

• Four required
Curriculum

• Twelve courses, standard load

• Four required

  • Python for DS, Prob. & Stats., Linear Algebra, Machine Learning
Curriculum

• Twelve courses, standard load
  • Four required
    • Python for DS, Prob. & Stats., Linear Algebra, Machine Learning
  • Four selected from fifteen depth courses
Curriculum

- Twelve courses, standard load
  - Four required
    - Python for DS, Prob. & Stats., Linear Algebra, Machine Learning
  - Four selected from fifteen depth courses
    - At least one in each of 3 areas: Analytics, Algorithms, Applications
Curriculum

- Twelve courses, standard load
  - Four required
    - Python for DS, Prob. & Stats., Linear Algebra, Machine Learning
  - Four selected from fifteen depth courses
    - At least one in each of 3 areas: Analytics, Algorithms, Applications
  - Four elective
Curriculum

- Twelve courses, standard load
  - Four required
    - Python for DS, Prob. & Stats., Linear Algebra, Machine Learning
  - Four selected from fifteen depth courses
    - At least one in each of 3 areas: Analytics, Algorithms, Applications
  - Four elective
    - ECE, CSE, Math, COGS, BENG, …
Curriculum

- Twelve courses, standard load
  - Four required
    - Python for DS, Prob. & Stats., Linear Algebra, Machine Learning
  - Four selected from fifteen depth courses
    - At least one in each of 3 areas: Analytics, Algorithms, Applications
  - Four elective
    - ECE, CSE, Math, COGS, BENG, …
  - Two new courses
Courses

The following 12 courses (48 units) will be required for this major.

4 courses/16 units core courses:

ECE 143 - Programming for Data Analysis (instructor varies)
ECE 225A - Probability and Statistics for Data Science (Alon Orlitsky)
ECE 269 - Linear Algebra (Piya Pal)
ECE 271A - Statistical Learning I (Nuno Vasconcelos)

4 additional courses/16 additional units (with at least one course in each area) from:

Analytics
ECE 271B - Statistical Learning II (Nuno Vasconcelos)
ECE 273 - Convex Optimization and Applications (Piya Pal)
ECE 275A - Parameter Estimation (Kenneth Kreutz-Delgado)

Computation
ECE 226 - Optimization and Acceleration of Deep Learning on Various Hardware Platforms (Farinaz Koushanfar)
ECE 289, Special Topic - Parallel Processing in Data Science (Siavash Mirarab) New
ECE 289, Special Topic - Scalable Learning (Bill Lin) New

Applications
ECE 208 - Computational Evolutionary Biology (Siavash Mirarab)
ECE 209 (currently ECE 289, Special Topic) - Statistical Learning for Biosignal Processing (Vikash Gilja)
ECE 227 - Big Network Data (Massimo Franceschetti)
ECE 228 - Machine Learning for Physical Applications (Peter Gerstoft)
ECE 268 - Security of Hardware Embedded Systems (Farinaz Koushanfar)
ECE 271C - Deep Learning and Applications (Nuno Vasconcelos)
ECE 276A - Sensing and Estimation in Robotics (Nikolay Atanasov)
ECE 276B - Planning and Learning in Robotics (Nikolay Atanasov)
ECE 276C - Advances in Robotics Manipulation (Michael Yip)

4 courses/16 units Technical Electives:

- Any 4 unit, 200+ course from ECE, CSE, MAE, BENG, CENG, NANO, SE, MATS, MATH, PHYS or COGS taken for a letter grade may be counted. In particular, the following courses are recommended: MATH 245 A-B-C (Convex Analysis and Optimizations), MATH 282 A-B (Applied Statistics), MATH 289C (Exploratory Data Analysis and Inferences), COGS 260 (Image Recognition), and COGS 289 (Machine Learning and Signal Processing for EEG-Brain Computer Interfaces).

- Up to 12 units of undergraduate, upper-division ECE coursework may be counted (ECE 111+ only; and not including ECE 195, 197, 198 or 199).

- MS students (Plan II) are allowed no more than 4 units of ECE 299 (research units) as technical electives. PhD and MS students (Plan I) are allowed no more than 8 units of ECE 299 as technical electives.
UC Feedback
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• Three evaluations
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• Three evaluations

  • Greg Pottie, Chair, ECE, UCLA
UC Feedback

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• All supportive
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to be added to the M.S. and Ph.D. degrees available within the Electrical and Computer Engineering Department, UCSD
Effective Fall 2018
By
Vwani Roychowdhury
UCLA

– Quality and academic rigor of the program

This is a very timely program, and the proposed courses and requirements (for both MS and Ph.D. studies) have been carefully thought out and crafted so that they strike a judicious balance between many of the theoretical foundations of machine learning, and the pressing need for integrating data science and machine learning into a wide array of applications and products. I believe that the “Aims and objectives of the program” of the report correctly points out that the enabling driving forces behind the current era of information revolution are the availability of large-scale and diverse data sets, and the ubiquitous access to computing resources to store and process such data in a timely fashion. A lot of the conceptual and theoretical foundations that have already been developed, especially by those working in Information theory and Statistical Signal processing areas, are now practicable for the first time: There is enough data to model complex systems, and there is sufficient computing power to implement the various algorithms and data models that have been around for a while now. Deep Learning is an important data point in this regard: It implements ideas and algorithms known for several decades, but enabled only now by access to large-scale training data and matching computing power.

I am heartened to see that the proposed effort acknowledges these core realities upfront and then proceeds to design a program that combines core strengths of the department in statistical information processing, machine learning and computing to design a first rate program that will prepare students for effective career in data science and applications. My only suggestion is that the program could emphasize the computing aspects of data science a bit more in the required course work. Currently I see that the following 100-level course, ECE 143: Programming for Data Analysis, is a required core course in the Data Science and Machine Learning program; in addition, the students must take at least another course from the Computation area, which has three 200-level courses (ECE 2xx) that I assume are yet to be developed. Perhaps, having a sequence of two core courses on the computing aspects of Big Data would be more appropriate. Proficiency and fluency in the computing aspects of data processing, and being able to program the ideas and algorithms that the students learn in theory courses, is a defining characteristics of the data science movement that we are witnessing now. So my suggestion would be to perhaps strengthen this computing aspect more, which is already strong in the current proposal.

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ECE department at UCSD has a long history of providing world-class education and I have full confidence in its ability to provide adequate resources for a successful implementation of the program.

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There is a strong student demand for a program like this. In courses that we teach at UCLA related to Data Science and ML, typical graduate student enrollments exceed 150 routinely per class offering. Moreover, both in industry and academy there is a strong need for hiring in this field. All forecasts point to a strong demand for graduates of such programs for many years to come.

Concluding Remarks:

This is a timely and a very well designed program that will benefit both UCSD and the student body. It will also greatly benefit the larger eco-system comprising of academy, research and industry and contribute to the economy and the society at large. I strongly support this program.
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December 5, 2017

Dear Professor Orlitsky:

I am happy to provide my input on the proposed new program in Machine Learning and Data Science leading to MS and PhD degrees in the Electrical and Computer Engineering Department (ECED) of the UCSD Jacobs School of Engineering.

This is a timely proposal. It is important for the University of California to play a leadership role in data science, a field that has strong roots in this state. Machine learning and the related statistical and computational tools are transforming not only scholarly research but also many aspects of the economy and society. Data science education is an investment in our future.

The UC Berkeley School of Information launched a self-supporting Master’s of Information and Data Science (MIDS) degree in 2014 to educate professionals seeking to be data science leaders in their organizations. The proposal under review, by contrast, adds a new field of study to the existing state-supported ECED graduate programs, allowing Masters and PhD students to specialize in Machine Learning and Data Science.

Quality and Academic Rigor

This is a very strong proposal. The ECED at the Jacobs School of Engineering is home to a substantial core of faculty members working in probability, statistical machine learning, and related analytical and computational tools/techniques, as well as key application areas (from robotics and bio signal processing, to network data and physical and embedded systems.)

The program is well designed and technically rigorous. The 4 core courses provide a strong foundation in the mathematics, probability, statistics, and programming skills that all students will need for more advanced graduate work in the field. The 4 required courses in analytics, computation, and applications will provide students with in-depth exposure to current research in machine learning and data science tools and applications. Ideally some of the technical electives will also be in related fields, further deepening their expertise.

While this is a solid program of technical education, I would be remiss in not asking about how the curriculum exposes students to the ethical and privacy issues that are raised by the growing use of machine learning and data at scale. I suspect that the Jacobs School offers courses on the social and human aspects of technology—but they may need updating. The collection and use of data to address human, societal, and scientific problems raises important issues, ranging from potential biases in the data collection and classification process to questions about ownership of personal data and privacy in a world of ubiquitous sensor networks. Graduate students who will work in this field should be exposed to these issues.

Adequacy of the size and expertise of faculty to administer the program

The proposal lists 21 ECED faculty members who will teach and administer the program—all of whom are doing research that is relevant to machine learning and data science. This represents a healthy mix of Assistant Professors, Professors, and Distinguished Professors. Most (if not all) of the courses for the program are already being taught, and there appears to be more than sufficient personnel to staff all of the core courses as well as the electives. In short, the scale and expertise of the faculty are more than adequate to mount a strong program in the area.

This program is likely to increase the visibility of ECED and, over time, grow enrollment because of the robust demand for machine learning and data science education. Over time the department may need additional resources. That should, however, easily handled within the normal unit and campus recruitment processes.

Adequacy of the facilities and budgets

The program does not require any additional facilities or other resources; rather it involves redeploying existing faculty and classes to this new program. The professors who are involved have ongoing research contracts and grants that they will use to support PhD students in the field. They already have laboratories, space, and computing resources. As noted above, if demand is substantial additional facilities and budgets may be needed, but not immediately.

Applicant pool and prospects for graduates

There is far more demand for programs in the field of machine learning and data science than there is supply. MIDS has grown from an initial cohort of 28 students in 2014 to close to almost 500 enrolled today—and we accept only 25-30% of total applicants. I have no doubt that a strong program with a high faculty, like that in ECED, will be attractive to existing students, and has the potential to increase applications to the department’s graduate programs.

There are now many studies documenting the shortages of graduates with data science skills. Graduates of our MIDS program increase their salaries by over 70%. Our experience shows that there is strong demand for graduates with these skills from every sector of society: small firms, large firms, consumer-oriented and enterprise-oriented businesses, a wide range of industries, government and non-profit organizations, as well as corporate research labs and universities. We have had no problem placing grads in attractive and well-paid positions, and I have little reason to believe that the UCSD program would be different.

Thanks for the opportunity to comment on this program. Feel free to contact me with any additional questions.

Best regards,

AnnaLee Saxenian
Dean & Professor
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To: Graduate Council

RE: proposal to add the major field of “Machine Learning and Data Science” to MS and PhD degree programs in ECE

This note is to express, on behalf of the CSE department, our support of this new program in ECE. I apologize for the lateness of this note, and it should not be construed as a lack of support.

There are two possible concerns about this new program, from our perspective, so I want to acknowledge that we have considered those before voicing our support.

The first concern is the overlap with our own program. The CSE department has a long, well-recognized history of excellence in the fields of Artificial Intelligence and Machine Learning. We do not offer “major fields” as part of our degree program, but obviously we have graduated many PhD and MS students in these fields, and in fact we do have an MS concentration in this area. However, we cannot deny that ECE has also built up strong faculty expertise in the area of Machine Learning, as well. Moreover, the demand placed on our graduate machine learning classes by students outside of our major is quite heavy, and we would welcome the sharing of that load.

The second concern is the overlap with graduate programs that will grow out of the Data Science undergraduate program and/or the Halicioglu Data Science Institute. On this matter, I suppose I am also speaking as the interim director of the Data Science undergraduate program. The concern here is that when those programs exist, that it be clear to prospective graduate students where they should apply. Several things come into play. First, I expect this will be a popular course of study for many graduate students, so some sharing of the load will be good. Second, I think there will be sufficient distinction between a Data Science major and a ML and DS field within a major that will help students choose between possible paths. Third, Data Science is by its very nature is inherently multidisciplinary, and I suspect we will end up seeing a number of discipline-specific data science programs in various departments – that isn’t exactly what this is, but I do not want to set a precedent for trying to claim sole ownership of the term “Data Science”; I think there will be more gained with an inclusive approach to Data Science across campus.

I write these things, not with the intention of introducing objections through the back door, but to assure the council that we have considered these issues, and still choose to support the ECE proposal. I believe it will be an excellent and popular program, backed by a very strong group of faculty already in place.

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I write these things, not with the intention of introducing objections through the back door, but to assure the council that we have considered these issues, and still choose to support the ECE proposal. I believe it will be an excellent and popular program, backed by a very strong group of faculty already in place.

Sincerely,

Dean Tullsen
Chair, CSE
Interim director, Data Science undergraduate program
To: Graduate Council

RE: proposal to add the major field of “Machine Learning and Data Science” to MS and PhD degree programs in ECE

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Interim director, Data Science undergraduate program
November 27, 2017

Truong Nguyen, Ph.D.
Professor and Chair
Electrical and Computer Engineering Dept.
University of California, San Diego
9500 Gilman Dr.
La Jolla, CA 92037-0407

Dear Truong,

Thank you for your leadership in pulling together a proposal for addition of new graduate major field of study in “Machine Learning and Data Science” to the MS and PhD degrees available within the Electrical and Computer Engineering Department in the Jacobs School of Engineering. We have reviewed the proposal and fully appreciate the intent of the new graduate program option to prepare students for an interdisciplinary career in the emerging area. We note program focus on foundational subjects in statistical learning and optimization and consider it to be a particular strength of the program while at the same time providing access to a large and diverse group of application areas where machine learning can be applied.

We also see a potential benefit to students from other departments who wish to enhance their graduate studies by taking the comprehensive set of classes offered in this program, on the theory, implementation and application of Machine Learning and Data Science.

Overall the program is an attractive option among a dozen or so majors in the ECE department and will complement current area of Intelligent Systems, Robotics and Control. We note that the new major options requires existing total credit requirements to ensure a strong graduate program. We look forward to partnering with the ECE Department on faculty recruitment, collaborative research initiatives, and summer research internship initiatives.

We are pleased to offer our support for the success of the program,

Sincerely yours,

[Signatures]

Rajesh Gupta
Professor of Computer Science & Eng.

Jeffrey L. Elman
Distinguished Professor of Cognitive Science
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Professor Sorin Lerner
Graduate Council

Dear Professor Lerner,

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Albert P. Pisano, Dean
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Walter J. Zable Professor of Engineering
Professor, Mechanical and Aero Engineering
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Professor, Electrical and Computer Engineering
February 12, 2018

PROFESSOR TRUONG NGUYEN, Chair
Department of Electrical and Computer Engineering

PROFESSOR ALON ORLITSKY
Department of Electrical and Computer Engineering

SUBJECT: Proposed MS and PhD Research Program Area in Machine Learning and Data Science

At its January 8, 2018 meeting, the Graduate Council reviewed the Department of Electrical and Computer Engineering’s proposal to add a new research program area in Machine Learning and Data Science to its MS and PhD degree programs. Prior to moving forward, the Council seeks to better understand the how the proposed research program area relates to existing educational efforts in the area of data science and how it relates to the University’s future plans for developing graduate programs in the field of data science. This is a growing field of interest in many disciplines across campus. The Council has sent an inquiry to Graduate Dean Kit Pogliano regarding the University’s future plans, and below are questions for the Department about the proposal.

1. The Council noted that some of the courses in the proposed research area overlap with offerings in other areas of campus, such as Mathematics and departments in the Social Sciences. The Council asks the Department to provide letters of acknowledgement from departments with overlapping content.

2. Please explain how the Department’s proposed core curriculum compares to other programs in data science. What distinguishes these core courses from a data science degree program in other disciplines, such as math? Why did the Department decide to include an undergraduate course (ECE 143) as a requirement? How does that impact the rigor of the program?

The Council looks forward to receiving your response. Please submit it to Associate Senate Director Lori Hullings at lhullings@ucsd.edu.

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Graduate Council
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Graduate Council

cc: F. Ackerman
    M. Allen
    R. Horwitz
    K. Pogliano
    R. Rodriguez
    S. Yadegari
February 23, 2018

Dear Truong,

Thank you for sharing your department’s proposal for a new ECE graduate program in Machine Learning and Data Science. It is very timely and will meet a clear need. I discussed the curriculum with the relevant faculty in my department and they were enthusiastic, especially with regard to applied machine learning courses. As per our discussion, we are pleased to offer our relevant ML courses as a part of the curriculum.

Good luck with this thoughtful new program!

Marta Kutas, Distinguished Professor and Chair
Department of Cognitive Science
Director, Center for Research in Language
University of California, San Diego
February 23, 2018

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University of California, San Diego
RE: Data Science Major in ECE

Dear Chair Truong,

The Department Mathematics is fully supportive to the new program ECE is proposing.

There are several graduate courses currently offered by mathematics, which I want to bring your attention to, and can be used by the new program proposed.

Math 202 ABC Applied Linear Algebra
Math 245 ABC Convex Analysis and Optimizations
Math 261 ABC Probabilistic Combinatorics and Algorithms.
Math 271 ABC Numerical Optimizations
Math 282AB Applied Statistics
Math 285 Stochastic Processes
Math 287D Statistical Learning
Math 289C Exploratory Data Analysis and Inferences.

Sincerely,

[Signature]
Chair, Department of Mathematics
RE: Data Science Major in ECE

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Math 289C Exploratory Data Analysis and Inferences.

Sincerely,

Lemi
Chair, Department of Mathematics
Undergrad Course

March 13, 2018

To: UC San Diego Graduate Council

Subject: ECE Department Response to Council’s Questions Regarding Proposal to Add New Major Field of Study in Machine Learning and Data Science

Dear Graduate Council,

Thank you very much for your thorough and helpful review of our proposal to establish a new major field of study in Machine Learning and Data Science. Following are our responses to your questions and recommendations.

We would first like to clarify the limited scope of our proposal. We are not proposing a new Masters Program in Data Science. Our students will continue to receive their degrees in Electrical and Computer Engineering. We ask only to augment our department’s twelve current focus areas, listed on page 4 of our original proposal, with a thirteenth area. Due to the diverse topics covered by the Electrical and Computer Engineering discipline, our graduate students select a focus areas that determines their curriculum. Many of our students are interested in machine learning and data science, and none of the current 12 area curricula fits their needs. Our proposal is to add a 13th focus area, with some additional courses to better suit the needs of our students in this important domain.

Your letter also makes two specific requests.

First, regarding overlap with offerings in other areas of campus, such as Mathematics and departments in the Social Sciences, we contacted Prof. Lei Ni, chair of the Mathematics Department and met with him along with Professors Peter Ebenfelt (associate dean, division of physical sciences) and Patrick Fitzsimmons (Mathematics vice chair). At the meeting, the Mathematics faculty expressed strong support for our new focus area. Prof. Ni’s letter, pledging the Math Department’s “full support” is attached. The Math Department also suggested several of their courses that our students could take. We added these courses (Math 245 ABC, Math 282AB and Math 289C) as optional courses in our proposed curriculum, and will highlight them as recommended Technical Electives.

We also went over the graduate courses offered by departments in the Social Sciences. The closest department appears to be Cognitive Science. We met with Cognitive Science Department Chair Marta Kutas who too expressed strong support to our program. In her attached support letter, Prof. Kutas writes “It is very timely and will meet a clear need. I discussed the curriculum with the relevant faculty in my department and they were enthusiastic, especially with regard to applied machine learning courses.” The Cognitive Science Department also suggested two of their courses that our students could take, COGS 260 and COGS 289. We added both to the list of recommended Technical Electives in our proposed curriculum.

These letters, along with the two original support letters, from CSE department chair Dean Tulsen, and from Jeff Elman and Rajesh Gupta, heads of the new Halicioglu Data Science Institute, show that our program is strongly supported by our most closely related sister departments and the campus data science community.

The second important point you mention concerns the required upper-division undergraduate course, ECE 143, in our proposed curriculum. We included this course because Python and data-analysis programming are typically not offered by ECE departments. We thought of this course as an equalizer for incoming students, ensuring that students have a strong foundation in the field. We are open to the possibility of modifying this requirement. For example, we could consider cross-listing the course as both an undergraduate and a graduate course, and running it at two levels to make sure the needs of all our students are met.

Please see the attached list of Revised Course Requirements that addresses your concerns.

Thank you for your consideration.

Prof. Truong Nguyen, Chair
Department of Electrical and Computer Engineering

Prof. Alon Orlitsky
Department of Electrical and Computer Engineering
March 13, 2018

To: UC San Diego Graduate Council

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Your letter also makes two specific requests.

First, regarding overlap with offerings in other areas of campus, such as Mathematics and departments in the Social Sciences, we contacted Prof. Lei Ni, chair of the Mathematics Department and met with him along with Professors Peter Ebenfelt (associate dean, division of physical sciences) and Patrick Fitzsimmons (Mathematics vice chair). At the meeting, the Mathematics faculty expressed strong support for our new focus area. Prof. Ni’s letter, pledging the Math Department’s “full support” is attached. The Math Department also suggested several of their courses that our students could take. We added these courses (Math 245 ABC, Math 282AB and Math 289C) as optional courses in our proposed curriculum, and will highlight them as recommended Technical Electives.

We also went over the graduate courses offered by departments in the Social Sciences. The closest department appears to be Cognitive Science. We met with Cognitive Science Department Chair Marta Kutas who too expressed strong support to our program. In her attached support letter, Prof. Kutas writes “It is very timely and will meet a clear need. I discussed the curriculum with the relevant faculty in my department and they were enthusiastic, especially with regard to applied machine learning courses.” The Cognitive Science Department also suggested two of their courses that our students could take, COGS 260 and COGS 289. We added both to the list of recommended Technical Electives in our proposed curriculum.

These letters, along with the two original support letters, from CSE department chair Dean Tullsen, and from Jeff Elman and Rajesh Gupta, heads of the new Halicioglu Data Science Institute, show that our program is strongly supported by our most closely related sister departments and the campus data science community.

The second important point you mention concerns the required upper-division undergraduate course, ECE 143, in our proposed curriculum. We included this course because Python and data-analysis programming are typically not offered by ECE departments. We thought of this course as an equalizer for incoming students, ensuring that students have a strong foundation in the field. We are open to the possibility of modifying this requirement. For example, we could consider cross-listing the course as both an undergraduate and a graduate course, and running it at two levels to make sure the needs of all our students are met.

Please see the attached list of Revised Course Requirements that addresses your concerns.

Thank you for your consideration.

Prof. Truong Nguyen, Chair
Department of Electrical and Computer Engineering

Prof. Alon Orlitksy
Department of Electrical and Computer Engineering
Summary
Summary

• Data Science graduate program
Summary

• Data Science graduate program

• Market demand
Summary

- Data Science graduate program
  - Market demand
  - Student interest
Summary

• Data Science graduate program

• Market demand

• Student interest

• Faculty expertise
Summary

- Data Science graduate program
  - Market demand
  - Student interest
  - Faculty expertise
- Program
Summary

- Data Science graduate program
  - Market demand
  - Student interest
  - Faculty expertise
- Program
  - Focused in ECE graduates
Summary

- Data Science graduate program
  - Market demand
  - Student interest
  - Faculty expertise
- Program
  - Focused in ECE graduates
- Feedback
Summary

• Data Science graduate program
  • Market demand
  • Student interest
  • Faculty expertise

• Program
  • Focused in ECE graduates

• Feedback
  • Support and encouragement from UC, UCSD, Math, CogSci
Summary

• Data Science graduate program
  • Market demand
  • Student interest
  • Faculty expertise

• Program
  • Focused in ECE graduates

• Feedback
  • Support and encouragement from UC, UCSD, Math, CogSci
  • Several - “timely”
Summary

• Data Science graduate program
  • Market demand
  • Student interest
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• Program
  • Focused in ECE graduates
• Feedback
  • Support and encouragement from UC, UCSD, Math, CogSci
• Several - “timely”, with your endorsement and help
Summary

• Data Science graduate program
  • Market demand
  • Student interest
  • Faculty expertise

• Program
  • Focused in ECE graduates

• Feedback
  • Support and encouragement from UC, UCSD, Math, CogSci
  • Several - “timely”, with your endorsement and help, hopefully - “timeless”
Thank You
The **Long Range Development Plan (LRDP)** is the official Land Use Planning policy guide for the campus


- **A capacity plan that estimates the "outer envelope" for growth (population and development)**

- **Serves as basis for future land use and capital project decisions**

- **The UC Regents approve the LRDP and its Program Level EIR**
Planning Framework

Long Range Development Plan

Defines capacity of campus land use and development

Provides general locations of predominate land use on campus

Program Level EIR

Master Planning and Physical Planning Studies

Studies and Plans provide key development design principles and guidance for the campus

In implementing LRDP

Provide tailored design guidelines to individual buildings and sites on campus

Project Level Implementation

LRDP consistency for streamlined process

Is guided by the design principles of the Planning Studies

Incorporates the LRDP EIR mitigation measures

Each project analyzed for project specific environmental impacts
## 2018 Long Range Development Plan

<table>
<thead>
<tr>
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<th>Fall 2017</th>
<th>2035 Projections</th>
<th>Net New Under 2018 LRDP</th>
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<td>Student Enrollment</td>
<td>35,800</td>
<td>42,400</td>
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<td>Total Campus Population</td>
<td>51,800</td>
<td>65,600</td>
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<td>Development Gross Square Feet</td>
<td>19.0M</td>
<td>27.9M</td>
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<tr>
<td>(includes 3.3M in design or construction)</td>
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<tr>
<td>Campus Housing</td>
<td>15,000 Beds</td>
<td>30,000 Beds</td>
<td>+15,000</td>
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Development Strategies

Integrating Transportation, Mobility Improvements and Newfound Connections

2021

2019

UC San Diego
Development Strategies

Development of additional housing is a campus and system-wide priority

- Addresses affordability for students
- Better academic achievement
- Provides regional benefits
Development Strategies

Expand Retail Services and Amenities to support a growing on-campus population

Create a more livable, vibrant and lively campus environment

Transformed University Center

UC San Diego
Through strategic redevelopment, remove obsolete buildings, redevelop low-density areas.
Development Strategies

Renovate labs, repurpose and optimize underutilized space.

Improved space usage will help address projected growth needs in a sustainable manner.
Long Range Development Plan

Key Objectives

- Activate and enliven the campus through mixed-use and transit-oriented development, improved public spaces, expanded campus services, and additional on-campus housing to create vibrant living-learning environment;

- Recognize land as a limited and valuable resource and optimize usage of the few remaining development areas;

- Recognize the importance of campus open spaces that form a balance with the built environment and continue to be responsible stewards of natural and biological resources;
Expand multi-modal connections and Transportation Demand Management (TDM) programs to optimize benefits of the light rail transit, reduce automobile commuting and coordinate campus plans with the regional transportation programs;

Minimize impacts of growth through the implementation of sustainable development practices (related to design, construction and operations) in accordance with the UC Sustainable Practices Policy.
LRDP Environmental Impact Report

- Aesthetics
- Agricultural & Forestry
- Air Quality (incl. HRA)
- Biological Resources
- Cultural Resources (incl. Tribal Cultural Resources)
- Energy
- Geology & Soils
- Greenhouse Gas Emissions
- Hazards & Hazardous Materials
- Hydrology & Water Quality
- Land Use & Planning
- Mineral Resources
- Noise
- Population & Housing
- Public Services
- Recreation
- Transportation / Traffic
- Utilities & Service Systems
- Cumulative Impacts
- Project Alternatives
LRDP Outreach

2018 LONG RANGE DEVELOPMENT PLAN UPDATE 
OPEN HOUSE AND INFORMATIONAL MEETING

UC San Diego Campus Planning invites 
you to come learn about the LRDP.

Pick a date that works for you – either 
on the UC San Diego campus or off 
campus.

Friendly open house format, stop by 
 anytime and help spread the word with 
 friends and colleagues.

MAY 15, 2017
Monday | 4:30 pm – 7:30 pm
Lawrence Family 
Jewish Community Center 
Taubman Drama Workshop Room 
4126 Executive Drive 
La Jolla, CA 92037 
Park in the back lot located off of Eastgate Mall.

MAY 23, 2017
Tuesday | 11:00 am – 2:00 pm
UC San Diego 
Price Center, 4th Floor 
Forum Room 
Part of the Gomberg parking structure on Russell Lane.

WEB SITE: 
LRDP.UCSD.EDU

2018 Long Range Development Plan 
OPEN HOUSE

All UC San Diego Students

Please join UC San Diego Campus Planning 
at an Open House to learn about the 
2018 Long Range Development Plan. 
Pick a date that works for you to come interact 
and provide feedback on the plan.

WHEN
4-6 PM, Wednesday, October 25th, 2017 
OR
3-5 PM, Wednesday, November 8th, 2017

WHERE
Seuss Room, 2nd Floor of Geisel Library

Light refreshments will be provided.

http://lrdp.ucsd.edu/
### 2018 Long Range Development Plan (LRDP) Timeline

<table>
<thead>
<tr>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
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<td>Summer</td>
<td>Fall</td>
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</tbody>
</table>

- **Update Academic and Enrollment Plans**
- **Prepare Background and Support Studies**
- **Prepare the 2018 LRDP**
- **Draft the LRDP EIR**
- **Prepare Final EIR**

- **45 Day EIR Public Review July-August**
- **Fall 2018 Regents Approval and Certification of LRDP EIR**

*We Are Here*
Summer 2018 - Fall 2020 Construction
PROJECT INFORMATION

Goals:
Address Enrollment Growth
Integrate Living and Learning in one Community
Permanent Home for Sixth College

Key Elements
1,636,000 GSF
2,000 Undergraduate Beds
1,200 underground parking stalls
General Assignment Classrooms
Academic Space for Divisions of Social Sciences and Arts & Humanities
Resources

UCSD Living & Learning Website: livinglearning.ucsd.edu

UCSD Campus Map: maps.ucsd.edu/map

NTPLLN Construction Website: livinglearning.ucsd.edu/construction

NTPLLN Frequently Asked Questions: livinglearning.ucsd.edu/construction/faq

UCSD Transportation Website: transportation.ucsd.edu

UCSD Parking and Shuttle Alert: transportation.ucsd.edu/engage/firsttoknow

UCSD Transportation Virtual Town Hall: transportation.ucsd.edu/engage/virtualtownhall

UCSD Live Shuttle Map: ucsdbus.com/map
Trucks from the south will exit I-5 at Gilman Drive and stage on Gilman Drive. Trucks from the north will exit I-5 at Genesee Avenue and travel along North Torrey Pines Road.
Typical Work Hours: 7:00 AM - 3:30 PM Monday - Friday

Construction workers will arrive at the contractor parking area (glider port) 5:30 AM - 7:00 AM and shuttle to the construction site.

An afternoon shuttle will be utilized from 3:00 PM - 4:30 PM from the site to the glider port.
UC San Diego
North Torrey Pines Living Learning Neighborhood

Shuttle Routes & Available Parking

KEY
- UCSD West Campus Connector Shuttle Route
- Alternate UCSD West Campus Connector Shuttle Route DURING CONSTRUCTION
- UCSD South Campus Shuttle Route
- UCSD SIO Shuttle Route
- UCSD Shuttle Stop
- UCSD Shuttle Stop Unavailable DURING CONSTRUCTION

NOTES
- UCSD Shuttle Tracking: ucsdbus.com/map
- Walking Times from the Mandeville Center Shuttle Stop:
  - 2 Minutes to Faculty Club
  - 3 Minutes to Muir College
  - 4 Minutes to Peterson

<table>
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<tr>
<th></th>
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<tbody>
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<td>Summer</td>
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UC San Diego
North Torrey Pines Living Learning Neighborhood

Conditions Prior to the Start of Construction

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<thead>
<tr>
<th>Year</th>
<th>Season</th>
<th>Parking Lot</th>
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<tr>
<td>2019</td>
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<tr>
<td>2020</td>
<td>Summer</td>
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KEY
- Pedestrian Route
- Existing UCSD Shuttle Route
- Existing UCSD Shuttle Stop
Construction Hours:
Mon - Fri, 7 AM - 3:30 PM

There will be a 6’ tall chain link fence with green screen surrounding the construction site, job site trailers, and contractor parking lot at the glider port.

There will be no site lighting after hours. Contractor will be required to light the new building’s stair towers at night.
UC San Diego
North Torrey Pines Living Learning Neighborhood

Excavation & Early Foundations

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<tr>
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<th>2019</th>
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</table>
Late Foundations & Above Ground Structure
Building Envelope & Interior Finishes
UC San Diego
North Torrey Pines Living Learning Neighborhood

Sitework Completion

<table>
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SCHOLARS DRIVE

SCHOLARS DRIVE NORTH

Muir College Drive

Muir Lane

N Torrey Pines
UC San Diego
North Torrey Pines Living Learning Neighborhood

Project Completion
INTRODUCTION

The Committee on Academic Personnel (CAP) is charged with representing Senate faculty by making recommendations to the Administration concerning academic personnel and related matters. It also advises the Chancellor, EVC and the Academic Senate on general policy related to academic personnel. The work of CAP exemplifies the principle and practice of shared governance. Where CAP Stood explains CAP’s deliberations and is helpful to departments in file preparation. This report describes the extent to which the recommendations on these matters have been accepted by the administration, and also informs the division of other issues that were considered or remain pending.

COMMENTARY

Process, Interaction, and Consultation

CAP held 36 meetings and conducted 748 reviews (672 initial/additional/reconsiderations, 76 post-audits of dean-delegated actions). Actions ranged from consecutive no-change and contested merit advancements to appointments, promotions, career reviews, accelerated merit advancements, and retentions. In the interest of openness and effective communication, CAP regularly extends an invitation to the EVC, the Vice Chancellors for Research, Health Sciences, and Marine Sciences, as well as to Divisional Deans and Department Chairs and their respective AP staff, to visit the committee to discuss its practices and procedures or general issues of campus academic personnel policy. In all, CAP received 34 visitors during 2017-18. The CAP Chair attends meetings with department chairs at the beginning of the year to discuss the academic review process. The CAP Chair also attends the New Faculty Orientation, Faculty Advancement Workshop, and the Teaching Professor Briefing.

2017–18 Rate of Override and Disagreement. In seeking to ensure consistency and fairness across departments, divisions, and schools, CAP follows and interprets the APM/PPM policies on all matters in its recommendations to the Administration. In cases where the EVC or other final authority anticipates issuing a final decision contrary to the Committee’s recommendation, that individual attends a CAP meeting to present the arguments for not following CAP’s recommendation. In some cases, this discussion leads to agreement. In others, there is an agreement to disagree, with such cases often involving programmatic priorities of the campus that fall outside the criteria upon which CAP makes recommendations.

Overrides are those cases where the Chancellor/EVC final action (or, in the case of Research Scientist and Unit 18 Lecturer files, the final action of the relevant VC or Dean) differs from CAP’s final recommendation in step or action (appointment, merit advancement, promotion, etc.). Fourth-year appraisal ratings at the Assistant rank that differ from CAP’s recommendation are not considered Overrides. Disagreements are cases where the Chancellor/EVC’s final action differs from CAP’s recommendation in terms of salary (related to market off-scale or bonus off-scale salary components). In cases where the CAP membership is evenly split between two actions, a choice of either action is not an Override or Disagreement. In 2017–18 there were twelve cases in which the Administration’s final action differed from CAP’s recommendation; three involved the increment for merit advancement, five involved promotions, four involved the step for appointment.
Preparation of Files. As part of its ongoing efforts to calibrate requests for accelerated merit advancements, CAP conducts retrospective reviews (post-audits) of dean delegated merit advancements from various departments. In general, files were well prepared, but CAP notes the need for clear articulation of departmental standards for normal merit advancement in many instances. CAP also strongly encourages Departments to document fully the teaching and service contributions of their faculty members. Files submitted for CAP review can be delayed if teaching evaluations are not included in the file, or if there is insufficient analysis of a candidate’s teaching and service contributions. CAP recommends consultation of APM 210 to assist in file preparation details.

In disciplines where candidates routinely engage in collaborative work, CAP strongly emphasizes the need for departmental recommendation letters to identify clearly the candidate’s contribution to his or her publications. This is especially important as the University engages in team science and interdisciplinary hires. The absence of information supporting the departmental proposal occasionally resulted in delays in making a recommendation due to the need for CAP to ask for additional information from the Department.

Campus Ad Hoc Committees. Given the diverse representation of disciplines around the table, CAP acts as its own ad hoc committee. By the time cases arrive at CAP, there is already considerable expertise represented in the file, from the Departmental and Divisional ad hoc committees, senior faculty members, Department Chair, external referees, and from the cognizant Dean. Unless there is some substantial disagreement about the quality of the work, and CAP lacks suitable knowledge itself, a campus ad hoc committee is not regarded as necessary. CAP acted as its own ad hoc committee in 322 cases during 2017-18.

Policies, Issues, and Action Items Addressed

In addition to acting on individual academic personnel files, CAP, at the request of the Chancellor, EVC or the Academic Senate Chair, reviews general academic personnel policies and reports along with other issues of interest related to academic personnel. CAP also reviews Departmental voting procedures, the conferral of emeritus status to non ladder-rank academics, reviews of administrators, and appointments and reappointments for Endowed Chairs. CAP reviewed 42 such requests during 2017-18.

CONCLUSION

The Committee is grateful for the wisdom of the various divisional committees: the Division of Arts & Humanities Committee on the Arts; the School of Medicine Committee on Academic Personnel; the Scripps Institution of Oceanography Committee on Academic Personnel; the Deans, Provosts, Department Chairs, and ORU Directors; and those faculty members who served on departmental ad hoc committees. CAP also wishes to thank staff members involved in the academic review process at various levels for their many hours of efficient, knowledgeable, and professional work in file assembly and annotation, which is so crucial to fair and consistent reviews.

Respectfully submitted,

Susan Narucki, Chair
Committee on Academic Personnel
ANNUAL REPORT
COMMITTEE ON RESEARCH
FISCAL YEAR 2017/18

DIVISION COMMITTEE

The Committee on Research (COR) met monthly during the academic year to consider a number of issues. During the course of these meetings, the following principal issues were addressed and reports were prepared accordingly.

2. By Laws and Charge of COR – No action needed/taken.
3. Role of the Lead Discussant in an Organized Research Unit (ORU) Review – Identified ORU lead discussants for the three ORUs reviewed this academic year.
4. Overview of the Organized Research Unit (ORU) Review Process – AVC Miroslav Krstic provided an informative slide presentation on the role of the Academic Senate and COR in the review process.
5. Senate ORU Task Force Report – All seven specific issues were discussed in detail, and, in general, supported the recommendations outlined in the Senate ORU Task Force report. It was agreed that COR should be consulted on an as needs basis. COR recommend that both COR and the Academic Senate be notified on the outcome of reviews of all non-ORU Centers.
6. Research Misconduct Assessments – VCR Sandy Brown disseminated the UCSD Research Integrity Summary dated October 2017, noting that the ORA oversees and does a full assessment of complaints submitted to her office.
7. Review of Proposed New Open Access Policy – Theses & Dissertations – COR endorsed the proposal and recommend that there should be a uniform system-wide Open Access for student’s theses and dissertations. COR also recommended dissemination of the proposal to all Department Chairs for review and feedback prior to its implementation as well as advising students of this policy during orientation and that both students and faculty be required to affirm their awareness of the policy at the time the thesis is filed.
8. Revisions to PPM 100-4, Integrity of Research Policy & Procedures – COR recommended
9. HDSI Academic Unit Proposal Review - COR endorsed creation of the HDSI as an academic unit and provided several recommendations related to the development and integration of the HDSI as an academic unit.
10. Proposed Presidential Policy on Conflict of Interest and APM 028 Revision – COR found the revisions to be in line with State standard for the related issues reasonable and endorsed the revisions as presented.
11. Organized Research Unit: Multi-Year Review of QI-Calit2 (Qualcomm Institute- California Institutes for Telecommunications and Information Technology) – COR recommended that measures should be taken to improve the lack of transparency related to its finances, the lack of a stable financial model, its low self-sustainability index, and the limited collaborations with other divisions on campus. QI should confer with the administration on possible options that might enable them to secure more permanent funding by way of a non-ORU status.
12. Organized Research Unit: Multi-Year Review of CCIS (Center for Comparative Immigration Studies) – COR noted the limited funding resulted in a low self-sustainability index and recommended that CCIS activities and outreach efforts should be supported and expanded. COR strongly recommended its continuation as ORU for another five years.
13. Organized Research Unit: Multi-Year Review of CHD (Center for Human Development) – CHD provides excellent activities and COR strongly supported its continuation as ORU for another five years.
14. UCORP representative provided reports on the following main issues discussed at the monthly UCORP meetings; no action needed/taken:
   - National Labs and UC’s bid for Management of Los Alamos National Lab
   - Multi-Campus Research Programs
   - Reproducibility and authentication issued in the biological sciences
   - Negotiated Salary Trial Program
   - President Janet Napolitano’s surveys and audits
   - The California Cancer Research Center
   - MRU Review of the Institute of Transportation
The General Campus Research Grant Committee met on December 8, 2017, March 6, 2018, and May 3, 2018 to review research and bridge grant applications for FY 2017/18. The Committee reviewed the results of the bridge funding grants previously awarded. Based on the progress reports received on these projects, the Committee was convinced of the importance and need for continuation of the Bridge Funding program initiated in FY1995/96. Three calls for bridge funding applications were transmitted. Ten Bridge Funding program applications were reviewed and seven were funded, totaling $280K. Applicants were required to demonstrate strong proposals for continuing research programs that had received peer-reviewed extramural funding for at least four of the last five years and, that despite efforts to re-establish funding, were without any funding between June 30 and December 31, 2017. The Committee’s evaluation of proposals emphasized the quality of the research, past publication record, and the likelihood of future funding.

The existing policies regarding awards for bridge funding, individual research proposals, travel to scholarly meetings, and the intercampus exchange program were thoroughly reviewed by the Committee and a few notable modifications were incorporated in the application call letters on the Committee’s website at http://senate.ucsd.edu/grants-awards/grant-funding/. The Committee agreed to continue its policy limiting the ceiling for bridge funding to $40,000, as well as the ceiling for individual grants to $15,000, and to maintain the maximum cumulative support figure at $60,000 over a ten-year period. The ceilings for payment towards the cost of airfare for Travel to a Scholarly Meeting were 75% of an economy airfare not to exceed $1500 for foreign travel and $600 for domestic travel. Effective 7/1/17 for junior faculty only, additional eligible covered items to the airfare expenses described above, awards for junior faculty may cover 75% of reasonable costs of conference registration, accommodations, and ground transportation, up to a maximum award of $600 for these additional expenses. Applications must include documentation supporting the expenses for which an award is requested (e.g., hotel reservations; conference registration information and/or receipts; ticketing, reservation, or fare information for train, car rental, or other ground transportation). Effective 7/1/18, the policy for Travel to Scholarly Meetings will change as follows: awards may cover any combination of a standard economy airfare, registration fee, and/or hotel for all faculty. Domestic travel awards will be limited to $700; foreign travel awards will be limited to $1200.

Effective February 1, 2018 the committee announced the launching of an electronic application process for travel grants. The new software, e-Grants, replaced the former paper application process. Developed in partnership with campus Information Technology Services, the new software will save PIs and department administrators' time by enabling them to prepare and submit travel applications more efficiently online. The new software, e-Grants, will replace the current paper application for Research and Bridge Funding process in the fall 2018.

Research – Of 136 individual applications reviewed, 113 were funded for a total of $1,005,623. One award for $40K was made possible by the Earl C. Anthony Endowment Trust Fund. Twenty-three requests totaling $272,563 were denied primarily due to budget constraints. Ten bridge funding program applications were reviewed and seven were funded, totaling $280K. Three bridge funding requests totaling $119,567 were denied because they did not meet the bridge funding criteria. The breakdown of awards by faculty rank is as follows:

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<tr>
<td>Associate Professor</td>
<td>33 (1 Bridge)</td>
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<tr>
<td>Professor</td>
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<tr>
<td>Professor Emeritus</td>
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<td><strong>Total</strong></td>
<td><strong>120</strong></td>
<td><strong>$1,005,623</strong></td>
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The breakdown by department and discipline is as follows:

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<td>Cognitive Science</td>
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<td>Amount</td>
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<tr>
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<tr>
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<td>Ecology, Behavior &amp; Evolution</td>
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<td>0</td>
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<tr>
<td>Molecular Biology</td>
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</tr>
<tr>
<td>Neurobiology</td>
<td>3</td>
<td>9,550</td>
</tr>
<tr>
<td><strong>Total Division of Biological Sciences</strong></td>
<td><strong>5</strong></td>
<td><strong>$27,800</strong></td>
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<tr>
<td>Chemistry &amp; Biochemistry</td>
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<td>Physics</td>
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<td><strong>Total Division of Physical Sciences</strong></td>
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<tr>
<td>Nanoengineering</td>
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<tr>
<td>MAE</td>
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<td>22,500</td>
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<tr>
<td>Structural Engineering</td>
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<tr>
<td><strong>Total Engineering</strong></td>
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<td>Rady School of Management</td>
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<tr>
<td>Roosevelt College</td>
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<tr>
<td>School of GPS</td>
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<td>44,766</td>
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<tr>
<td><strong>Total Schools/Centers</strong></td>
<td><strong>9</strong></td>
<td><strong>$97,054</strong></td>
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<tr>
<td><strong>Total Individual Research Awards:</strong></td>
<td><strong>113</strong></td>
<td><strong>$1,005,623</strong></td>
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**Bridge Funding Awards**

<table>
<thead>
<tr>
<th>Field</th>
<th>Count</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology</td>
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</tr>
<tr>
<td>Chemistry &amp; Biochemistry</td>
<td>2</td>
<td>80,000</td>
</tr>
<tr>
<td>Cognitive Science</td>
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<td>40,000</td>
</tr>
<tr>
<td>Linguistics</td>
<td>1</td>
<td>40,000</td>
</tr>
<tr>
<td>MAE</td>
<td>2</td>
<td>80,000</td>
</tr>
<tr>
<td><strong>Total Bridge Funding Awards:</strong></td>
<td><strong>7</strong></td>
<td><strong>$280,000</strong></td>
</tr>
</tbody>
</table>

**GRAND TOTAL:**

|                      | **120** | **$1,285,623** |

*Intercampus Exchange Program* (FY 2017/18) - Twelve academic departments received grants totaling $23,383 in support of the University's Intercampus Exchange Program; $18,100 in unused funds was returned for redistribution. A formula of $75 per Academic Senate member plus $11 per registered graduate student was used to determine the total amount of this award.

*Travel to a Scholarly Meeting* – Of 258 applications reviewed, 251 were funded totaling $219,506; $28,355 was returned for redistribution; seven requests totaling $9,966 were denied because applicants were ineligible. One hundred twenty-seven of the trips funded were for foreign travel and 124 for domestic travel. The breakdown of awards by faculty rank is as follows:
The breakdown by discipline and department is as follows:

<table>
<thead>
<tr>
<th>Department</th>
<th>Awards</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology</td>
<td>12</td>
<td>$8,557</td>
</tr>
<tr>
<td>Cognitive Science</td>
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<td>3,154</td>
</tr>
<tr>
<td>Communication</td>
<td>9</td>
<td>5,926</td>
</tr>
<tr>
<td>Economics</td>
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<td>7,220</td>
</tr>
<tr>
<td>Education Studies</td>
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<td>3,886</td>
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<tr>
<td>Ethnic Studies</td>
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<td>2,391</td>
</tr>
<tr>
<td>Linguistics</td>
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<td>5,229</td>
</tr>
<tr>
<td>Political Science</td>
<td>11</td>
<td>5,656</td>
</tr>
<tr>
<td>Psychology</td>
<td>3</td>
<td>2,873</td>
</tr>
<tr>
<td>Sociology</td>
<td>15</td>
<td>11,583</td>
</tr>
<tr>
<td><strong>Total Social Sciences</strong></td>
<td><strong>80</strong></td>
<td><strong>$56,475</strong></td>
</tr>
<tr>
<td>History</td>
<td>22</td>
<td>18,278</td>
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<tr>
<td>Literature</td>
<td>13</td>
<td>10,846</td>
</tr>
<tr>
<td>Music</td>
<td>12</td>
<td>7,910</td>
</tr>
<tr>
<td>Philosophy</td>
<td>7</td>
<td>6,641</td>
</tr>
<tr>
<td>Theatre &amp; Dance</td>
<td>5</td>
<td>3,745</td>
</tr>
<tr>
<td>Visual Arts</td>
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<td>4,762</td>
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<tr>
<td><strong>Total Humanities &amp; Arts</strong></td>
<td><strong>63</strong></td>
<td><strong>$52,182</strong></td>
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<tr>
<td>Cell &amp; Developmental Biology</td>
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<td>2,863</td>
</tr>
<tr>
<td>Ecology, Behavior &amp; Evolution</td>
<td>5</td>
<td>4,258</td>
</tr>
<tr>
<td>Molecular Biology</td>
<td>1</td>
<td>1,500</td>
</tr>
<tr>
<td>Neurobiology</td>
<td>5</td>
<td>5,590</td>
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<tr>
<td><strong>Total Biological Sciences</strong></td>
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<td><strong>$14,211</strong></td>
</tr>
<tr>
<td>Chemistry &amp; Biochemistry</td>
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<td>17,424</td>
</tr>
<tr>
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<tr>
<td>Physics</td>
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<td>12,709</td>
</tr>
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<td><strong>Total Physical Sciences</strong></td>
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<td>Bioengineering</td>
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<td>3,552</td>
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<tr>
<td>CSE</td>
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<td>1,500</td>
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<tr>
<td>ECE</td>
<td>10</td>
<td>9,800</td>
</tr>
<tr>
<td>MAE</td>
<td>7</td>
<td>5,613</td>
</tr>
<tr>
<td>Nanoengineering</td>
<td>5</td>
<td>5,837</td>
</tr>
<tr>
<td>Structural Engineering</td>
<td>5</td>
<td>5,910</td>
</tr>
<tr>
<td><strong>Total Engineering</strong></td>
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<td><strong>$32,212</strong></td>
</tr>
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<tr>
<td>School of GPS</td>
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<td>11,588</td>
</tr>
<tr>
<td>Rady School of Management</td>
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<td>10,490</td>
</tr>
<tr>
<td><strong>Total Schools/Colleges</strong></td>
<td><strong>23</strong></td>
<td><strong>$22,424</strong></td>
</tr>
</tbody>
</table>

**GRAND TOTAL:** 251 $219,506
The Health Sciences Research Grant Committee met on November 27, 2017, February 15, 2018, and May 1, 2018 to review applications for FY 2017/18. The existing policies regarding awards for bridge funding, individual research proposals and travel to scholarly meetings were thoroughly reviewed by the Committee, and the modifications were incorporated in the application call letters on the Committee’s website at http://senate.ucsd.edu/grants-awards/grant-funding/. The Committee agreed to change its policy limiting the ceiling for individual grants from $10,000 to $15,000 and bridge funding from $25,000 to $40,000. Because of budget constraints, they also agreed to limit Travel to a Scholarly Meeting grants to Academic Senate members only, maintaining the ceiling of $750 for payment towards the cost of an economy airfare and/or registration fee every other fiscal year.

Effective February 1, 2018 the committee announced the launching of an electronic application process for travel grants. The new software, e-Grants, replaced the former paper application process. Developed in partnership with campus Information Technology Services, the new software will save PIs and department administrators’ time by enabling them to prepare and submit travel applications more efficiently online. The new software, e-Grants, will replace the current paper application for Research and Bridge Funding process in the fall 2018.

Research – Of 62 research applications reviewed, 38 were funded, totaling $443,485; twenty-four requests totaling $324,187 were denied primarily due to budget constraints. The Committee reviewed thirteen and funded eleven bridge program applications, totaling $341,543; two requests totaling $80,000 were denied because they did not meet the criteria for bridge funding. The breakdown of the awards by rank is as follows:

<table>
<thead>
<tr>
<th>Level</th>
<th>Awards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistant Professor</td>
<td>6</td>
</tr>
<tr>
<td>Assistant Professor-in-Residence</td>
<td>2</td>
</tr>
<tr>
<td>Assistant Adjunct Professor</td>
<td>7 (1 Bridge)</td>
</tr>
<tr>
<td>Assistant Clinical Professor</td>
<td>4</td>
</tr>
<tr>
<td>Assistant Research Scientist</td>
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</tr>
<tr>
<td>Assistant Project Scientist</td>
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</tr>
<tr>
<td>Associate Professor</td>
<td>3 (1 Bridge)</td>
</tr>
<tr>
<td>Associate Prof-in-Residence</td>
<td>3</td>
</tr>
<tr>
<td>Associate Adjunct Professor</td>
<td>2 (1 bridge)</td>
</tr>
<tr>
<td>Associate Clinical Professor</td>
<td>2</td>
</tr>
<tr>
<td>Professor</td>
<td>12 (6 Bridge)</td>
</tr>
<tr>
<td>Professor-in-Residence</td>
<td>2 (1 Bridge)</td>
</tr>
<tr>
<td>Professor of Clinical X</td>
<td>2</td>
</tr>
<tr>
<td>Clinical Professor</td>
<td>2</td>
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<table>
<thead>
<tr>
<th>Department</th>
<th>Awards</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>Cancer Center</td>
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</tr>
<tr>
<td>Cellular Molecular Medicine</td>
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<td>10,000</td>
</tr>
<tr>
<td>Dermatology</td>
<td>1</td>
<td>15,000</td>
</tr>
<tr>
<td>Family Medicine/Public Health</td>
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<td>34,751</td>
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<tr>
<td>Medicine</td>
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<td>89,530</td>
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<tr>
<td>Ophthalmology</td>
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<td>19,961</td>
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<tr>
<td>Orthopedic Surgery</td>
<td>1</td>
<td>15,000</td>
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<td>Pathology</td>
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<td>0</td>
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<tr>
<td>Pediatrics</td>
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<td>40,000</td>
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<td>0</td>
</tr>
<tr>
<td>Radiology</td>
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<td>10,000</td>
</tr>
<tr>
<td>Reproductive Medicine</td>
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<td>30,000</td>
</tr>
<tr>
<td>SSPPS</td>
<td>3</td>
<td>40,000</td>
</tr>
<tr>
<td>Surgery</td>
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<td>49,709</td>
</tr>
<tr>
<td>Urology</td>
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<td>10,000</td>
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**Total Individual Research Awards:** 38 $443,485
**Bridge Funding Awards**

<table>
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<th>Awards</th>
<th>Amount</th>
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</thead>
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<td>25,000</td>
</tr>
<tr>
<td>Medicine</td>
<td>1</td>
<td>40,000</td>
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<tr>
<td>Ophthalmology</td>
<td>1</td>
<td>40,000</td>
</tr>
<tr>
<td>Pediatrics</td>
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<td>39,920</td>
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<tr>
<td>Psychiatry</td>
<td>1</td>
<td>29,997</td>
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<tr>
<td>SSPPS</td>
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<td>90,000</td>
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<tr>
<td>Surgery</td>
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</table>

**Total Bridge Funding Awards:** 11 $ 341,543

**GRAND TOTAL:** 49 $ 785,028

**Travel to a Scholarly Meeting** – Of 85 applications reviewed, 71 were funded totaling $47,566; $3,651 was returned for redistribution, and 14 applications totaling $16,069 were denied because applicants were ineligible. Twenty-seven of the trips were for foreign travel and 44 were for domestic travel. The breakdown of the awards by rank is as follows:

<table>
<thead>
<tr>
<th>Level</th>
<th>Awards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistant Professor</td>
<td>8</td>
</tr>
<tr>
<td>Assistant Professor-in-Residence</td>
<td>2</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>5</td>
</tr>
<tr>
<td>Associate Professor of Clinical X</td>
<td>5</td>
</tr>
<tr>
<td>Associate Prof-in-Residence</td>
<td>9</td>
</tr>
<tr>
<td>Professor</td>
<td>23</td>
</tr>
<tr>
<td>Professor-in-Residence</td>
<td>8</td>
</tr>
<tr>
<td>Professor of Clinical X</td>
<td>6</td>
</tr>
<tr>
<td>Professor Emeritus</td>
<td>5</td>
</tr>
</tbody>
</table>

**Total** 71

The breakdown of the awards by department is as follows:

<table>
<thead>
<tr>
<th>Department</th>
<th>Awards</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anesthesiology</td>
<td>2</td>
<td>$1,500</td>
</tr>
<tr>
<td>Dermatology</td>
<td>1</td>
<td>750</td>
</tr>
<tr>
<td>Emergency Medicine</td>
<td>2</td>
<td>814</td>
</tr>
<tr>
<td>Family Medicine/Public Health</td>
<td>7</td>
<td>5,229</td>
</tr>
<tr>
<td>Medicine</td>
<td>16</td>
<td>9,866</td>
</tr>
<tr>
<td>Neurosciences</td>
<td>2</td>
<td>1,500</td>
</tr>
<tr>
<td>Orthopedic Surgery</td>
<td>3</td>
<td>2,250</td>
</tr>
<tr>
<td>Pathology</td>
<td>2</td>
<td>1,353</td>
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<tr>
<td>Pediatrics</td>
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<td>3,936</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>2</td>
<td>1,500</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>10</td>
<td>5,866</td>
</tr>
<tr>
<td>Radiation Medicine</td>
<td>2</td>
<td>1,500</td>
</tr>
<tr>
<td>Radiology</td>
<td>3</td>
<td>1,752</td>
</tr>
<tr>
<td>Reproductive Medicine</td>
<td>5</td>
<td>3,750</td>
</tr>
<tr>
<td>SSPPS</td>
<td>4</td>
<td>3,000</td>
</tr>
<tr>
<td>Surgery</td>
<td>3</td>
<td>2,250</td>
</tr>
<tr>
<td>Urology</td>
<td>1</td>
<td>750</td>
</tr>
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</table>

**Total Travel Awards:** 71 $ 47,566

**MARINE SCIENCES RESEARCH GRANT COMMITTEE**

The Marine Sciences Research Grant Committee met on November 22, 2017, February 8, 2018, and May 4, 2018 to review applications for FY 2017/18. The existing policies regarding awards for research and travel to scholarly meetings were thoroughly reviewed by the Committee. The Committee agreed to continue its policy to maintain the ceiling for individual grants at $15,000 and the maximum cumulative support figure at $45,000 over a ten-year period. The modifications were incorporated in the application call letters on the Committee’s website at [http://senate.ucsd.edu/grants-awards/grant-funding/](http://senate.ucsd.edu/grants-awards/grant-funding/). The ceilings for payment towards the cost of airfare on
economy/coach tickets for Travel to a Scholarly Meeting will remain at $1500 for foreign travel and $1000 for domestic travel. The Committee would like new requests for support to demonstrate more evidence of results from previous Academic Senate funding, such as a manuscript or the receipt of a larger award stemming from a "seed" money grant.

Effective February 1, 2018 the committee announced the launching of an electronic application process for travel grants. The new software, e-Grants, replaced the former paper application process. Developed in partnership with campus Information Technology Services, the new software will save PIs and department administrators' time by enabling them to prepare and submit travel applications more efficiently online. The new software, e-Grants, will replace the current paper application for Research and Bridge Funding process in the fall 2018.

**Research** – Of 20 research applications reviewed, 14 were funded totaling $138,827. Six requests totaling $50,752 were denied primarily due to budget constraints. The breakdown of the awards by rank is as follows:

<table>
<thead>
<tr>
<th>Level</th>
<th>Awards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistant Professor</td>
<td>3</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>4</td>
</tr>
<tr>
<td>Professor</td>
<td>4</td>
</tr>
<tr>
<td>Professor Emeritus</td>
<td>1</td>
</tr>
<tr>
<td>Research Scientist</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>14</td>
</tr>
</tbody>
</table>

The breakdown by division is as follows:

<table>
<thead>
<tr>
<th>Division</th>
<th>Awards</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
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<td>CASPO</td>
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</tr>
<tr>
<td>CMBB</td>
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</tr>
<tr>
<td>GRD</td>
<td>4</td>
<td>21,300</td>
</tr>
<tr>
<td>MBRD</td>
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<tr>
<td>MPL</td>
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<td>23,890</td>
</tr>
<tr>
<td><strong>Total Research Awards:</strong></td>
<td><strong>14</strong></td>
<td><strong>$138,827</strong></td>
</tr>
</tbody>
</table>

**Travel to a Scholarly Meeting** – Of 33 applications reviewed, 31 were funded totaling $33,194; $4,392 was returned for redistribution. Two applications were denied because applicants were ineligible. Nineteen awards were for foreign travel and twelve awards were for domestic travel.

<table>
<thead>
<tr>
<th>Division</th>
<th>Awards</th>
<th>Amount</th>
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<tbody>
<tr>
<td>CASPO</td>
<td>8</td>
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<tr>
<td>CMBB</td>
<td>3</td>
<td>3,613</td>
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<tr>
<td>GRD</td>
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<td>4,853</td>
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<tr>
<td>IGPP</td>
<td>4</td>
<td>4,615</td>
</tr>
<tr>
<td>IOD</td>
<td>3</td>
<td>2,510</td>
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<tr>
<td>MBRD</td>
<td>5</td>
<td>4,741</td>
</tr>
<tr>
<td>MPL</td>
<td>4</td>
<td>4,097</td>
</tr>
<tr>
<td><strong>Total Travel Awards:</strong></td>
<td><strong>31</strong></td>
<td><strong>$33,194</strong></td>
</tr>
</tbody>
</table>

Respectfully submitted,

Division Committee

Charles (Jordan) Crandall
Pascal Gagneux
Andrew Kehler
Seth Lerer
Tannishtha Reya
Emily Troemel
Sandra Brown, *ex officio*
Brian Eliceiri, UCORP Representative
Adam Engler, Vice Chair
Emmanuel Theodorakis, Chair
<table>
<thead>
<tr>
<th>Committee</th>
<th>Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Campus Research Grant Committee</td>
<td>Simpson Joseph, Amy Pasquinelli, Lisa Porter, Ravi Ramamoorthi, Katerina Semendeferi, Eric Watkins, Grant Kester, Chair</td>
</tr>
<tr>
<td>Health Sciences Research Grant Committee</td>
<td>William Gerwick, Thomas Hnasko, Lisa Madlensky, Mark Mayford, John Shyy, Harold (Hal) Hoffman, Chair</td>
</tr>
<tr>
<td>Marine Sciences Research Grant Committee</td>
<td>Sarah Gille, Jane Willenbring, Stuart Sandin, Chair</td>
</tr>
</tbody>
</table>
The Educational Policy Committee makes recommendations to the Division concerning educational policy matters; it establishes policies and procedures related to undergraduate and graduate education, and it reviews and approves or disapproves all petitions requesting exceptions to the Regulations of the Academic Senate (see Divisional Bylaw 200). A brief enumeration of the items considered by the Educational Policy Committee during 2017-18 is presented here.

Senate Regulations and Appendices

- **San Diego Senate Regulation 600, Sections A(3) and C**
  The Committee proposed amendments, approved by the Divisional Representative Assembly, to replace the current maximum unit limitation policy with a policy based on a quarter limit effective Fall Quarter 2019. The policy establishes quarter limits of 12 quarters for all undergraduate students entering as freshmen and 6 quarters for students entering as transfer students. Extensions of enrollment beyond the quarter limit will be granted by the colleges for all students with valid reasons who submit a plan to complete their degree requirements.

- **San Diego Senate Regulation 600.H**
  The Committee proposed amendments, approved by the Representative Assembly, to update the residency requirements in San Diego Senate Regulation 600.H to allow the UC Natural Reserve System (NRS) California Ecology and Conservation course to count for the UC senior residence requirement to be consistent with systemwide Senate Regulations.

- **Appendix II. UCSD Policy on Integrity of Scholarship**
  The Committee continued drafting revisions to the Division Manual’s Appendix II: UCSD Policy on Integrity of Scholarship. The proposed changes are intended to clarify the policy and procedural components of Appendix II, streamline the process for resolving academic integrity violations, and update and modernize the language and format. The Committee’s review will continue in 2018-19 with the goal of submitting a proposal to the Representative Assembly.

Educational Policies

- The Committee initiated a review of the Policy on Remote and Distance Instruction and consulted with Karen Flammer, director of the Center for Digital Learning on revisions to the policy. The Committee’s will continue working on revisions in 2018-19.

Petitions Requesting Exceptions to the Regulations of the Academic Senate

- The Committee received 177 undergraduate student petition requests and 176 graduate student petition requests. Of these requests, 92.9% were approved, 6.2% were denied, 0.6% required no action, and 0.3% were referred to the Undergraduate Council for action.

Grade Appeals

- The Committee considered and denied two grade appeals.

Endowed Chair Proposals

- The Committee reviewed and endorsed three proposals submitted by the Executive Vice Chancellor to establish endowed chairs at UC San Diego.

Senate Business

- The Committee was asked by the Division Chair to comment on the following:
  - Organized Research Unit: Center for Comparative Immigration Studies (CCIS)
• The Committee approved granting an exception to students enrolled at UC San Diego prior to Fall 2017 to allow CHEM 40A, 40B, 40C, 43A, and 43AM (or their Honors equivalencies) to apply as upper division for all degree requirements if completed at UC San Diego by Spring 2021 following the Department of Chemistry and Biochemistry’s reclassification of its organic chemistry series from upper division to lower division. EPC found that continuing students should not be hindered in their degree progress as a result of the reclassification.

Respectfully Submitted,

Stephanie Mel, Chair
Samuel Buss, Vice Chair
Thandeka Chapman
Judy Kim
Rachel Klein
Sorin Lerner
Ursula Meyer
Timothy Rickard
Samuel Rickless
The Graduate Council of the San Diego Division of the Academic Senate has a variety of responsibilities regarding the oversight of graduate education at UCSD (see Divisional Bylaw 220). The majority of the business handled by the Council this year fell into the following areas: proposals for new degree programs, modifications to existing programs, reviews of existing programs, and student petitions requesting exceptions to Graduate Council policies. In addition, the Council’s opinion was sought on a number of other issues, such as reviews of Organized Research Units (ORUs). A brief enumeration of the issues considered by the Graduate Council in 2017-18 is presented here.

Proposals for New Degree Programs
The Graduate Council considered seven proposals to establish new degree programs. Five proposals were approved by the Council and received Divisional approval from the Representative Assembly. The Council’s consideration of two proposals is still in process and will be carried forward to the 2018-19 academic year.

New degree program proposals approved by the Graduate Council:
• Department of Bioengineering proposal to establish an MS in Bioengineering with a Medical Specialization
• Department of Electrical and Computer Engineering proposals to establish MS and PhD program areas in Applied Electromagnetics and Machine Learning and Data Science
• Department of Family Medicine and Public Health proposal to establish an MS in Biostatistics
• Global Health Program proposal to establish an MA in Global Health

Proposals for Modifications to Existing Graduate Degree Programs
The Graduate Council considered 18 proposals to modify existing graduate degree programs. Seventeen proposals were approved. One proposal is still in process and will be carried forward to the 2018-19 academic year.

Modifications to Existing Graduate Degree Programs approved by the Graduate Council:
• Department of Chemistry and Biochemistry proposals to change the subject GRE requirement for admission and update degree requirements for the PhD degree
• Department of Computer Science and Engineering proposals to update degree requirements for the MS and PhD degrees and establish a remote course for the MAS in Data Science and Engineering
• Department of Education Studies proposal to establish four remote courses
• Department of Ethnic Studies proposal to update degree requirements for the MA and PhD degrees
• Department of Family Medicine and Public Health proposal to change the name of the terminal MS degree associated with the PhD in Biostatistics from MS in Biostatistics to MS in Biostatistical Sciences
• Department of Literature proposal to revise the curricula for the MS and PhD degrees
• Department of Mechanical and Aerospace Engineering proposal to update degree requirements for the MS degree
• Department of Medicine proposal to revise the curriculum for the MAS in Clinical Research
• Department of Music proposal to update degree requirements for the MA, PhD, and DMA degrees
• Department of NanoEngineering proposal to revise the curricula for the MS and PhD degrees
• Department of Psychology proposal to change the name of its MA and PhD degrees from Psychology to Experimental Psychology
• School of Global Policy and Strategy proposals to revise the curricula for the Master of International Affairs (MIA), Master of Public Policy (MPP), and Master of Chinese Economic and Political Affairs (MCEPA)
• Scripps Institution of Oceanography proposal to revise the curriculum for the MAS in Climate Science and Policy
Skaggs School of Pharmacy and Pharmaceutical Sciences proposal to update the degree requirements for the MS in Drug Development and Product Management

Reviews of Graduate Degree Programs
Graduate programs are reviewed by the Graduate Council once every eight years. An external committee visits the program or department under review, and submits its findings to the Graduate Council for consideration. The program or department under review has an opportunity to respond to issues raised by the external review committee prior to the Graduate Council’s review. After considering both the external committee report and the program’s response, the Graduate Council provides recommendations to the program or department during its initial review. Progress towards achieving those recommendations and goals set forth in the initial review is examined in a follow-up review conducted by the Graduate Council. The following programs and departments were reviewed:

Graduate Program Reviews (initial review):
- Department of Cognitive Science
- Department of Computer Science and Engineering
- Department of Music
- Department of Philosophy
- Joint Doctoral Program in Language and Communicative Disorders
- Joint Doctoral Program in Public Health
- Rady School of Management (MBA Programs)
- Scripps Institution of Oceanography

Graduate Program Reviews (follow-up review):
- Department of Bioengineering
- Department of Chemistry and Biochemistry
- Department of Structural Engineering
- Department of Theatre and Dance
- Joint Doctoral Program in Biology
- Joint Doctoral Program in Clinical Psychology
- MAS in Clinical Research
- MAS in Health Policy and Law
- MAS in Leadership of Healthcare Organizations

Graduate Fellowship (Block Grant) Reviews
Graduate programs’ graduate fellowship (block grant) allocations are reviewed by the Graduate Council every four years. The Graduate Council reviews each program to adjust the merit component of the block grant allocation. The following programs were reviewed:

- Department of Cognitive Science
- Department of Computer Science and Engineering
- Department of Education Studies
- Department of Music
- Department of Political Science
- Department of Theatre and Dance
- Division of Biological Sciences
- Neurosciences Graduate Program

Organized Research Units (ORUs)
The Graduate Council opined on the reviews of the following Organized Research Units:

- Center for Comparative Immigration Studies (CCIS)
• Center for Human Development (CHD)
• Qualcomm Institute – UCSD division of the California Institutes for Telecommunications and Information Technology (QI-Calit2)

**Other Business**

• The Graduate Council endorsed proposals to discontinue the EdD in Teaching and Learning and three program areas of study for the MS and PhD degrees in the Department of Electrical and Computer Engineering.
• The Graduate Council reviewed a pre-proposal to establish a School of Public Health and provided comments for Senate consideration.
• The Graduate Council reviewed a proposal to grant academic unit status to the Halicioğlu Data Science Institute and provided comments for Senate consideration.
• The Graduate Council endorsed the renewal of the affiliation agreement between the Bioinformatics and Systems Biology graduate program and the Salk Institute for Biological Sciences.
• The Graduate Council discussed a proposed systemwide open access policy and also reviewed current local procedures for submitting the final dissertation/thesis and requesting an embargo period for manuscripts. The Council requested that the Graduate Division update the signature requirements on the Dissertation and Thesis Release Form.
• The Graduate Council approved a proposal from the Graduate Division to raise the minimum TOEFL score required for admission.

Respectfully submitted,

Sorin Lerner, Chair
Shahrokh Yadegari, Vice Chair
David Barner
James Nieh
Francesco Lanza di Scalea
Maho Niwa Rosen
Lynn Russell
Rosaura Sanchez
Susan Taylor
Ronghui (Lily) Xu
Kit Pogliano, Dean of the Graduate Division, *ex officio*
The Undergraduate Council of the UCSD Academic Senate has a variety of responsibilities regarding the oversight of undergraduate education at UCSD (see Divisional Bylaw 210). The majority of the business handled by the Council during the year is divided into the following areas: proposals for new majors and minors, modifications to existing majors and minors, modifications to existing College curriculum, modifications to Senate Regulations, reviews of existing undergraduate programs, and course approvals. In addition, the opinion of the Council was sought on a number of other Systemwide and Divisional issues. A brief enumeration of the issues considered by the Undergraduate Council is presented here.

Proposals for New Majors and Minors
The Undergraduate Council considered five requests to establish a new major and four requests to establish a new minor. Three major proposals and two minor proposals were approved by the Council in 2017-2018. Two major and two minor proposal were returned seeking more information.

New proposals approved by the Undergraduate Council:
- B.S. in Business Psychology
- B.A. in International Studies - Philosophy
- B.S. in Political Science/Data Analysis
- Minor in Supply Chain
- Minor in Climate Change Studies

Proposals for Modifications to Existing Majors and Minors
The Undergraduate Council considered thirty-nine requests to modify existing majors and minors. Thirty-two proposals were approved as proposed and seven proposals were returned seeking more information.

Reviews of Undergraduate Degree Programs
Undergraduate programs are reviewed by the Undergraduate Council once every seven to eight years. A review committee, including one member of the Council, visits the college, program, or department under review, and submits its findings to the Undergraduate Council for consideration. The college, program, or department under review has an opportunity to respond to issues raised by the review committee prior to the review and recommendation of the Undergraduate Council. After considering both the committee report and the program’s response, the Undergraduate Council provides recommendations to the college, program, or department. Progress towards achieving those recommendations and goals set forth in the initial review is examined in a follow-up review conducted by the Undergraduate Council.

Undergraduate Program Reviews conducted in 2017-18:
- Electrical and Computer Engineering
- Linguistics
- Marshall College
- Computer Science and Engineering
- Physics
- Theatre and Dance
- Program for the Study of Religion

Undergraduate Council Review and Recommendations issued in 2017-18:
- Bioengineering
- Structural Engineering
Course Approvals
The Undergraduate Council considered 235 requests to establish new courses and 420 requests to revise existing courses.

Respectfully submitted,
Samuel Rickless, Chair
John Eggers, Vice Chair
Anthony Burr
Aaron Coleman
Justin P. Opatkiewicz
Tajana Rosing
Jason Schweinsberg
John Serences
Jane Teranes
Haim Weizman
REPORT OF THE GRADUATE COUNCIL

The Graduate Council and Undergraduate Council approved a joint proposal from the Department of Economics and the School of Global Policy and Strategy to establish a new five-year Bachelor of Arts/Master of Public Policy (BA-MPP) program. The formation of the BA-MPP also requires a revision to San Diego Senate Regulation 706. Requirements for the Master of Public Policy (MPP) to change the residency requirement by allowing for completion of the degree in one year.

The Committee on Rules and Jurisdiction has reviewed the proposed changes to SD Senate Regulation 706 and finds them consonant with the Code of the Academic Senate. SD 706 is attached to this report with the proposed changes red-lined.

The Council is supportive of this academic endeavor and recommends that the Representative Assembly approve the proposal and proposed change to San Diego Senate Regulation 706.

Sorin Lerner, Chair
Graduate Council


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Executive Summary
Following the model of the successful five-year combined program of undergraduate and professional study leading to a Bachelor of Arts in International Studies and a Master of International Affairs, the School of Global Policy and Strategy and the Department of Economics are proposing a new five-year program, allowing the completion of a Bachelor of Arts (B.A.) in Economics-Public Policy and a Master of Public Policy (M.P.P.). Students will first declare themselves as Economics majors (EN25) and follow the existing requirements for the degree. In the spring of their junior year, they may apply to the five-year program and, upon admission, change to the Economics-Public Policy major. As in the BA/MIA, students will take master’s level GPS courses in their senior year, completing their undergraduate degree and developing the skills required for matriculation to the graduate level in their fifth year.

Only students admitted to the five-year BA/MPP will be allowed to declare the Economics-Public Policy major. Should someone opt out prior to undergraduate graduation or fail to matriculate to graduate standing, they will be allowed to complete the standard B.A. in Economics. Application and admissions processes, and the determination of eligibility for matriculation to the fifth year will follow what is in place for the BA/MIA.

This program will require the creation of a new undergraduate major code in the Economics Department, and a change in the existing Master of Public Policy Regulation (706), bringing it in line with the regulation for the MIA (IR78; 707) and which allows matriculation into one year of graduate status following successful completion of the B.A. No new courses or faculty, and no changes in the quarterly rotation of courses will be necessary. The proposal does not create a new graduate degree. The only innovation on the undergraduate side is the requirement of taking GPS graduate core courses, and the use of two in place of upper division Economics Department electives.
GPS and the Department of Economics would like to open the admissions process to students with junior standing in Spring Quarter, 2019, allowing the first class to begin senior year, GPS core coursework in Fall Quarter, 2019.

The program we propose not only makes use of an institutional collaboration already in place, but increases its reach. GPS faculty regularly teach in the Economics Department, and several ladder rank Economics faculty offer courses at the School, including two in the existing MPP core. The five-year program recognizes these intellectual synergies and uses them to the particular advantage of undergraduates. The program we propose not only answers the question “How does this apply in the world?” but also shortens the time to degree without stinting on training for students with career goals in policy evaluation, for which a master’s is requisite. Indeed, the rigorous training provided to undergraduate Economics majors at UCSD allows them to enter GPS policy analysis classes on par with second year students. Finally, the partnership with Economics deepens the GPS admissions pool by providing a consistent stream of well-trained applicants. Applications to both the BA/MIA and MPP for fall 2018 are up considerably over the numbers for fall 2017. The BA/MPP will be responding to this demonstrated interest.

The BA/MPP program takes seriously the interest among students in more affordable options to earn an advanced professional credential without forgoing rigor or co-curricular opportunities. It allows well qualified undergraduates to earn the MPP with only one year of graduate tuition and professional school fees while still proving successful in the course work of a two year program. The BA/MPP will provide a model of curriculum design for additional partnerships, both locally and internationally.
October 3, 2018

SORIN LERNER
Chair, Graduate Council

SUBJECT: Review of the Proposed Amendments to San Diego Divisional Senate Regulation 706

Dear Sorin,

The Committee on Rules and Jurisdiction reviewed the proposed amendments to San Diego Divisional Senate Regulation 706. Requirements for the Master of Public Policy (MPP), and found the proposed amendments consonant with the code of the Academic Senate.

Sincerely,

Professor Andrew Dickson, Chair
Committee on Rules and Jurisdiction

cc: R. Horwitz
    M. Corr
    L. Hullings
    R. Rodriguez
The degree of Master of Public Policy will be granted on the following conditions:

A) The candidate shall have received the Bachelor’s degree; have fulfilled the requirements for admission to the Graduate Division and the School of Global Policy and Strategy Graduate School of International Relations and Pacific Studies; and shall meet any additional requirements that may be specified by the Admissions Committee of the School of Global Policy and Strategy Graduate School of International Relations and Pacific Studies.

B) The candidate shall have completed at least one year two years of resident graduate study (4892 units) at the University of California, San Diego.

C) In addition to the Core Requirements, the candidate shall select at least one Area of Specialization from those approved for inclusion in the MPP graduate program by the School of Global Policy and Strategy Graduate School of International Relations and Pacific Studies, and shall pursue a program of study approved by his or her program advisory committee.

D) The candidate must maintain a GPA of 3.0 in all course work undertaken as a graduate student at the University of California.

E) The program of work of each candidate shall be under the supervision of a faculty committee appointed by the Dean of the School of Global Policy and Strategy Graduate School of International Relations and Pacific Studies and the Dean of the Graduate Division Graduate Studies.
Academic freedom is not the same as free speech. Academic freedom pertains specifically to teachers and researchers in universities and colleges, whereas free speech is the First-Amendment right of all US citizens. The basic document is the 1940 “Statement of Principles on Academic Freedom and Tenure,” drafted by the American Association of University Professors and the Association of American Colleges. The full document, with later commentary, is available on the AAUP website, under “issues.” Here are the basic points, in quotation marks, followed by CAF’s comments.

1. “Teachers are entitled to full freedom in research and publication of the results....”
2. “Teachers are entitled to freedom in the classroom in discussing their subject, but they should be careful not to introduce into their teaching controversial matter which has no relation to their subject.”

This means that teachers are free to introduce controversial material that does relate to their subject. As the 1970 commentary explicates: “The intent of this statement is not to discourage what is ‘controversial.’ Controversy is at the heart of free academic inquiry....” But “Teachers [should] avoid persistently intruding material which has no relation to their subject.”

3. “College and university teachers are citizens, members of a learned profession, and officers of an educational institution. When they speak or write as citizens, they should be free from institutional censorship or discipline, but their special position in the community imposes special obligations. As scholars and educational officers, they should remember that the public may judge their profession and their institution by their utterances.”

The university may not censor faculty members’ speech inside or outside of the classroom, research environment, or university public sphere, nor may it punish teachers for what they say as citizens. UC faculty members are also permitted to criticize the University. At the same time, teachers should, as a matter of professional obligations, voluntarily take care as they offer extra-mural political speech, setting an example of how to carry out productive debate in a democratic society: For instance, not lying; avoiding ad hominem remarks; listening to the other side; providing evidence for their positions; and being willing to change their minds. Or, as the AAUP commentary goes on to explain: “They should at all times be accurate, should exercise appropriate restraint, should show respect for the opinions of others, and should make every effort to indicate that they are not speaking for the institution.” As a recent UCAF statement emphasizes, faculty members should show respect for others, even when one cannot possibly respect their opinions. This is, surely, the mode of debate we strive to teach our
students. As the AAUP commentary notes, “As citizens engaged in a profession that depends upon freedom for its health and integrity, professors have a particular obligation to promote conditions of free inquiry....”

Sincerely,

Professor Dana Kay Nelkin
Chair, Committee on Academic Freedom

Professor Adam Aron
Member, Committee on Academic Freedom

Professor Hoang Nguyen
Member, Committee on Academic Freedom
February 14, 2018

FARRELL ACKERMAN
Chair, San Diego Divisional Academic Senate

SUBJECT: Course Cancellation Petition Response

Dear Professor Ackerman,

As the members of the UC San Diego Academic Senate Committee on Academic Freedom, we have evaluated a recent petition from a group of students and community members to cancel a particular class in progress and prevent its being taught in the future.

First, we recognize that the Academic Senate is responsible for vigilantly maintaining and promoting the free expression of ideas and opinions on campus and for encouraging critical, deliberative and informed debate on controversial issues. This responsibility is manifested both in our valuing and respecting the right of students to express their deeply held views, and our valuing and respecting of the right of our faculty, in accordance with fundamental principles of academic freedom, to choose what they teach.

Second, we conclude that cancelling or removing this or any other course for the reason that it contains the study of controversial material, or even material widely regarded as morally problematic, would undermine both the value of free inquiry and the associated rights of faculty to engage in such inquiry by choosing their course content. These rights are set out in the Principles on Academic Freedom and Tenure¹, and include the right of faculty to decide what to teach in the classroom, unimpeded by administrative, commercial, governmental or other pressures. In this context, we think it is important to highlight two aspects of the Principles:

- First, faculty have a right to introduce controversial material into the classroom.
- Second, promoting free inquiry, which at times has controversy at its heart, is not only a right, but a special obligation of faculty members.

This is because free inquiry is itself at the heart of the educational mission. We honor this value both by listening to dissenting voices, and by respecting and protecting faculty members’ essential right to academic freedom.

Sincerely,

Professor Dana Kay Nelkin
Chair, Committee on Academic Freedom

Professor Adam Aron
Member, Committee on Academic Freedom

Professor Hoang Nguyen
Member, Committee on Academic Freedom

cc: R. Horwitz - Vice Chair, San Diego Divisional Academic Senate
    R. Rodriguez – Director, San Diego Divisional Academic Senate Office