February 23, 2016

To: Kathryn Uhrich, Dean, College of Natural & Agricultural Sciences

From: Jose Wudka, Chair, Academic Senate

Subject: Proposal Regarding Reorganization of CNAS

Dear Kathryn,

Executive Council reviewed the CNAS reorganization proposal during its February 8 meeting. In preparation for that, I asked several committees to opine on the proposal in order for Council to have an informed discussion.

Both Council and the reviewers had a variety of serious concerns about the proposal in regards to academic and faculty welfare issues. I will refer you to the attached reports for details and mention here only some of the main points: The proposal lacks detail regarding what will happen to graduate and undergraduate programs during the restructuring, as well as, the mechanisms that will be in place to ensure students are not negatively affected. The proposal also lacks a clear implementation plan, including an estimate of the resources needed, an evaluation of staffing needs, the details of personnel actions (i.e. approval process for faculty changing departments, provisions for those who might refuse to move from departments slated to be disestablished, etc.), number of faculty expected to change departments, and a schedule for the implementation of the restructuring. There is no attention given to diversity and equal opportunity issues.

There is no discussion of the resources that will be required. Also absent is a justification for the proposed changes and the departmental votes supporting them. Some reviewers noted that the proposal fails to mention (let alone address) the problems voiced by the departments of Chemistry, Mathematics and Physics, whose issues provided a strong motivation to consider a reorganization of the College. The proposal also contained ancillary items that caused some confusion, such as the Material-Science & Engineering Institute without evidence of any discussion with the Bourns College of Engineering.

Based on the above points (and on those made in the attached full committee reports), Council advises against continuing with this reorganization program before addressing the concerns listed. Council is aware that there are faculty in the College who strongly favor the proposed changes and would like to emphasize that this advice and recommendations are provided not as an obstacle, but to help ensure a smooth transition should the administration decide to continue the process.
January 25, 2016

To: Jose Wudka, Chair  
Riverside Division

From: Sarjeet Gill, Chair, Executive Committee  
College of Natural and Agricultural Science

Re: College Reorganization

There was an error in item 2, and this is corrected here.

The CNAS Executive Committee at their January 5th meeting reviewed the College Reorganization plan.

The committee voted for the following:

1. The establishment of two new departments “Molecular, Cellular and Systems Biology” (MCSB), and “Evolution, Ecology, and Organismal Biology (EEOB)" = 15 for, 1 abstention
2. The voluntary relocation of the faculty from CNAS life science departments to the newly established departments. = 15 for, 1 against
3. The disestablishment of the Department of Biology and Department of Cell Biology and Neuroscience once they are empty = 16 for (unanimous)
4. The renaming of Environmental Sciences to “Environmental and Ecosystems Sciences.” = 16 for (unanimous)

Hence there was very strong support for all actions proposed by the Dean of CNAS. Dean Uhrich, the new Dean of CNAS voted in favor of all actions.

Yours sincerely,
Sarjeet Gill, Chair  
CNAS Executive Committee
February 1, 2016

To: Jose Wudka
Riverside Division Academic Senate

From: Georgia Warnke, Chair
Committee on Academic Personnel

Re: CNAS Reorganization Proposal

The Committee on Academic Personnel met on December 14, 2015 to discuss the proposal for reorganizing the College of Natural and Agricultural Science. CAP voted unanimously (+9-0-0) against supporting the proposal. Members think that it fails to demonstrate how the proposed changes will make CNAS a stronger or more highly ranked college. To the contrary: among other deficiencies, CAP found that the proposal fails to address the concerns of the physical and mathematical sciences; fails to consider the impact of unknown numbers of faculty moving from one department to another; fails to account for potential negative effects on existing established and well-recognized departments; fails to deal with the inadequacies of the existing infrastructure and fails to address the increase to administrative costs that the changes will incur.
January 13, 2016

To: Jose Wudka, Chair
    Riverside Division

From: Stephen Wimpenny, Chair
      Committee on Educational Policy

Re: Review of Proposed CNAS Reorganization

The Committee on Educational Policy reviewed the proposal for a reorganization of CNAS at their January 8, 2016 meeting. The Committee has significant concerns regarding the continuity of undergraduate instruction and how this will be maintained following the re-organization. These include the issues of how the programs will continue to operate and how faculty will be assigned to instruct undergraduate courses. The Committee recommends that the proposal be expanded to address these issues explicitly.
February 1, 2016

To: Jose Wudka  
Riverside Division Academic Senate

From: Jennifer Hughes, Chair  
Committee on Faculty Welfare

Re: CNAS Reorganization Proposal

The Committee on Faculty Welfare met on January 19, 2016 to discuss the material received for the CNAS Reorganization proposal. The Committee understands the proposal’s intent is to resolve long enduring problems within the college and was received in the Senate in advance of the new CNAS dean’s effective start date. Faculty Welfare noted the proposal does not include official communication about how this proposal was received by the affected departments, CNAS faculty as a whole, the CNAS Executive Committee, nor comments from the new Dean. In the absence of this important material, the Committee on Faculty Welfare cannot make a sufficient judgement regarding the proposal. In addition, Faculty Welfare is aware of the historical problems and concerns of the physical sciences; however, the Committee feels that the current proposal is not persuasive in solving nor addressing any of these preexisting issues. It is unclear how graduate programs would be affected by the proposed changes and how this proposal or any life science reorganization would enhance the interdisciplinarity of existing faculty. Faculty Welfare advises that none of the proposed actions take place until the appropriate people are consulted and a complete proposal with sufficient context is received for Senate review.
January 27, 2016

To: Jose Wudka, Chair
   Riverside Division

From: Leonard Nunney
       Committee on Library, Information Technology and Scholarly Communication

Re: Campus review - CNAS Reorganization

The Committee on Library, Information Technology and Scholarly Communication reviewed the proposal for the CNAS Reorganization at their January 11, 2016 meeting. The Committee noted: the impacts to Undergraduate Education, in particular to the Biology major, were not defined. There is not enough information to determine how these undefined changes will affect Library and Information Technology resources. The Committee would like these issues to be addressed in the proposal.
January 25, 2016

To: Jose Wudka  
Chair, Riverside Division Academic Senate

Fr: Kenneth Barish  
Chair, Committee on Planning and Budget

Re: Review of the CNAS Reorganization Process

The Committee of Planning and Budget (CPB) has reviewed the proposal for reorganization in the College of Natural and Agricultural Sciences at UCR. The provided document does not adequately address the budget ramifications of such a change, provide a real plan for the implementation of the reorganization, or make clear how the proposal has been vetted. As such, we would ask for greater and more careful detail on these points before we can articulate an informed opinion.

In terms of budget, the proposal outlines the administrative structures, but does not make any direct statements about the impact of the reorganization on budgets. In particular, what are the financial costs for implementing the change? And what will be the long-term "steady-state" differences between the current budget requirements and the new ones?

In terms of an implementation plan, the proposal is almost equally silent. Two paragraphs (titled "Transition") state that the proposal may be cause for concern among junior faculty and that they should discuss these with senior faculty and administrators (discussions which, presumably, should have happened prior to this proposal) and that a mentoring program will be available to junior faculty. No other mention of how to manage the transition is made. The entirety of the treatment of the Biology major after the closure of the Biology Department is confined to a single footnote to Table IV.

This is troublesome, as the details of the implementation are critical. This proposal cannot be evaluated without understanding the answers to questions such as,

- How will undergraduate and graduate programs be administered during the transition?

- How will degree programs be transferred?
- What will happen if a faculty member chooses not to change departments (out of one scheduled for removal)? Will such departments be removed, thus terminating the faculty's positions? Will the departments be allowed to remain with only a few (one?) members?

- How will faculty requests for transfers be handled? Who decides whether it is approved? Will this create a situation in which departments have members who were not approved by the other members of the department?

- How long will faculty have to make a change?

- How many faculty are expected to change and in what way? It is surprising the proposal does not have a matrix showing rough numbers of people "from" and "to" each department to give a sense of scope. In particular, the notion of "open enrollment," is not sufficiently explained. Hope and expectation that things will proceed smoothly are not sufficient.

Finally, we are uncertain about whether this proposal has broad support from the CNAS faculty. The report does not read as a carefully considered plan in which all faculty's concerns have been vetted and weighed. The "History" section states that various (often small) groups met and made decisions. The core text occasionally mentions that various faculty groups or departments were (or were not) in support of different aspects. However, the methods for determining these supports are missing. The executive committee gave its approval to a particular subset of the proposed changes, but we would expect letters of support from the departments involved or evidence that more than just 10-20 faculty approve the changes.

The proposal's discussion of the various changes occasionally mentions differing viewpoints, and then either accepts them, dismisses them, or delays them for future consideration. Which of these three options are selected appears arbitrary. The document is filled with statements such as "we believe" and "we do not believe," and it is unclear who is represented by "we."

Specific examples of the variety of rationale and justifications in the document include the following. In each case it is not clear whether a small group is making this decision, or whether there is overwhelming support for the opinion.

- The Department of Nematology's request to remain intact is honored, but with voiced reservations on the part of the proposal writers.

- The Department of Biochemistry voiced concerns about losing its independent status, and this is both honored and supported by the document.

- The rationale for "Department of Entomology" seems to imply that the generation of the MCSB department will have ramifications on Entomology; yet
it is not clear what faculty (especially in Entomology) feels about this change; only that the proposal writers view it as positive.

- The rationale for the "Department of Environmental & Ecosystems Sciences" expressly states that this may not be the final structure and that there are unaddressed concerns about the location of ecology under the new structure.

- The rationale notes that the Department of Statistics has an impact on a "range of scientific disciplines." While asking that collaborations with other departments continue, it places it in Life Sciences based on current collaborations (a departure from the "forward-looking" view taken with Biology and the approach taken with mathematics, a department with a similar role).

While the proposed changes may be well considered and enjoy broad support, the current proposal document does not provide enough detail and clarity for this committee to support it in its current form. We would like to see additional information addressing the above points before making a recommendation.
January 27, 2016

To: Jose Wudka, Chair
   Riverside Division

From: Richard Arnott, Chair
       Committee on Research

RE: Proposed CNAS Reorganization

The Committee on Research discussed the proposal for the reorganization of CNAS at their January 15th meeting. The proposal is nicely crafted and superficially elaborates several possible advantages to the College. However, the proposal is rather one-sided because it downplays or neglects to mention at all a number of serious disadvantages. The Committee has the following major concerns with the proposal relevant to the establishment of two new departments "Molecular, Cellular and Structural Biology” (MCSB), and "Evolution, Ecology and Organismal Biology” (EEOB):

1. Recent campus planning documents have emphasized the importance of maintaining and/or building on current areas of strength. However, this proposal would likely do the opposite: it would moderately to potentially catastrophically decrease the strength and breadth of several nationally and internationally acclaimed departments in the cause of creating a new department, which may or may not become an “instant” center of excellence.

2. The original motivation for forming a new department by reorganization of existing departments came from a small minority of the faculty within the college, 35 of whom signed the original letter of intent to form a new department. That proposal, however, was in the context of a radically different plan calling for complete abolishment of all life sciences and replacement by four large departments, one of which would have been the proposed MCSB department. Many of the signatories to that letter are dissatisfied with the current plan, and it remains entirely unclear whether those faculty would indeed leave their current departments. Recent conversations with faculty suggest that at least some are seriously reconsidering, not least because of the catastrophic effect that the reorganization could have on current departments. Under those circumstances, the new
department would not achieve its goal of consolidating all faculty with similar research interests into one department.

3. At least some of the affected departments have made careful efforts spanning several decades to maintain a continuum from very basic science that incorporates state of the art ideas and techniques through to applied science that addresses immediate issues. These efforts have been very successful, with departments like Botany and Entomology being recognized as among the best in the world. For example, in the case of Entomology, in the most recent 5-year review of their graduate program, the review committee specifically noted that Entomology’s balanced structure was a model that similar departments should follow. Removal of a few to many of the faculty with strong molecular biology and related interests from these departments would undermine these long-term efforts to maintain both breadth and strength within these departments, and would have a significant to substantial deleterious effect on the breadth and quality of the research emanating from those diminished departments.

4. Another major college goal, cited in the proposal document, is “capitalizing on synergies to propel UCR as a leader in translational agriculture”. However, the proposal would seem to encourage the opposite, by separating faculty involved in basic science from those doing more translational and applied science. Thus, instead of basic and applied scientists being commingled in departments where interactions and collaborations are catalyzed, they would be segregated into groups which would be much less likely to interact.

5. The Committee considers the argument that the reorganization would encourage new collaborations to be specious, for several reasons. First, numerous faculty with similar interests already collaborate across departments and colleges, and this is further encouraged by interdepartmental programs, centers, and institutes. Second, whereas reorganization might increase interactions among the small minority of college faculty who will form the new department, it will definitely decrease interactions between those faculty and the departments from which they came. Furthermore, the interactions within the faculty in the new department would be “like talking to like”, instead of the much broader cross-fertilization that occurs in current departments which comingle a full continuum of basic and applied scientists. Lastly, many researchers who do not plan to join the new MCSB department are using similar methods and exploring similar questions to those proposed for the new department, so the decentralization of research interests and techniques will persist anyway.

6. The reorganization plan does nothing to address the decades-long issue of the hard sciences being dissatisfied with the current college structure.
7. The Committee would not recommend a divisional structure within the new department because this would simply lend itself to intradepartmental competition for scarce resources. For example, historically, Entomology had a divisional structure, and abolition of the divisions in the 1980s produced a much more cohesive and collegial department, which persists to this day. In addition, it is not clear how the different proposed divisions of the new proposed MCSB department would be administered or how they would interact with other departments that lack such divisional structure, but that have ongoing research in areas that overlap with those divisions.

8. There are numerous issues, such as maintenance or reorganization of undergraduate teaching, graduate programs, and space and relocation of faculty to form a cohesive new department, which the proposal does not address.

Because of the serious concerns described above, the Committee recommends that the reorganization of CNAS does not go forward as described in the proposal.
January 25, 2016

To: Jose Wudka, Chair  
Riverside Division

From: David Lo, Chair  
Graduate Council

RE: Proposal for the Reorganization of CNAS

On January 21st, the Graduate Council had a chance to discuss the CNAS reorganization proposal in some detail. I am forwarding here a summary of the main points from our discussion.

- The overall rationale for the reorganization is neither clear nor well justified. The long history of discussions on the reorganization of CNAS has had many different origins, directions, and intentions, many of which are absent in this latest version. This reorganization proposal is now down to what can be distilled into a simple shifting of a few of the CNAS faculty from one department into another, with an accompanying name change in two affected departments. The movement of faculty from one department to another generally would not require the wholesale disestablishment of departments and establishment of new departments, especially since a large number of faculty will remain in present associated groups of faculty in related research areas. Thus, the rationale for such significant efforts for likely minimal effect is not clear.

- Department reorganization does not have intended benefits to new faculty recruiting. The new names associated with the newly established departments take one step forward and another back. The new EEOB department would be home of the EEOB graduate program, currently a departmental program within Biology. However, the new MCSB department would essentially lose the department-level prominence of a major research area – Neuroscience - that is a successful graduate program (and undergraduate major). Although Neuroscience as a discipline is associated with a newly described “emphasis area” within MCSB, it is not an actual formal administrative or academic unit with a chair or assigned resources, and it can be disbanded on a simple faculty vote. The argument had been presented that the five new emphasis areas would be helpful to new faculty recruiting in each of the emphasis areas; however, the absence of any formal administrative or resource commitment to any emphasis area would in fact be as likely to be a disincentive for any prospective faculty recruit due to uncertainties in departmental commitment.
Similarly, the creation of an emphasis area in Microbiology and Immunology will suffer from the absence of senior faculty leadership to drive new faculty recruitment. Indeed, depending on the unknown numbers of microbiologists to move to this group from the existing department of Plant Pathology and Microbiology, there will be confusion over how new microbiology faculty recruiting will be balanced between these two groups. This lack of detailed information on actual faculty moves in this proposal also leaves significant confusion over the significance of the reorganization on existing faculty distributions, making it difficult to evaluate the impact and value of the proposed reorganization.

- The reorganization of the departments has potential negative impact on the Biology undergraduate major and potentially creates similar problems in other undergraduate majors. Over the past decade the Biology department could not hire in the areas of molecular and cellular biology. This decision, combined with retirements and administrative moves, left Biology as a defacto EEOB department. Indeed, they renamed the departmental graduate program as EEOB a decade ago. That Biology exists not as a full-spectrum department but instead as one focused in the areas of Evolution, Ecology, and Organismal Biology means that they require support from other CNAS departments to provide teaching faculty to cover the curriculum in the undergraduate Biology major -- by far the largest major in the College -- but without administrative or structural commitments from these other departments to insure adequate teaching coverage. The renaming/creation of a new EEOB department fails to address this problem, as the proposed MCSB department remains administratively separate without a way to insure adequate commitments to the undergraduate Biology curriculum. The potential redistribution of Microbiology faculty between Plant Pathology and MCSB (Microbiology and Immunology emphasis area) creates a similar problem of faculty commitment to supporting the undergraduate major. We suggest that a poll of the CNAS faculty or a clearer listing of prospective faculty moves be provided before the impacts of the proposed CNAS reorganization can be fully assessed.

- Known issues in CNAS are not addressed by this proposal. While it would be well beyond the scope of this note to discuss many of the concerns within CNAS that led to the original discussions on reorganization years ago, there are problems with more ongoing and significant impact that call for discussion at this time. For example, we note that in nearly every graduate program review by Graduate Council in CNAS-based programs, there have been concerns about the selection of students for Teaching Assistantships, especially regarding the need for a more equitable distribution across programs and departments in support of undergraduate teaching, as well a need for more transparency in the process of selecting students. These are not addressed by this proposal, and the redistribution of faculty among departments and remaining concerns about department coverage of undergraduate curricula has the potential to confuse the question even more. As for the graduate programs themselves, programs sponsored by CNAS departments as well as interdepartmental programs within CNAS are not likely to be dramatically affected by these changes, but some of the department-sponsored programs may be negatively affected by shifts in department faculty. Finally, graduate programs that might have benefitted from reorganization or mergers are also not likely to see any attention paid to their issues, and may also suffer from adjustments in administrative support.
Reference to a new Institute for Materials Science and Engineering. Although the proposal aims to be forward-looking in research initiatives, the reference to a new Institute for Materials Science and Engineering seems particularly inappropriate in view of the existing interdisciplinary program in Material Science and Engineering in the Bourns College of Engineering. Cross-college collaborations are certainly to be encouraged and have been strongly supported by existing Institutes, such as the IIGB, but this reference seems very much out of place at the present time.

In sum, the proposal for reorganization of CNAS, while aspirational in its aims, appears to be only the residue of much larger goals. For example, it leaves all of the existing "Ag" departments as is; only grouped into a new Division of Agriculture and Natural Resources. The resulting proposal involves significant and disproportionate shifts in two departments, but leaving what appears to be only a minimal impact on research and educational programs. Moreover, many of the potential impacts are not in a positive direction, and they present a frustrating picture of undirected activity without addressing many known issues within CNAS.
January 29, 2016

TO: Jose Wudka, Chair
Riverside Division

FR: Srikanth Krishnamurthy, Vice Chair
Executive Committee, Bourns College of Engineering

RE: CNAS Reorganization Proposal

The BCOE Executive Committee discussed the CNAS reorganization. There were no issues with
the proposed reorganization items that were voted on by the CNAS Executive committee.
However, there were two items in the reorganization plan that caught the BCOE’s attention since
they can impact Engineering.

First was the recommendation of Statistics under the Division of Life Sciences. We were
wondering what impact this could have on collaborations with Engineering, especially in the
rapidly growing area of Data Sciences and Bioengineering.

Second, we are assuming that the institute proposal is for research aspects of Materials Science
& Engineering (MSE), rather than educational aspects. For the latter, the MSE BS, MS and PhD
programs are under BCOE faculty. Joint faculty members have been hired for the program as
well as home departments. Moreover, the proposal for MS&E Institute was advanced by a
BCOE faculty for the Cluster Hire Program. This proposal was rejected. It would be beneficial
if CNAS considers this proposal as well.