

February 16, 2021

Dear Colleagues,

We are writing to update you on UC Santa Barbara Research during the pandemic. In the memo to campus dated November 18, we discussed several ways that we would like to increase the amount of research being done on campus. On December 3, there was a Regional Stay-at-Home order announced and while we were fortunate to be able to continue our research without change in this period, we had to pause any plans for increases. The regional Stay-at-Home order has since been lifted and in Santa Barbara County, the 7-day-averaged case count as of today is down 70% from a peak of just over 500 on January 16. Although the situation is much improved, the case counts are still significant, the roll out of vaccines is slow, and variants are arriving in California that are more transmissible or for which defenses from a previous infection or vaccine may be less effective, meaning that we need to continue to be very cautious. It is with this backdrop that the Ramp-up Oversight Committee met earlier this month.

### **Emphasis on mitigation by non-pharmaceutical methods**

First of all, it was emphasized that with the arrival of the aforementioned variants, non-pharmaceutical methods of protection are more important than ever. The committee agreed to emphasize this in the research program going forward. First, we will now require better quality masks to be used in any space that has more than one occupant or that has less than the highest standard of ventilation. With a good seal, KN95 and N95 masks filter 95% of particles as small as 0.3 microns and it is often possible to obtain KN95 and even N95 masks at reasonable prices. As a potentially more accessible and affordable option, it has recently been demonstrated that a 3-ply blue surgical mask covered by a 3-ply cloth mask that fits well enough to inhibit leakage around the edges can achieve 92.5% filtration efficiency. The committee also reasserted the importance of maintaining good distancing of 9' or more, especially indoors, with separations down to 6' for only very brief intervals. Special protocols have been worked out for tasks that require participants to be within 6' of one another for extended periods of time. These must be submitted for approval and are reviewed on a case by case basis. Your building committee or the Office of Research can provide assistance if you need to develop protocols of this nature.

### **Expanding research: Higher density in qualified spaces and small increases in undergraduate researchers and human subjects research.**

In the interest of making it possible to do more research the committee agreed to take three new steps. First, that **higher density occupancy** can be accommodated in spaces that meet a high standard of ventilation quality, provided that occupants use higher quality masks and keep maximum separation as mentioned above. The density will be increased from 250 sq ft per person to 150 sq ft per person in spaces that have been verified to have high quality ventilation. For the moment we define high quality ventilation as at least 6 Air Changes per Hour (ACH) of fresh outside air with a failsafe for possible recirculation of air being filters with a Minimum Efficiency Reporting Value (MERV) of at least 13. The spaces meeting these criteria are being identified building by building. The following are buildings for which lists of such spaces have been completed:

Building Name	Number
Bio II	571
BioEngineering	512
Bren	521
Broida	572
Chemistry	557
Engineering II	503
Engineering Science	225
Henley Hall	226
Life Sciences	235
Marine Biotech	555
Marine Science	520
MRL	615
Noble Hall	544
Physical Sciences North	657

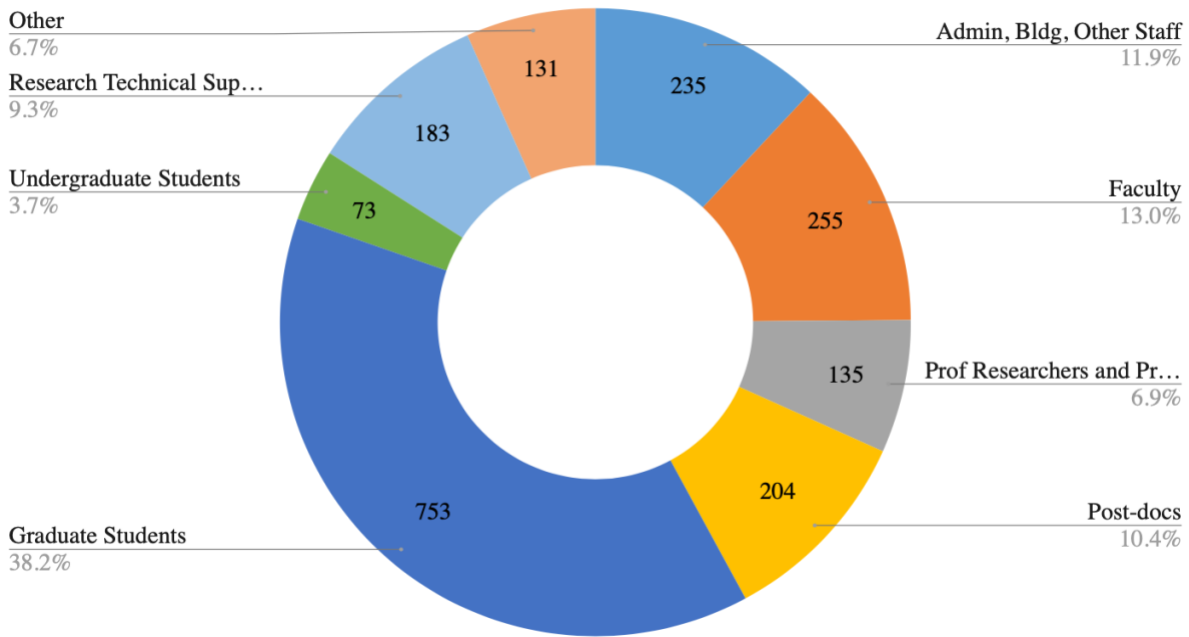
Building committees in charge of these buildings should contact Hilary Campbell ([campbell@research.ucsb.edu](mailto:campbell@research.ucsb.edu)) for a spreadsheet showing the spaces that meet these standards. Since the increased density could result in individual buildings exceeding the 25% cap on density relative to pre-covid levels, we would like building committees to determine the impact on density and report that to their respective Deans. Building committees should analyze whether traffic in common areas can be kept to safe levels. We will look at the global picture to see if we are within bounds or need to get a green light from the county to go beyond the 25% cap. Building committees must assure that the tasks in these spaces will meet all covid mitigation requirements.

The second change we discussed is a gradual ramp-up of **undergraduates in Research**. A committee was charged with reviewing this topic and has formulated recommendations that were reported to the Oversight Committee. The ramp up of undergraduates will start slowly, with roughly 40 additional students coming onto campus research spaces this quarter, ramping up to a total of around 250 undergraduates by summer, if all goes well. We currently have about 70 undergraduates carrying out essential tasks in the research area. All undergraduates are required to get tested weekly and we have begun to monitor compliance. This first group of 40 will be mainly restricted to those who would be particularly important in the research of junior faculty. As we gain experience and a good track record with these undergraduates, we will request further increases with the county and expand the selection criteria. Junior faculty with a significant need for undergraduate researchers for their research should begin to prepare proposals and protocols, with the help of their building committees. Note that there are over 1000 undergraduates, including many new arrivals, living on campus who have demonstrated over 97% compliance with weekly covid testing who are a potential good source of undergraduate lab assistants.

The third change we discussed is in the realm of human subjects research (HSR). The Participant Safety Committee has prepared documentation of the types of **human subjects research** to be allowed along with details on the process for proposing such research in the [HSR ramp-up document](#). On-campus studies with human subjects need to be in low risk environments such as labs with excellent ventilation, low risk activities that allow for 9' physical distancing and with populations for whom there is a low risk of

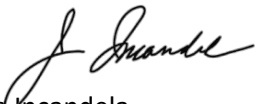
infection. The Participant Safety Committee recommended that students living in campus housing (including ~950 undergraduates), who are tested for COVID-19 on a weekly basis, be recruited as participants during this phase of the ramp-up. If your research meets the criteria specified in the documentation, you can use the template provided to begin to prepare for review and approval of your plans. These research activities should only involve carefully planned one-on-one interactions in an environment where the risk of transmission can be mitigated and that comply with all regional public health orders/restrictions. Requests for off-campus HSR will be handled on a case-by-case basis. Requests should go to the Off-Site Research and the Participant Safety Committees for review.

### Research Ramp-up Position Breakdown



We are doing well and this has allowed us to maintain a monotonic ramp-up of research that we hope to continue in coming months. We currently have almost 2000 people active in the UC Santa Barbara Research program as seen in the chart above, and on behalf of the campus administration, Office of Research and all members of the Ramp-up Oversight Committee, we acknowledge your efforts and thank all of you for continuing to be patient and vigilant in this difficult period. Of course we all hope that the pandemic will end soon, but in the meantime, we will do as much as we can to facilitate your important research. We wish you the best of outcomes for your research and continued good health!

Sincerely,

  
 Joe Incandela  
 Vice Chancellor for Research

  
 Scott Grafton  
 Campus COVID-mitigation Program Manager