

University Senate Plenary

March 12, 2021



University Senate

Proposed: March 12, 2021

Adopted: March 12, 2021

PROPOSED AGENDA

University Senate

Friday, March 12, 2021 at 1:15 p.m.

[Registration required](#)

After registering you will receive a confirmation email with meeting details.

1. Adoption of the agenda
2. Adoption of the minutes of February 19, 2021
3. President's report
4. Executive Committee Chair's report:
 - a. COVID-19: An update on the public health situation with Dr. Wafaa El-Sadr, University Professor
 - b. COVID-19: The year in review and launch of the [Columbia Emergency Loan Fund](#), with Flores Forbes, Associate Vice President for Community Affairs
5. Old business:
 - a. Committee reports and updates:
 - i. The need for a more stringent testing regime (Research Officers Committee, Commission on the Status of Women, and Student Affairs Committee)
6. New business:
 - a. Committee reports and updates:
 - i. Progress report on Columbia's commitment to antiracism and public safety (Commission on Diversity)

MEETING OF FEBRUARY 19, 2021

Executive Committee chair Jeanine D’Armiento (Ten., VP&S) called the Senate to order at 1:15 pm on Zoom. Seventy-seven of 103 senators were present during the meeting.

Sen. D’Armiento thanked Brett Dignam of the Law School faculty for substituting as Senate Parliamentarian for Linda Mischel Eisner, who was unable to attend.

Sen. D’Armiento also reminded all present that normally only senators can speak or vote at plenaries. She also reminded senators to use the raised-hand icon (not the yes button) in seeking recognition to speak.

Adoption of the agenda. The [agenda](#) (*January 29 Plenary Binder, p. 2*) was adopted as proposed.

Minutes and agenda. The [minutes](#) of January 29 (*Binder, 3-9*) were adopted as proposed.

President’s Report. President Bollinger offered an informal sense of the state of the University nearly a year into the pandemic. He said Columbia had endured an extraordinary set of difficulties and tragedies, which were not over. But he saw reason to be hopeful and optimistic. He began by giving thanks to all, recognizing that this had to be a generic message, since he had seen almost no one in his audience in about a year. So he gave collective, not individual, thanks for everything everyone had done to respond to the crisis. He also thanked the Senate for continuing on so well under these conditions.

He said the past year had seen a combination of the most horrific, difficult circumstances that he could remember since the late 1960s—a point to which he would return at the end of his remarks. The pandemic, obviously, was one reason, but another one was that the country had lived through one of the most dangerous periods in its political history, at least during his lifetime. President Bollinger said he was speaking not in a narrowly political sense, but with the values of a research institution in mind. He said Columbia was committed—as part of its very essence—to respect democratic values. On January 6, he said, Americans came as close to losing those values and that system of government as at any time in living memory.

The president said these threats have interacted with the pandemic to cause unprecedented hardships and dangers. International students have been unable to get visas and have struggled with immigration restrictions. There have been problems in funding certain areas of research, as well as attacks on faculty members, and generally on faculty expertise at Columbia. The University had also lost a lot of money over the past year—hundreds of millions of dollars—because of lost clinical revenue on the Medical Campus, lost room and board revenue, and a

drop in student enrollments, especially by international students. These factors, and others, have contributed to a very substantial budget deficit.

The University had also had to completely reinvent its teaching since the shutdown in March 2020. This process had been extremely stressful and difficult. He himself taught a large First Amendment class completely online, as well as a small law seminar in a hybrid setting. But faculty have made these efforts, and students have been doing a wonderful job of adapting to the conditions. Research had also been severely disrupted, with access to labs restricted, and research teams unable to meet in person or to travel freely and do field work. Much of the normal life of the University has been on hold, with hiring and salary freezes (but a few exceptions).

Columbia officers have made sacrifices. One was a reduction in retirement benefits. Some peers, including the University of Chicago and Johns Hopkins, have imposed similar cuts. But it's not a step one ever wants to take. The president said that in imposing these sacrifices, the University wanted to prioritize some core values. First and foremost, he wanted to protect students from the worst effects of the deficit to the extent possible. He said the disruptions the pandemic caused in his own life do not compare to the experience of someone 18-25 years old who is missing a year of higher education. Another priority was to avoid large layoffs and furloughs of staff. It was not possible to do that completely, but the University had managed to keep most people employed.

The president said there had been some real heroes in the community. People in health care had performed brilliantly in every field. He said there are times when particular professions are on the line. That has been true of law in recent years. But with the pandemic, health care workers have been front and center in this country and the entire world. For Columbia the Global Centers have stepped up to provide international students with a connection to the institution. This is particularly important because Columbia's global character is perhaps the most pronounced of any American university.

Where are we now? The president said democracy had held for the time being, and started to recover. But he noted that the New York region was in the midst of another Covid surge, which was reflected in recent numbers at the Medical Center. Columbia had brought back more students for the present semester, and now had 2000 undergraduates in the residence halls. Another thousand or two were living nearby. Every school had found a way to function at some level and hold classes—some hybrid, some in person, but most still virtual.

The president said the public health measures that Columbia had put into effect—including the Gateway and follow-up testing--had been very successful. He was dazzled every week seeing an infection rate consistently below 1 percent. He thanked the University community for its high level of compliance. In addition, the vaccines were becoming available. He had had his two shots, and now felt relief and a renewed sense of hope, even though the whole recovery process was taking longer than everyone hoped. There was also reason to fear the new variants and to remember to keep taking the usual public health measures. He said many may react as he has, looking forward to next fall as the return to normal, but experts keep telling him that that forecast may be too optimistic.

The president said the University had borrowed a lot of money, at low rates. This helped to cover a significant portion of the deficit, but not all. As Columbia units have experienced sharp declines in revenues, the central administration has been there to try to help, though not to solve the problem completely. The University's liquidity remained good. These efforts, supplemented by sacrifices, helped enable the University to hold on. But again, everything had been put on hold. There was no new funding of initiatives but work was proceeding under previously committed funding. He was proud to say that a great deal of work on race was going forward across the institution. There was also forward movement on the task force on the University's Fourth Purpose, as well as Columbia World Projects.

The School of Climate was also in process of formation, and progress was being made in the construction of the new Business School in Manhattanville, for which the funding was committed some time ago. Completion is expected next year. When the Business School moves, Uris Hall on the Morningside campus will be available to Arts and Sciences. Other initiatives, including data science, precision medicine, cancer research, global activities, and gender initiatives were all moving ahead.

The president said fundraising was extremely difficult in the current environment. It's harder to meet with people to talk to them about the needs of the university. But he was pleased to report that cash-in was ahead of last year at this time, before Columbia entered the pandemic. He said fundraising totals were somewhat down, but not as down as two months ago. Columbia was holding its own in the process of philanthropy that it depends upon so heavily. He added that the current capital campaign, seeking \$5 billion in five years, was 94 percent complete. It would meet its goal, despite the pandemic.

For the rest of the semester, the president said, most Columbia activities would remain virtual, including—sadly—Commencement. He said this is one of his favorite moments of the entire year. It is a huge joy to celebrate the graduation of Columbia students in the spectacular space between Butler and Low. He said schools would be announcing their own commencement plans, but most would be virtual, with a possibility of some small gatherings. The president said the expectation was to be largely back to normal during the next academic year. The goal was to recapture what Columbia has.

Returning to his opening remarks, the president said the current period is the most difficult for Columbia since the late 1960s and 70s. In the late 1960s, protests erupted on campuses across the country, but the severity of the confrontation at Columbia set it apart. No other university suffered as much. And then, following that crisis, came the decline of New York City in the 1970s, which caused enormous problems for Columbia. It was the University's greatest challenge since World War Two. But the president said the present crisis was worse than those of the 1960s and 70s. The difference was that Columbia, for the first two decades of the 21st century, had been on an upward trajectory, and had entered one of the great periods in its history. The president offered that statement in recognition of all the people in the institution who worked to make it true. He said he believed strongly that once the pandemic was over, that upward trajectory would resume. In 1980 the institution was still in decline because of financial, academic, and space constraints. This time, even though conditions were as bad or worse, the opposite would be the case.

The president said he would soon be announcing some important signs of rebirth. One would involve a much-needed fundraising initiative to strengthen student financial aid.

He said Columbia has a role to play in reshaping American democracy, and there were people in the Law School who were thinking about how Columbia could help to assure that the political experience the nation had just undergone doesn't happen again. A number of other new initiatives could also help the University regain its momentum, along with the basic work of the institution. The president saw every sign that Columbia was ready to move ahead.

He invited questions.

Sen. Ramsey Eyre (Stu., CC) said the society at large, and the Senate Student Affairs Committee in particular, had been discussing the future of higher education, particularly student debt and other costs. How did the president see Columbia's role in these discussions in the next five to ten years? Had the recent change in the political climate, with start of the Biden administration, altered the president's thinking at all?

President Bollinger offered several thoughts. He said there's nothing worse to a dean or a faculty member or a president than seeing the numbers on student debt, and talking to students about their own debt. One wants to do everything possible to help with this. He referred again to the difficulties of the 1970s, when he said the University really lost its endowment, for a variety of reasons. One consequence was that Columbia is competing now as one of the top 3-5 institutions of higher education in the United States and the world, but only has about 25% of the wealth of its main rivals. Columbia devotes much more of the resources that it does have to student financial aid. It is competing to match the education that the top institution can provide, with all the talent and the faculty and the administration and the research that it can muster--with significantly smaller resources—while trying to match the financial aid of these wealthier peers. The president added that even though the tuition at Columbia is high, it does not cover more than about half of the cost of a Columbia education. So the University is in a bind, and always trying to figure out ways to increase financial aid and keep tuition lower. So the new fundraising initiative on financial aid would be very important.

The president said he did not believe it was a good idea to just relieve student debt or to basically reduce tuition uniformly. He preferred the need-blind approach because he did not believe in subsidizing wealthy sectors of the society. The president did not want to say more at present. He didn't see major changes on the national scene, though he hadn't been following the politics of the issue that closely.

Sen. Matthew Hart (Ten., A&S/Humanities) understood that the initiative to support financial aid would mainly support undergraduate students. Would it also help the Arts and Sciences and other divisions rebalance their budgets, where a large portion of the operating costs are now committed to financial aid, with clear knock-on effects? Would the financial aid initiative help to address the longstanding structural imbalance in the A&S budget?

The president explained that the financial aid initiative would involve all schools, not just the undergraduate divisions. He said Columbia College now has a level of financial aid, with need-

blind admissions, that is very near the top program in the United States. Aid at Harvard, Princeton, Yale or Stanford is a little better, but Columbia College belongs in the same group. But this level of support does depend on University and A&S resources, much more than at wealthier peer institutions. He said a significant purpose of the current plan to strengthen financial aid is to release operating funds that are now used for financial aid for other purposes, such as teaching, research, recruiting faculty, etc.

Sen. D'Armiento thanked the president for the discussion. He then left the meeting.

Executive Committee Chair's Report.

Travel restrictions. Sen. D'Armiento called attention to the travel policy recently announced by Joseph Greenwell, VP for Student Affairs. Sen. D'Armiento said all spring travel is discouraged except in emergencies. And group travel by students is forbidden.

Commencement. Sen. D'Armiento repeated the president's announcement that Commencement would again be virtual this year.

New Business.

Committee reports and updates.

Supporting Caregivers during and following the COVID-19 Crisis: Suggestions for Immediate Response (Commission on the Status of Women). Sen. D'Armiento reminded senators that under the rules for electronic Senate meetings, all members of the committees presenting reports, whether senators or not, would have the floor.

Kuheli Dutt, director of academic affairs and diversity at the Lamont Doherty Earth Observatory and co-chair of the Commission on the Status of Women, introduced a fellow Commission member, Sen. Shayoni Mitra (Fac., Barnard), a senior lecturer in the Theatre Dept., who would present the report. Dr. Dutt also mentioned longtime Commission member Katie Conway, an associate professor at Teachers College as well as TC's VP for Planning, who worked on the report, but was unable to attend the present meeting.

Sen. Mitra then shared her screen to present the [report](#) (*Binder, 10-19*).

At the end of the presentation, Sen. D'Armiento invited Senior Executive Vice President Gerald Rosberg to respond on behalf of the administration.

Mr. Rosberg praised the report, including its recommendations. He was not convinced that the University could carry out all of them, but he promised to consider them carefully and to do what was possible.

Mr. Rosberg said the main themes of the report had also been the subject of weekly discussions among a group of administrators who were focusing on childcare. Since the start of the pandemic, this group offered programs for crisis care, for the cash benefit provided last summer, and other programs. This group would now take up the Commission's recommendations. They agreed that the University was now in a crisis, had hit the pandemic wall, and now had to figure out how to get over it.

Mr. Rosberg said it was also understood that Covid did not create the childcare problem, but exacerbated a huge problem that already existed, and that would persist after Covid goes away. There was also complete recognition that this problem was having a disproportionate impact on women—not only on their well-being, their ability to get through any particular day, but on their careers. And this issue must also be addressed.

Mr. Rosberg said the particular challenge here, as the report recognized, was the difficulty of solving these problems. Some of them are availability and safety issues, which may not be solvable by money. He appreciated the report's recognition that the University was now facing severe financial constraints. Columbia is also a very different institution from Barnard or Teachers College, in that any new policy must be applied at Columbia on a much bigger scale, and in a much more complex organization. Issues that seem like they should be easy are hard, not just because of the cost at Columbia's scale, but also because of the difficulty of drawing lines. The Columbia population is diverse, the environments heterogeneous. There are people in labs who come into work every day, and also people working at home and struggling to do their jobs because of concerns about caring for and educating their children. There are also health care workers. This diversity makes it particularly difficult to come up with eligibility rules. But the administrative committee understood that something needed to be done, and it now had approval to go forward: starting in the coming week, Bright Horizons will provide a limited version of crisis care. It will not solve everyone's problem, but it will be available across the entire University. He expected some to respond that this was good, but insufficient. He said the administration was trying to do as much as it could, accepting the challenge not to let the perfect be the enemy of the good. He thought the program was a good one, helping many people with a cash reimbursement that will enable them to succeed over the next few weeks. The Bright Horizons program would launch on March 15, and run for a limited period of time coinciding with all the break periods of the local schools that Columbia children attend.

Mr. Rosberg also addressed the question of flexible work arrangements, which he recognized as a crucial piece of the puzzle. He said a major effort was underway, including people in Work/Life in the provost's office and in Human Resources, to address this problem, which will also outlast Covid. He said the Bright Horizons program had been in the works for some time, but he was content to treat it as a response to an ask in the Commission report.

The need for a more stringent testing regime (Research Officers Committee, Commission on the Status of Women, and Student Affairs Committee). Sen. D'Armiento introduced the next report, which would be presented by two members of the Research Officers Committee: Sen. Regina Martuscello, an associate research scientist in the Department of Pathology and Cell Biology, and Adrian Brugger, an associate research scientist in the Department of Civil Engineering and Engineering Mechanics. Sen. D'Armiento announced that Rui Costa, professor of neuroscience, director and chief executive officer of the Mind Brain Behavior Institute, and chair of the University's research ramp-up group, had also been invited to comment on the report.

Sen. Martuscello and Dr. Brugger then shared their screens to present their [report](#) (*Binder, 20-29*).

At the end of the report, Sen. D'Armiento thanked the presenters, and invited Prof. Costa to respond.

Prof. Costa also thanked the presenters, adding that he couldn't agree more with their presentation, and that he thought he was speaking on behalf of the research group in saying that.

He said the research group began meeting last April to prepare for the research ramp-up that started on June 22. One of the great concerns back then was about the need for a university-wide program of robust and frequent testing. The first regime included bi-weekly testing for the undergrads. This approach may now be part of New York State guidelines, but it came from modeling by Prof. Jeff Shaman of the Mailman School of Public Health. Prof. Costa was involved in the deliberations of the Ivy-Plus group over time, and he saw the ACHA recommendations, and was part of the decision to approve a regimen of one test a week.

Prof. Costa said that, as everyone knew, a voluntary program of weekly testing started in October. He wanted to clarify that there was either a miscommunication about this regime, or some variations in communications that went out to different groups of researchers. The voluntary weekly program was stopped in November, considered a success, and followed by an attempt by the research group to establish mandatory weekly testing. But there was an issue with compliance, and the terms were changed in November to "strongly recommended" weekly testing. So since November, when people book the appointment, it doesn't say that the testing is "voluntary," but Prof. Costa stressed that the research group did advocate for mandatory weekly testing. And there was mandatory random testing for 10 percent of the population, a rate that could be raised. He said the issue of "strongly recommended" versus "mandatory" was an understandable matter of logistics. The research group met with deans, who made clear that a mandatory regimen would be very hard to enforce. So a decision was made to use the language "strongly recommended."

Prof. Costa stressed that the issue was not capacity, or money. He said Columbia now had enough testing data to enable a discussion of different testing models.

Prof. Costa proposed, with the agreement of Mr. Rosberg and Naomi Schrag, to invite the presenters to come and discuss the issues in more detail with the research group. One potential solution involved correcting for miscommunication. Prof. Costa said the research group has an issue even with the mandatory 10 percent random sample over compliance. That's the logistical challenge to a mandatory testing regime. But he said again that he agreed with the presenters about the need for testing. Right now the policy was at the level just below mandatory. That was the highest level the research group could achieve—strongly recommended weekly testing. At the minimum, if this message was not coming across, it was necessary to emphasize that the University is aware of the new Covid variants. And so the research group is working with the Broad Institute, to make sure that the tests are modified to detect all the new variants. Prof. Costa said the experts he meets with regularly are David Ho, whose work the presenters had mentioned, along with Jeff Shaman and Ian Lincoln.

Prof. Costa responded to the presenters' request to require a negative test before allowing someone who has tested positive back into campus buildings. He said the research group tested this idea. Though some individuals become negative in 10-14 days, many continue to test positive for up to 90 days, even after they are clearly no longer sick. There have been several studies of this condition. This is the reason why the CDC guidelines in New York State do not permit the requirement of that negative test. His group had actually conducted tests to evaluate a requirement of two negative tests. But that regime was not logistically feasible now, or legal under current guidelines. He said Columbia has been among the good universities, but it can always improve, especially if some people feel that it is not safe. That's what matters. If there are different experiences across campuses, it is important to make them uniform in adherence to shared Covid guidelines, and to communicate that message clearly. During the Gateway testing in January, the positivity rate for the entire population on campus was 0.67 percent. The highest day was 1 percent. Now there are 8000-9000 tests a week, which is comparable to the weekly number during the three-week Gateway Period, which totaled 25,000 tests. It was true that the testing did not reach 100 percent of the population, again because the testing was only strongly recommended, not mandatory.

Sen. D'Armiento said the meeting had reached its 3pm end point. She said the presenters, along with some members of the Student Affairs Committee, would accept Prof. Costa's invitation to meet with his research group.

Prof. Costa gave his assent, and repeated that he agreed with the presenters' recommendations.

Sen. D'Armiento noted that there were a number of questions in the chat. One asked why the University couldn't insist on mandatory testing if it controls everyone's access to campus buildings. She said comments were still coming. Senators at the meeting with the research group would ask these questions, and get answers.

Dr. Brugger readily accepted this outcome.

Sen. D'Armiento adjourned the meeting shortly after 3 pm.

Respectfully submitted,

Tom Mathewson, Senate staff

University Senate Commission on the Status of Women

Supporting Caregivers during and following the COVID-19 Crisis: Suggestions for Immediate Response

Universities across the country are struggling during COVID-19 to keep their community members safe and supported. For the last seven months, the CU Senate Commission on the Status of Women, Commission on Diversity, and Student Affairs Committee have worked together to consider how to prioritize an equitable recovery that includes the full scope of our Columbia families. We understand that the University is motivated to support caregivers in the months ahead, knowing that such additional responsibilities have had an undue impact on academic, research, and administrative duties we carry. The subcommittee tasked with thinking through the most effective avenues for supporting caregivers offers the following recommendations. In making these recommendations our key considerations were interventions we believe would be most impactful while minimizing increased expenses.

First Priority:

1. **Subsidization of Childcare Expenses.** While childcare expenses are an ongoing issue for members of the Columbia community, COVID-19 has added new barriers to finding and using safe and available childcare. Closures, temporary, ongoing or unpredictable, of day care centers and schools have aggravated the demand for childcare far beyond those in a normal year. We recommend exploring two supports (one focused on faculty/staff/administrators and one on students):
 - a. Barnard* and Teachers College* have negotiated with Bright Horizons to include coverage for private care providers during the COVID-19 crisis. For many reasons (including a lack of availability of BH caregivers, concerns about the quality of BH's providers, and the need to minimize the number of providers in a home given virus transmission risks), we strongly recommend that Columbia does the same. We understand that expanding this benefit to everyone may not be fiscally possible and suggest that the University consider prioritizing those employees who make below a certain income if necessary.

- b. Subsidies for students who require childcare vary significantly across schools within the University. We recommend that the University provide a centrally managed pool of grant funds for which students can apply, modeled on [Cornell's need-based childcare grant program](#).
2. **Extending Tutoring and Support Programs for K-12 students.** Many of our families have school age children who have severely limited or no in-person instruction at their schools. This has meant that parents and guardians have had to supervise remote-schooling along with their own work responsibilities. We recommend the university develop, pay and manage a tutor corps available to any family that would like to use them. This would be an extension of the [tutoring program developed for the families of the medical school](#) over the spring and summer of 2020, with the added recommendation that such tutors should be paid and not be solely volunteer positions. Barnard College for instance has been able to [develop such a program](#) by using work study positions that they could otherwise not fill remotely. The University can also look to modifying and expanding its after-school community programs, school break and summer camp programs, and other community enrichment initiatives to directly engage this K-12 population that is facing severely limited educational and social opportunities through the COVID crisis.
3. **A Transparent Policy Supporting Parents in Key Educational/Career Moments.** Pre-tenure (and, to a lesser extent, pre-promotion) faculty, postdoctoral fellows, and students are all experiencing career interruptions during COVID-19. We recommend that the University commit to:
 - a. Placing formal letters in faculty and fellow files noting any possible career impacts from COVID-19, including but not limited to delays in publication, funding, and/or data collection as well as noting reduced opportunities for networking that may impact external letter responses.
 - b. Transcript notifications for students for any semesters impacted by COVID-19 (including, to date, Spring, Summer, and Fall 2020, and Spring 2021.
4. **Guidance for Managers, Leaders, and Faculty About Supporting Flexibility.** While there are countless cases of individual managers and faculty providing understanding and flexibility during COVID-19, there are also those who want to be supportive but do not know how. To that end, we recommend that the University:

- a. Develop and share widely a memo from HR for managers about how to support flexible work arrangements during this time, as well as how to promote asynchronous work (which, by virtue of being flexible, can allow caregivers to complete their work well when they are able to).
- b. Clarify for faculty and academic department staff allowable mechanisms for granting flexibility to students. In particular, adding dependent-care emergencies to the list of appropriate reasons to grant an excused absence from class would be helpful. Elective alternative grading policies have been well received and should, where possible, be continued throughout the crisis.

Second Priority:

5. **Dedicated student-parent support.** Supporting student parents will continue to be necessary for recruiting and retaining the best students. We suggest that the University consider funding a line in the Office of Work/Life that is dedicated to student parents. This relatively small investment could have an outsized impact on the experience of student parents and help connect them with resources, thereby decreasing student demands for additional internal funds.
6. **Improved data collection/capture.** Ascertaining what supports would be helpful for the community have been hampered by inconsistent and/or nonexistent data. Comprehensive data collection efforts (managed and maintained by the appropriate offices in order to maintain confidentiality) on work/life demands for faculty, staff, and students would ensure that the University is better positioned to meet such challenges head on in the future.
7. **Consideration regarding testing and vaccination for families and caretakers.** We recognize it is key for the safe return to work for our community members that all members of their families and immediate households have access to testing and vaccination. We ask that the university consider where it may be able to extend benefits it is already offering in this area to those on the same health insurance policy as the Columbia affiliate.

*please contact CSW members regarding specific Barnard (Shayoni Mitra) or Teachers College (Katie Conway) policies.

COVID-19 Pandemic & Vaccine Update

Wafaa El-Sadr, MD, MPH, MPA



Status of the Global Pandemic

COVID-19 Global Snapshot

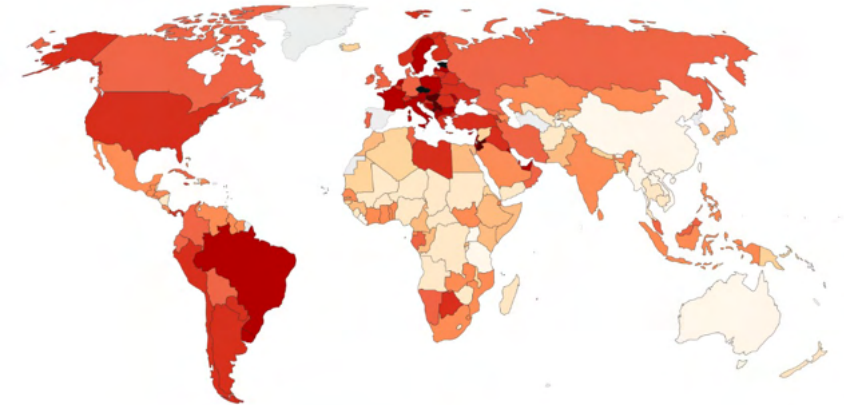
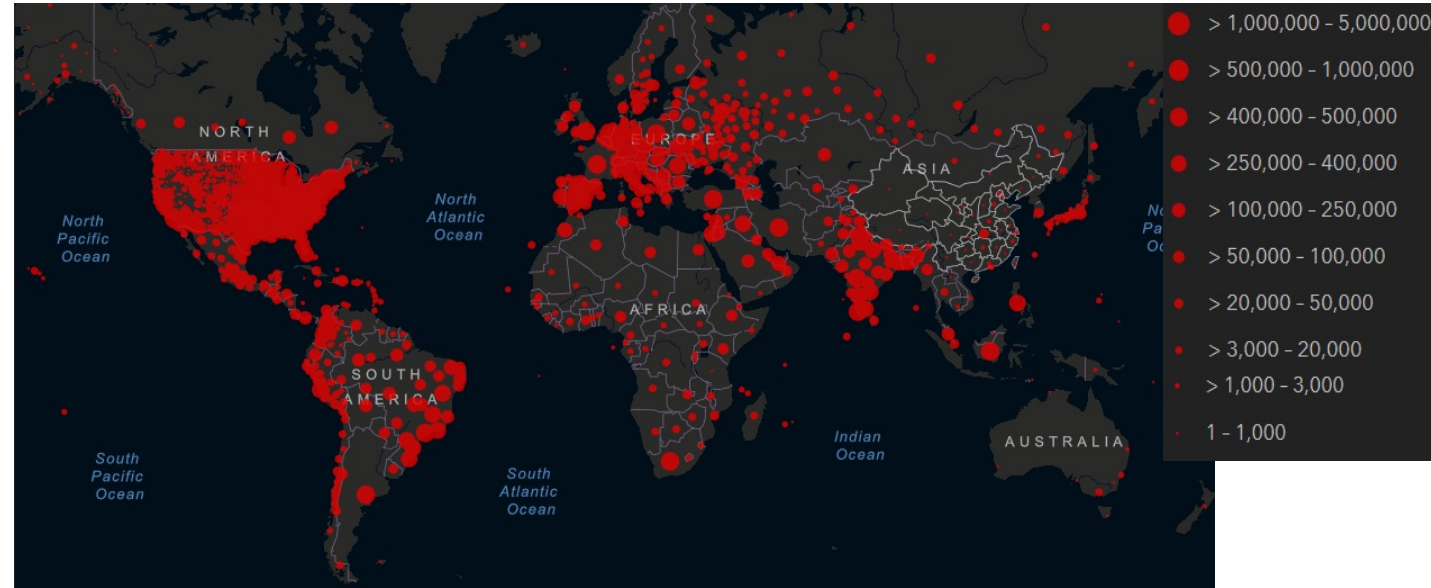
Top five: US, India, Brazil, Russia, UK

As of March 12th:

- 118,729,046 confirmed cases
- 2,632,955 reported deaths*
- 67,253,779 reported recoveries

By Region:

- 44% in the Americas
- 34% in Europe
- 12% in South-East Asia
- 6% in the Eastern Mediterranean
- 3% in Africa
- 1% in the Western Pacific



No data 0 0.5 2.5 5 10 50 100 250 500 1,000 4,000

Number of new confirmed cases/million population

COVID-19 in the US/ NYC

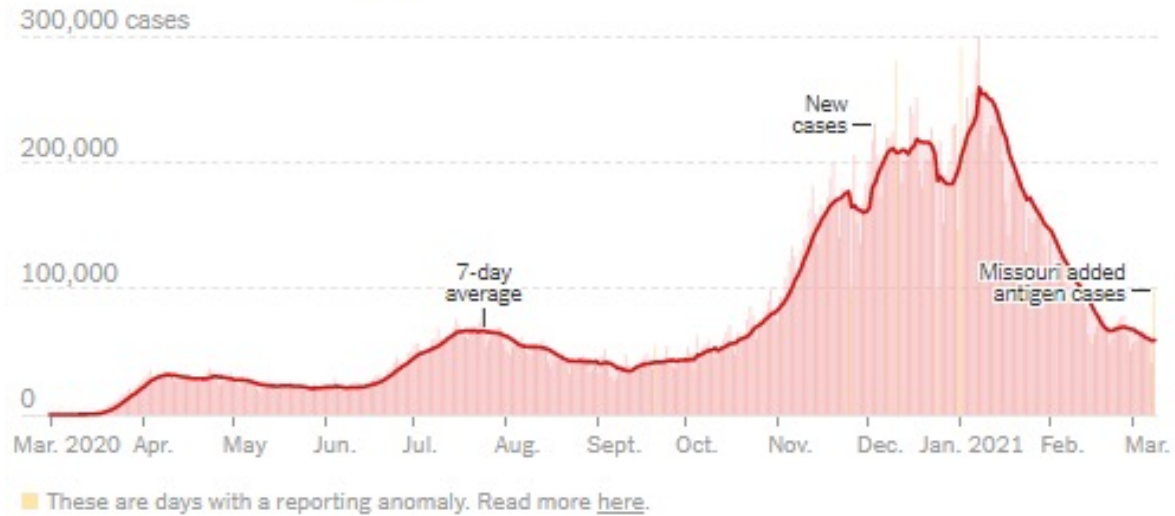
US Current Snapshot:

- **29,289,999 confirmed cases**
 - 25% of global cases
- **530,962 reported deaths**
 - 20% of global deaths

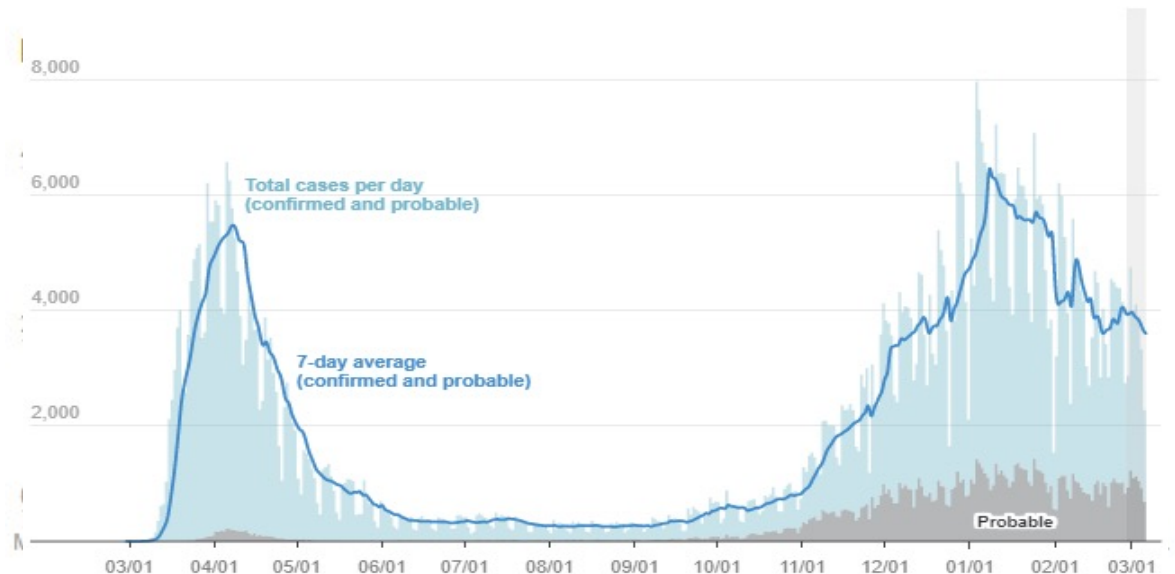
NYC Current Snapshot:

- **766,194 reported cases***
 - 3,514 cases/ day
- **30,068 reported deaths***
 - 61 deaths/ day

New reported cases by day



Note: The seven-day average is the average of a day and the previous six days of data.





COVID-19 Vaccine Pipeline

COVID-19 Vaccine Development

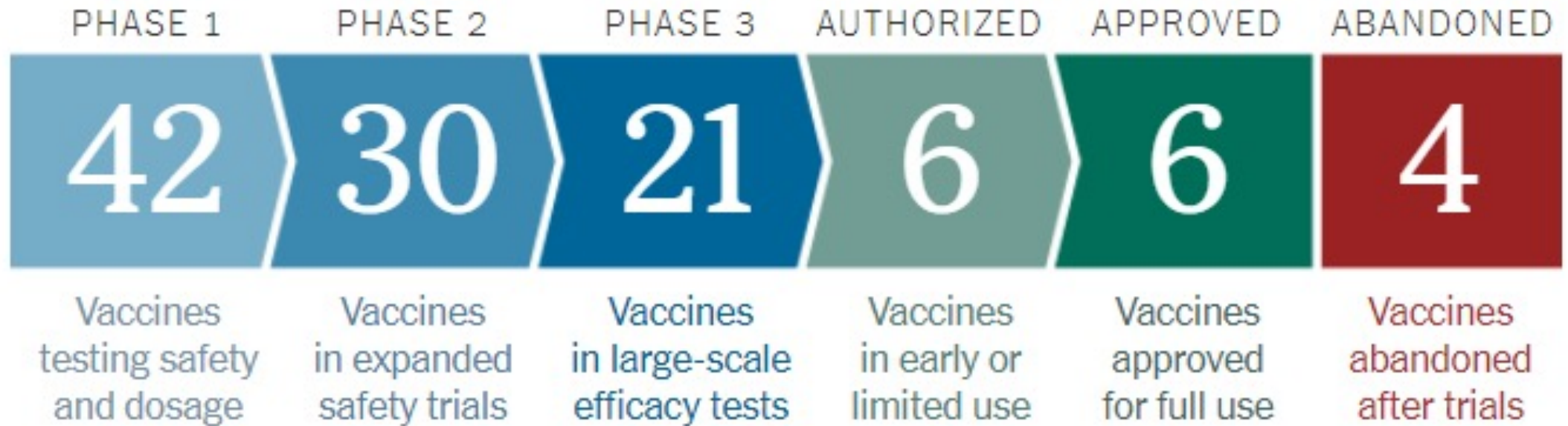





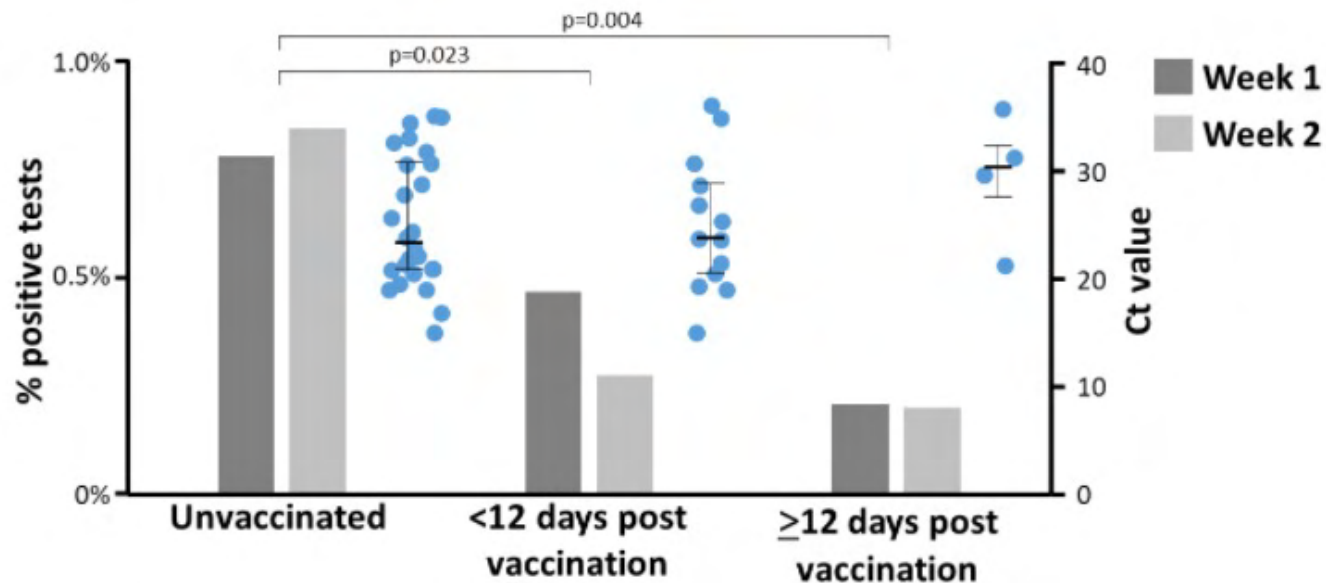
Image source: New York Times

COVID-19 Vaccines in the U.S.

	Johnson & Johnson Janssen	Pfizer-BioNTech	Moderna
Type of vaccine	 Viral vector (Ad 26)	 mRNA	 mRNA
How it works	Uses a modified adenovirus with instructions for a coronavirus spike protein to elicit an immune response	Uses messenger RNA with instructions for a coronavirus spike protein to elicit an immune response	Uses messenger RNA with instructions for a coronavirus spike protein to elicit an immune response
Efficacy	Overall: 66% US 72%, BR 68%, SA 64% Severe COVID-19: 85%	95%	94.5%
Side effects	Mild to moderate: pain at the injection site, headache, and flu-like symptoms	Mild-to-moderate pain at the injection site, fatigue, headache	Mild-to-moderate pain at the injection site, fatigue, headache
Doses needed	1 dose	2 doses (1, 21)	2 doses (1, 28)

Single-dose BNT162b2 (Pfizer-BioNTech) Vaccine Protection Against Asymptomatic Infection

- Analyzed data from vaccinated and unvaccinated health care workers over 2 weeks spanning January 18-January 31, 2021
- 4,408 (week 1) and 4,411 (week 2) PCR tests were performed from individuals reporting well to work
- 26/3,252 (0.80%) tests from unvaccinated HCWs were positive, compared to 13/3,535 (0.37%) from HCWs <12 days post-vaccination and 4/1,989 (0.20%) tests from HCWs ≥12 days post-vaccination



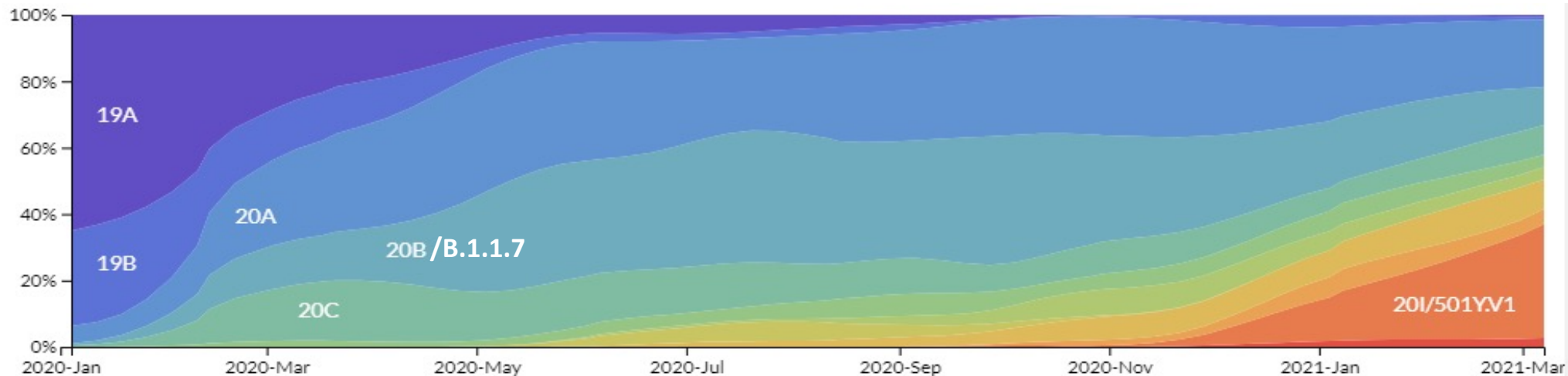
Proportion of HCWs testing positive for SARS-CoV-2 in the asymptomatic screening program



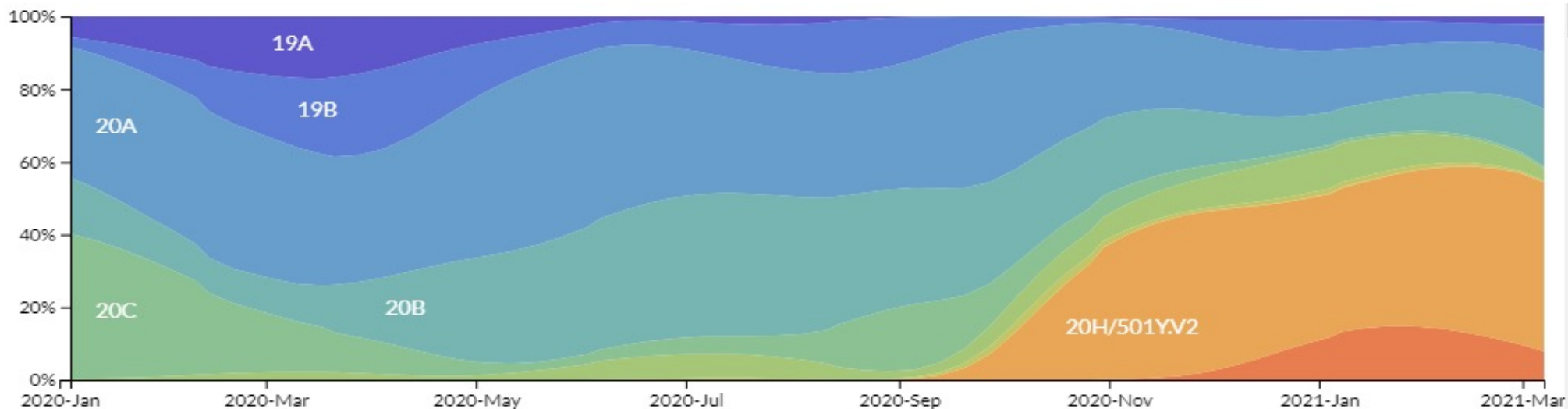
SARS-CoV-2 Variants

Evolution of Variants

Frequencies of variants globally over time



Frequencies (colored by clade) (Africa continent)



Increased Risk of Severe Disease with B.1.1.7 Variant

- Early-stage research in the UK indicates B.1.1.7 (UK) variant of concern (VOC) is associated with **higher absolute risk of death by 28-days post SARS-CoV-2 positive test by age, sex, and presence of comorbidities**
- Risk of death increased with age, presence of comorbidities, and in men vs. women

Absolute risk of death by 28-days

	non-VOC % (95% CI)	VOC % (95% CI)
No Comorbidities		
Female: 0-<65	0.05 (0.03-0.06)	0.07 (0.06-0.09)
65-<75	0.45 (0.30-0.59)	0.72 (0.50-0.95)
75-<85	1.08 (0.71-1.45)	1.73 (1.15-2.31)
85+	2.36 (1.47-3.25)	3.75 (2.34-5.16)
Male: 0-<65	0.09 (0.07-0.11)	0.14 (0.11-0.17)
65-<75	0.85 (0.59-1.12)	1.37 (0.96-1.77)
75-<85	2.03 (1.35-2.71)	3.24 (2.19-4.30)
85+	4.38 (2.72-6.03)	6.87 (4.33-9.42)
1 Comorbidity		
Female: 0-<65	0.11 (0.08-0.15)	0.18 (0.13-0.24)
65-<75	1.09 (0.78-1.41)	1.75 (1.25-2.25)
75-<85	2.60 (1.84-3.35)	4.13 (2.94-5.32)
85+	5.54 (3.77-7.31)	8.64 (5.91-11.38)
Male: 0-<65	0.22 (0.15-0.28)	0.35 (0.25-0.45)
65-<75	2.06 (1.51-2.62)	3.29 (2.44-4.14)
75-<85	4.81 (3.48-6.14)	7.54 (5.52-9.55)
85+	9.94 (6.87-13.01)	15.10 (10.63-19.58)
2+ Comorbidities		
Female: 0-<65	0.21 (0.14-0.28)	0.34 (0.22-0.45)
65-<75	1.99 (1.41-2.57)	3.18 (2.27-4.09)
75-<85	4.66 (3.45-5.87)	7.31 (5.42-9.20)
85+	9.65 (7.01-12.29)	14.68 (10.73-18.63)
Male: 0-<65	0.40 (0.27-0.52)	0.64 (0.44-0.84)
65-<75	3.72 (2.74-4.69)	5.87 (4.38-7.35)
75-<85	8.44 (6.44-10.44)	12.93 (9.99-15.87)
85+	16.65 (12.42-20.88)	24.34 (18.55-30.13)

SARS-CoV-2 Variants in NYC

Specimen collection date, week	Total specimens sequenced	B.1.1.7 (UK) (N, %)	B.1.351 (SA) (N, %)	B.1.526 (NYC) (N, %)
Feb 8 -14	734	46 (6.3%)	0 (0%)	214 (29.2%)
Feb 15 - 21	826	65 (7.9%)	2 (0.2%)	254 (30.8%)
Feb 22 - 28	988	116 (11.7%)	0 (0%)	384 (38.9%)
Possible functional changes		More transmissible and higher risk of severe disease	More transmissible, reduced immune response and vaccine efficacy	More transmissible



COVID-19 Vaccine Distribution

Vaccine Allocation and Distribution in NYC

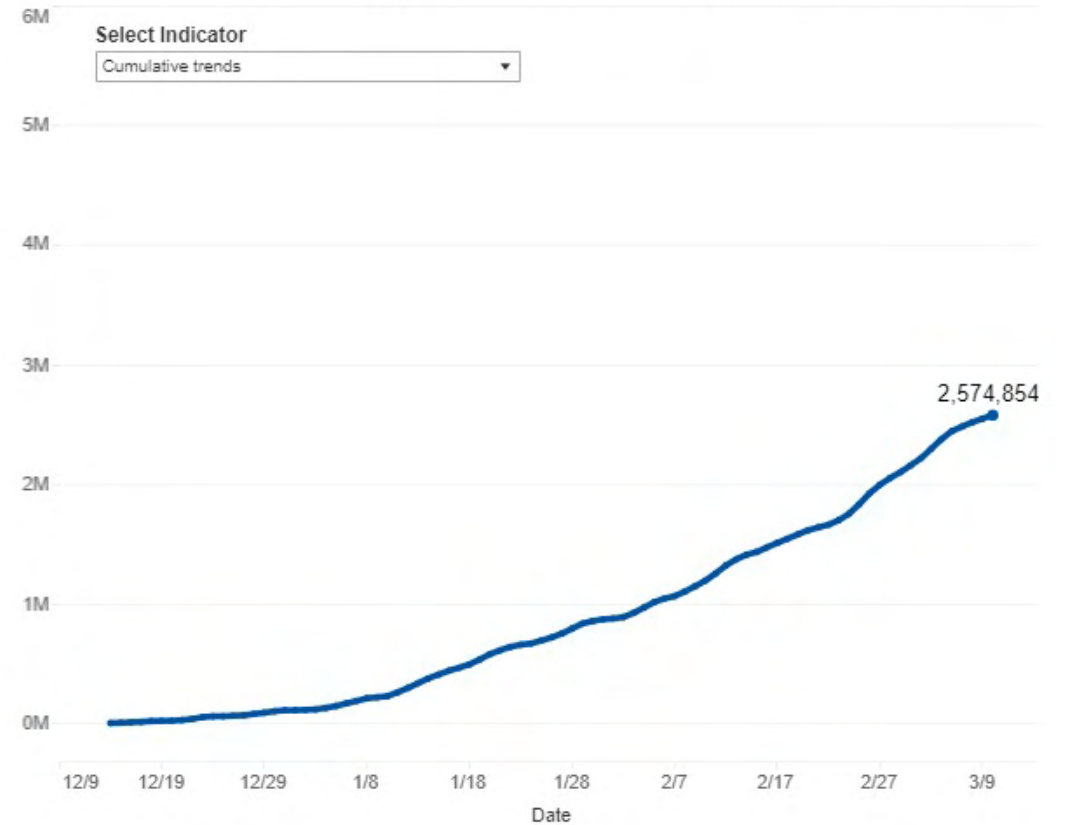
COVID-19 Vaccine Tracker

Last updated: 9:30 AM 3/11/2021

Doses Administered		Doses Delivered	
This table shows COVID-19 doses administered at NYC facilities to date.		This table shows doses delivered to NYC to date.	
Total Doses Administered	(78%) 2,574,854	Total Doses Delivered	3,299,885
Doses Administered by NYC-run Programs	2,078,086		
Doses Administered by Federal and NY State-run Programs in NYC	496,768		
Doses on Hand		Doses Delivered to NYC-run Programs	2,496,180
This table shows the total number of doses available for NYC providers and facilities to use.			
On Hand (Dose 1 of 2 and Single Dose)	<i>fewer than</i> 151,935	Doses Delivered to Federal and NY State-run Programs in NYC	803,705
On Hand (Dose 2 of 2)	<i>fewer than</i> 266,159		

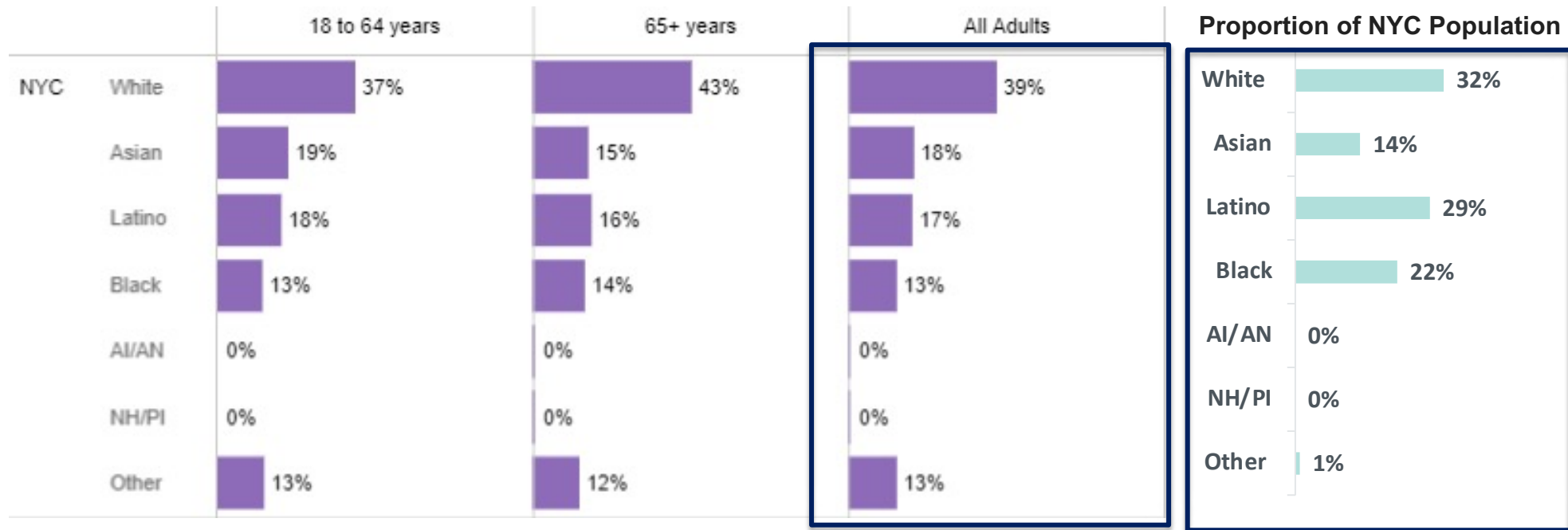
Doses Administered in NYC

Select the indicator of interest using the filter below. These figures show the cumulative and daily number of COVID-19 vaccine doses administered in NYC. This includes doses administered by immunizing facilities in NYC regardless of residency status. Data from the most recent days may be incomplete due to delays in reporting.



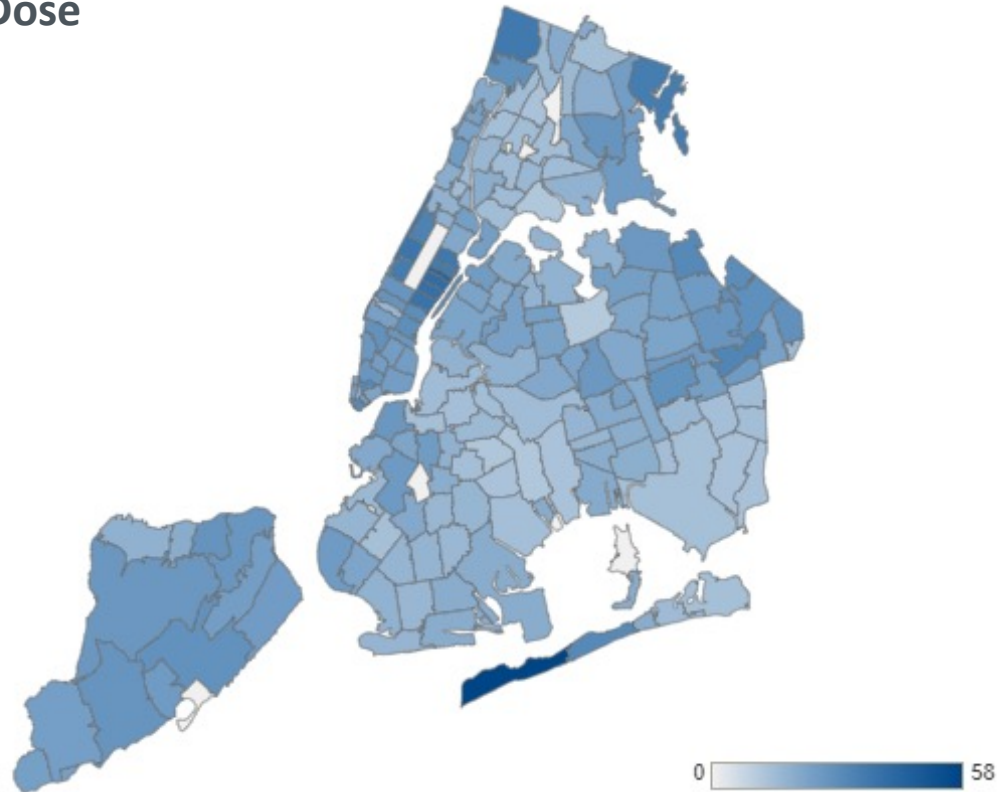
Vaccinations in NYC

Among adults with known race/ethnicity who received at least 1 dose

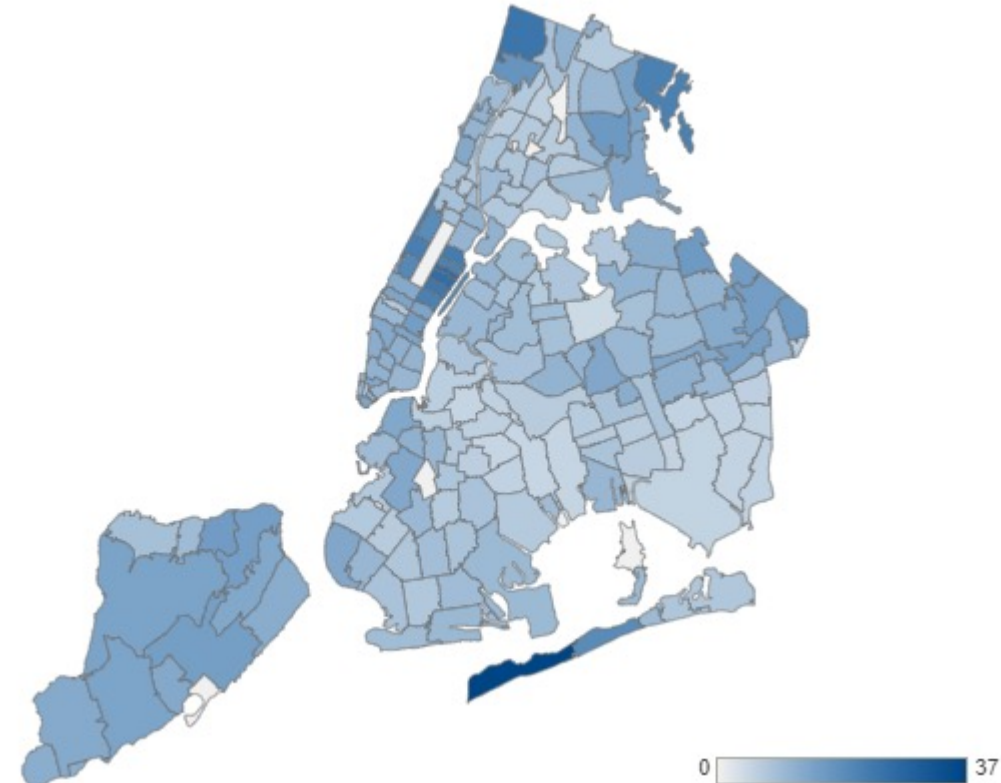


Vaccination by Zip Code – NYC

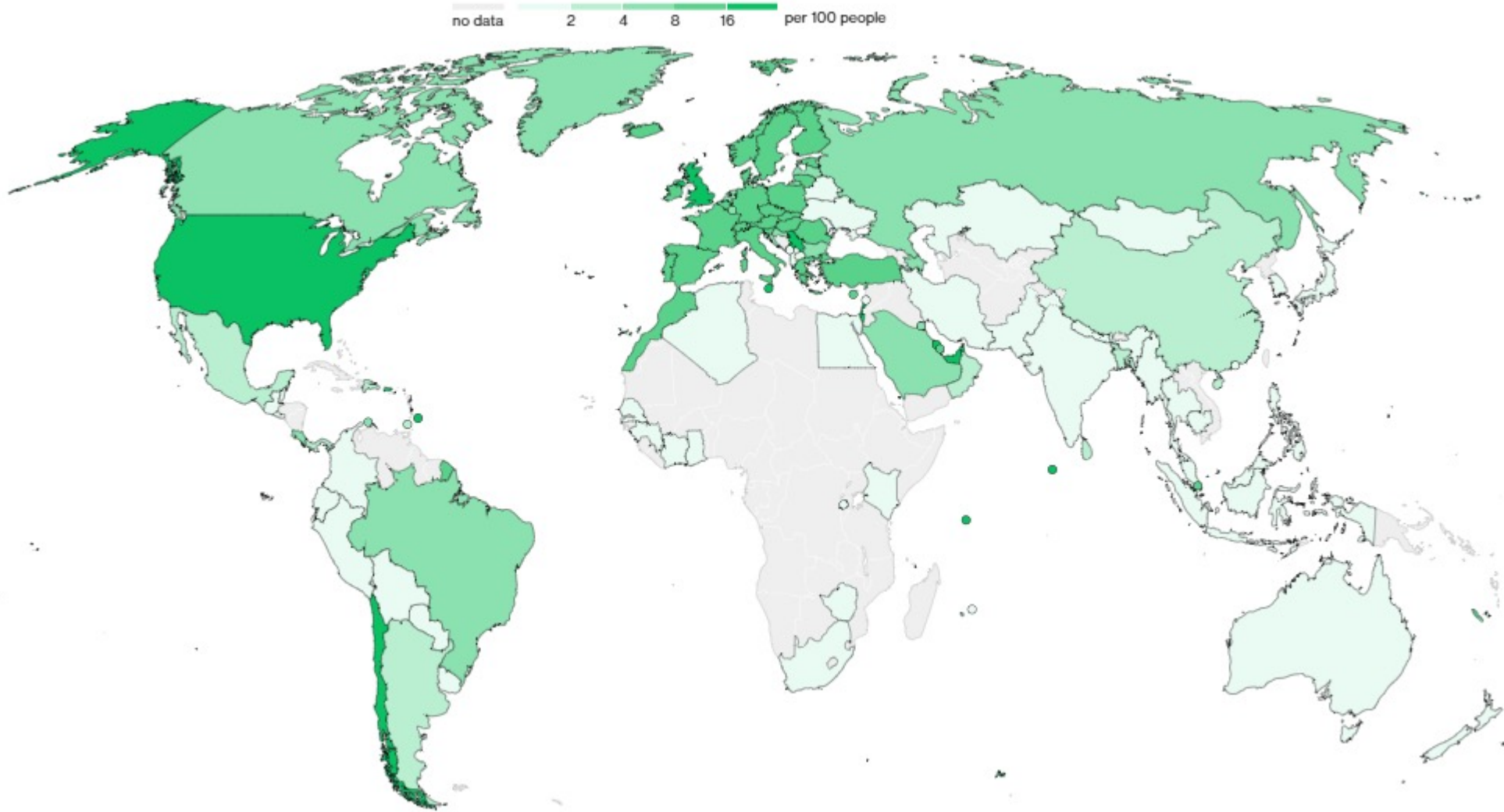
First Dose



Two Doses



Global COVID-19 Vaccination Per 100 persons





Discussion/Q&A

Supporting Caregivers during and following the COVID-19 Crisis: Suggestions for Immediate Response



Commission on the Status of Women in partnership with the
Commission on Diversity & Student Affairs Committee

The Importance of an Equitable Recovery from COVID-19

- Nationally, disparities in career and educational outcomes from COVID-19-related challenges are being documented, particularly for caregivers and particularly for women.
- We understand that the University is motivated to support caregivers in the months ahead, knowing that such additional responsibilities have had an undue impact on academic, research, and administrative duties we carry.
- The subcommittee tasked with thinking through the most effective avenues for supporting caregivers offers the following recommendations.
- In making these recommendations our key considerations were interventions we believe would be most impactful while minimizing increased expenses.
- We have suggested seven interventions, designating four of them as high priority.

High Priority Recommendation 1: Subsidization of Childcare Expenses

- While childcare expenses are an ongoing issue for members of the Columbia community, COVID-19 has added new barriers to finding and using safe and available childcare. Closures, temporary, ongoing or unpredictable, of day care centers and schools have aggravated the demand for childcare far beyond those in a normal year. We recommend exploring two supports (one focused on faculty/staff/administrators and one on students):
 - Barnard* and Teachers College* have negotiated with Bright Horizons to include coverage for private care providers during the COVID-19 crisis. For many reasons (including a lack of availability of BH caregivers, concerns about the quality of BH's providers, and the need to minimize the number of providers in a home given virus transmission risks), we strongly recommend that Columbia do the same. We understand that expanding this benefit to everyone may not be fiscally possible and suggest that the University consider prioritizing those employees who make below a certain income if necessary.
 - Subsidies for students who require childcare vary significantly across schools within the University. We recommend that the University provide a centrally managed pool of grant funds for which students can apply, modeled on Cornell's need-based childcare grant program.

High Priority Recommendation 2: Extending Tutoring and Support Programs for K-12 Students

Many of our families have school age children who have severely limited or no in-person instruction at their schools. This has meant that parents and guardians have had to supervise remote-schooling along with their own work responsibilities. We recommend the university develop, pay and manage a tutor corps available to any family that would like to use them. This would be an extension of the tutoring program developed for the families of the medical school over the spring and summer of 2020.

High Priority Recommendation 3: A Transparent Policy Supporting Parents in Key Educational/Career Moments

Pre-tenure (and, to a lesser extent, pre-promotion) faculty, postdoctoral fellows, and students are all experiencing career interruptions during COVID-19. We recommend that the University commit to:

- Placing formal letters in faculty and fellow files noting any possible career impacts from COVID-19, including but not limited to delays in publication, funding, and/or data collection as well as noting reduced opportunities for networking that may impact external letter responses.
- Transcript notifications for students for any semesters impacted by COVID-19 (including, to date, Spring, Summer, and Fall 2020, and Spring 2021).

High Priority Recommendation 4: Guidance for Managers, Leaders, and Faculty About Supporting Flexibility

While there are countless cases of individual managers and faculty providing understanding and flexibility during COVID-19, there are also those who want to be supportive but do not know how. To that end, we recommend that the University:

- Develop and share widely a memo from HR for managers about how to support flexible work arrangements during this time, as well as how to promote asynchronous work (which, by virtue of being flexible, can allow caregivers to complete their work well when they are able to).
- Clarify for faculty and academic department staff allowable mechanisms for granting flexibility to students. In particular, adding dependent-care emergencies to the list of appropriate reasons to grant an excused absence from class would be helpful. Elective alternative grading policies have been well received and should, where possible, be continued throughout the crisis.

Additional Recommendations for Consideration

Dedicated student-parent support. Supporting student parents will continue to be necessary for recruiting and retaining the best students. We suggest that the University consider ways to continue supporting student parents through the the Office of Work/Life.

Improved data collection/capture. Ascertaining what supports would be helpful for the community have been hampered by inconsistent and/or nonexistent data. Comprehensive data collection efforts (managed and maintained by the appropriate offices in order to maintain confidentiality) on work/life demands for faculty, staff, and students would ensure that the University is better positioned to meet such challenges head on in the future.

Consideration regarding testing and vaccination for families and caretakers. We recognize it is key for the safe return to work for our community members that all members of their families and immediate households have access to testing and vaccination. We ask that the university consider where it may be able to extend benefits it is already offering in this area to those on the same health insurance policy as the Columbia affiliate.

To: Interim Provost Katznelson
Senior Executive Vice President Rosberg
From: Sens. Daniel Savin and Manuela Buonanno, Research Officers Committee
February 11, 2021

RE: The need for a more stringent COVID testing regime

Dear Gerry and Ira:

The COVID-19 pandemic is, and will continue to be, a situational issue that requires significant time and effort on the part of Columbia and its affiliates. We applaud the extraordinary efforts made by Columbia leadership and the COVID-19 Task Force. Recently, important concerns over the current testing policy have come to light, affecting particularly those working in CUIMC laboratories: graduate students and postdoctoral researchers, staff, and professional officers of research. These individuals, most of whom are not currently eligible for vaccination, require public transportation, work within laboratories with limited social distancing, and have direct contact with patients and healthcare workers who may themselves be exposed to COVID. Our testing protocol, therefore, requires strengthening.

University testing has routinely found low numbers of positive tests. However, following winter break, the surrounding areas of the city have seen an increase in positivity rate. Moreover, 37 percent of total positive tests identified to date by the University occurred in the month of January 2021. This indicates that positive individuals could potentially be entering campus at higher rates. Undergraduates living in dorms are required to have twice-weekly testing. This policy, however, does not extend to other groups entering campus and it is estimated that 5,000 affiliates¹ enter campus weekly without routine testing. Prior testing policies may have been appropriate when positivity rates remained low. However, positivity rates have changed and the University's approach should evolve accordingly.

A portion of our community is vaccinated, but can carry SARS-CoV-2. While these individuals are likely protected from severe disease, they interact with unvaccinated individuals for whom there is no testing program. Given the high positivity rate, the discovery of highly-transmissible variant strains, and the increased number of individuals entering campus, we recommend that the testing policy be expanded to require weekly testing for all affiliates who enter campus one day or more per week. Furthermore, we recommend that, following an initial positive test, a negative test be required in order to return to campus.

Thank you for your time, efforts, and continued work for the safety of the Columbia Community.

Sincerely,

Sens. Daniel Savin (Chair) and Manuela Buonanno (Vice Chair)

On behalf of Research Officers Committee

Endorsed by the Commission on the Status of Women and Student Affairs Committee

¹ As explained by Dr. Melanie Bernitz in the January 29, 2021 plenary.

The Need for a More Stringent Testing Regime: *A Scientist's Perspective*

Adrian Brügger, PhD

Director of Robert A.W. Carleton Strength of Materials Laboratory
Adjunct Assistant Professor & Associate Research Scientist
Department of Civil Engineering & Engineering Mechanics

Sen. Regina Martuscello, PhD

Associate Research Scientist
Department of Pathology and Cell Biology

ACHA Guidelines & SARS-CoV-2 Screening Strategies

Multi-layer mitigation strategy for controlling COVID-19 where all links are critical:



“In an IHE setting, with frequent movement of faculty, staff and students between the IHE and the community, a strategy of entry screening combined with regular serial testing might prevent or reduce SARS-CoV-2 transmission.”¹

Testing models indicate test frequency was most strongly associated with cumulative infection, with 1 test every 7 days identifying 90% of true infections.²

1- ACHA Guidelines: Considerations for Reopening Institutions of Higher Education for the Spring Semester 2021. Dec 2020

2- Paltiel, David A, Et al. Assessment of SARS-CoV-2 Screening Strategies to Permit the Safe Reopening of College Campuses in the United States. JAMA Network Open. 2020;3(7)

Mixed Population Interaction

Diverse population circulating at Columbia:

! Students in congregate housing ! "#\$%&' " (\$

! Other students

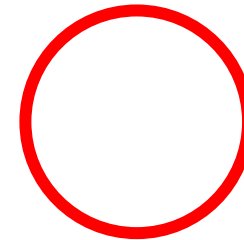
! Faculty

! Research Officers & Technicians

! Officers of Administration

! Support Staff & Facilities Workers

*! "#\$%&' " (\$
+ " : # \$ - . # \$ / 0



Important Points

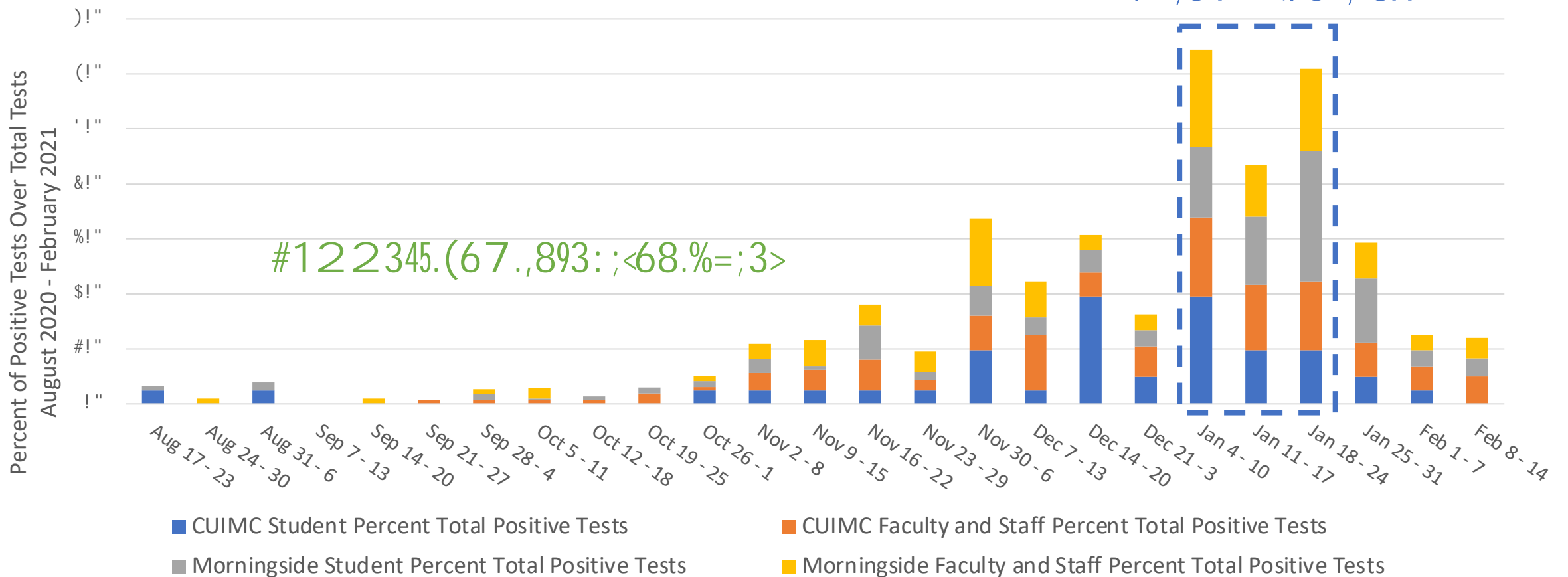
- ! Most ROs currently not eligible for vaccination
- ! Most ROs are not eligible for N95 masks (cloth and surgical masks with 70%-90% efficacy)
- ! Daily Attestation blind to asymptomatic and cavalier individuals (engaging in risky behavior)
- ! Reports of researchers coming to work while sick, for fear of reprisals or cavalier attitude
- ! Timely detection of hot spots requires vigilance in testing

Columbia Testing Numbers

!"#\$%&'()*+,-./:0'()12

Total Student Tests	Positive Student Tests		Total Faculty Tests	Positive Faculty Tests	
93,390	315	0.34%	45,093	267	0.59%

Percent of Positive Tests Over Time



Variants

Known Variants

! B.1.1.7 – UK Variant

- ! January 13, 2021, 76 cases in 12 states¹
- ! February 14, 2021, 1173 cases in 40 states²

! B.1.352 – SA Variant

- ! January 13, 2021, 0 cases in states¹
- ! February 14, 2021, 17 cases in 8 states²

! P.1 & P.2 – Brazil Variants

- ! January 13, 2021, 0 cases in U.S.¹
- ! February 14, 2021, 3 cases in 2 states²

New Variants: NYC & CUIMC

! Research at CUIMC demonstrates SARS-CoV-2 antigenic drift from extensive mutations in the spike that lead to antigenic changes detrimental to mAb therapies and vaccine protection.¹

! In NYC:²

- ! 6 cases of B.1.1.7, 1 case of B.1.352 and 1 case of P.2
- ! A **new** NYC variant has been identified that shares a key mutation (E484K) with the SA and BZ variants.
 - ! E484K mutations are in the receptor binding domain (RBD)

! At CUIMC:²

- ! 60 cases of NYC variant with prevalence increasing from about 3% to 12% in the past week
- ! A study accepted in Nature from Dr. Ho indicates that the E484K mutation poses a threat to mAb therapy, vaccine efficacy as well as resistance to re-infection.

Strong Testing Protocol is Critical to Detect New Variant Dynamics

1- Galloway, SE., et al. Emergence of SARS-CoV-2 B.1.1.7 Lineage — United States, December 29, 2020–January 12, 2021. Morbidity and Mortality Weekly Report US Department of Health and Human Services/Centers for Disease Control and Prevention. Jan 2021

2- CDC website – Covid cases by variant

1- Wang, P. et al. Increased Resistance of SARS-CoV-2 Variants B.1.351 and B.1.1.7 to Antibody Neutralization. **BioRxiv** Jan 2021

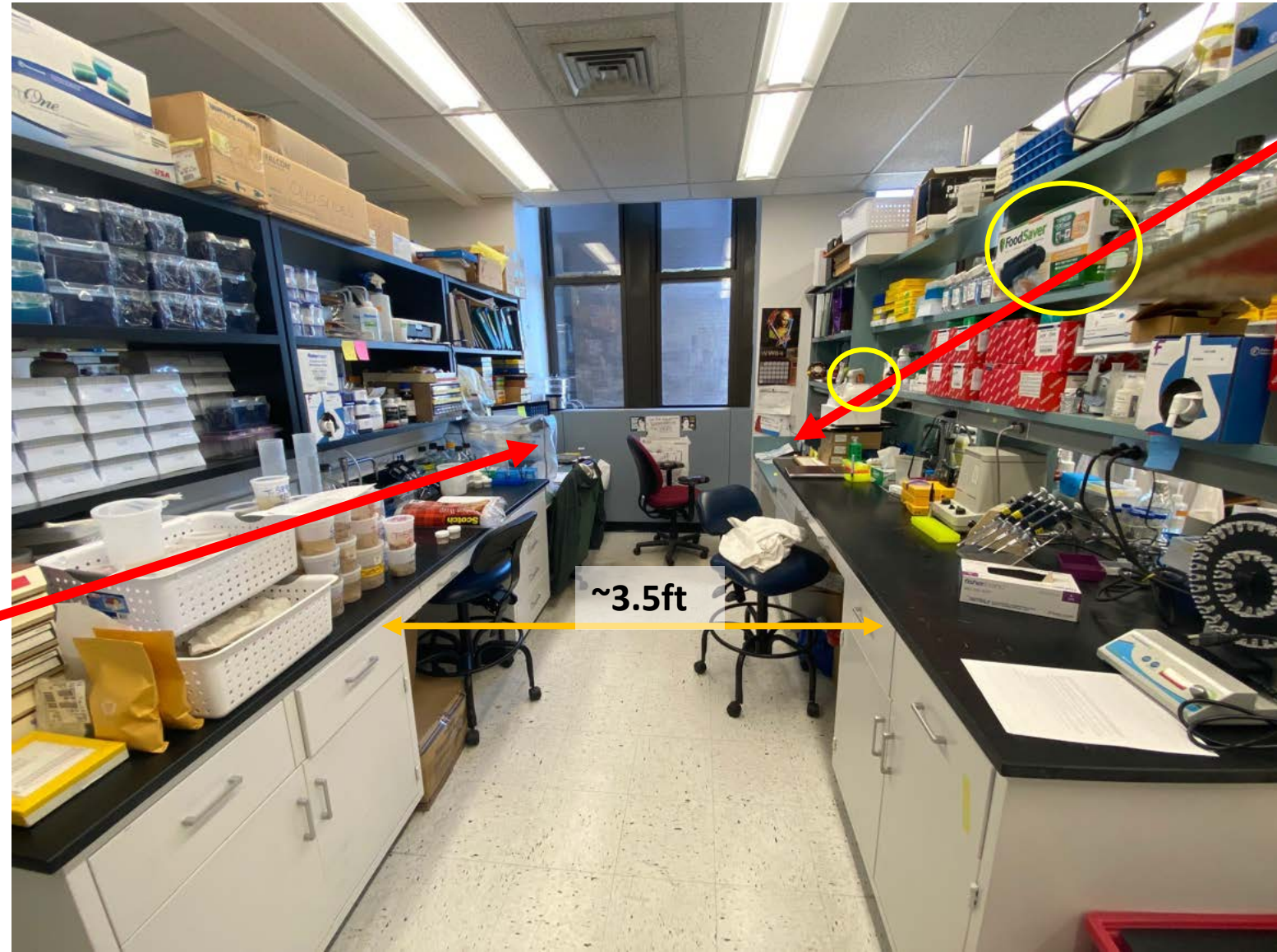
2- David Ho, MD & Anne-Catrin Uhlemann, MD, PhD – Columbia University Covid Symposium, manuscript accepted

Vaccine Resistance to E484K

Fold change of IC50 from WT		Moderna vaccinee sera												Pfizer vaccinee sera									
		V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17	V18	V19	V20	V21	V22
UK	UKΔ8	-2.7	-2.2	-3.0	-1.2	-1.7	-1.9	-1.2	-1.9	-1.4	1.0	-1.2	-1.8	-1.6	-1.9	-2.1	-1.8	+1.1	-2.4	-2.3	-3.2	-1.1	+1.1
	69-70del	+1.4	+1.4	-1.3	+1.2	-1.3	-1.1	+1.9	+1.1	+1.5	-1.4	+1.3	+1.3	-1.4	+1.3	-1.0	-1.0	-1.5	-1.3	+1.3	+1.3	-1.4	+2.1
	144del	-1.1	-1.2	-1.4	+2.1	-1.2	-1.2	-1.1	-1.2	-1.2	-1.1	+1.1	-1.3	-1.2	-1.7	-1.2	-1.2	-1.3	+1.1	-1.2	-1.6	+1.1	-1.3
	N501Y	+1.5	+1.1	-1.8	+1.6	-2.0	+1.9	+2.2	-2.0	-1.2	+4.6	+2.9	-1.2	-1.2	+1.2	-2.1	-1.6	-1.6	-1.5	-1.1	-2.4	-1.4	1.0
	A570D	+1.4	+2.2	+1.2	+2.4	+1.7	+1.6	+2.2	+1.5	1.0	+1.5	+1.4	+1.6	+1.2	+1.5	+1.5	+2.6	+1.2	+1.3	+1.8	+1.1	-1.2	+1.4
	P681H	+2.2	+1.2	-1.7	-1.5	-1.5	+1.0	+1.1	-1.4	1.0	-1.1	+1.1	+1.1	+1.2	+1.2	-1.3	+1.1	-1.1	-1.1	-1.0	-2.1	-1.3	-1.0
	T716I	+1.1	-1.1	-1.1	+1.6	+1.3	+1.3	+1.8	+1.1	1.0	+1.6	+1.2	+1.4	+1.7	+1.4	+1.3	+1.1	+1.1	+1.3	+1.1	+1.6	+1.1	+1.1
	S982A	-2.3	-1.5	-2.6	-1.8	-2.0	-1.6	-1.3	-2.5	-1.7	-1.5	-1.5	-1.5	-1.2	-1.6	-1.6	-1.7	-1.5	-1.9	-1.6	-2.4	-2.0	-1.3
D1118H	-1.2	+1.1	-1.2	-1.4	+1.1	1.0	1.0	-1.5	-1.2	-1.1	1.0	+1.1	-1.2	-1.2	-1.6	-1.6	-1.2	-1.5	-1.2	-1.3	-1.7	-1.3	
SA	SAΔ9	-6.9	-8.4	-22.7	-11.0	-6.1	-7.7	-2.9	-10.0	-4.8	-3.2	-13.0	-6.6	-3.0	-2.2	-9.2	-3.5	-2.5	-7.5	-10.4	-4.5	-15.0	-2.5
	L18F	+1.9	1.0	-1.8	-1.1	-1.3	1.0	+3.3	-1.5	1.0	+1.2	+1.8	1.0	+1.2	-1.3	+1.2	+1.2	1.0	-1.4	+1.4	-1.4	-1.5	+1.4
	D80A	+1.2	+1.5	-1.1	+2.1	+1.1	+1.5	+1.8	-1.5	+1.4	+3.0	+1.3	+1.1	+1.8	1.0	+1.2	+1.4	-1.5	-1.8	1.0	-1.8	-1.3	+1.1
	D215G	-1.3	+1.1	+1.1	-1.2	+1.3	+1.2	-1.1	-2.9	-1.1	+2.7	+1.1	-1.3	-1.1	+1.1	-1.8	-2.0	-1.2	-1.8	-1.3	1.0	-1.2	+1.1
	242-244del	-3.6	1.0	-1.3	-1.8	-1.7	-1.3	-1.7	-1.7	-1.4	-1.5	-1.6	-1.6	-1.4	-1.9	-1.4	-1.3	+1.5	+1.1	-1.3	-2.8	-1.6	-1.8
	R246I	-1.6	+1.1	-2.0	-1.1	-1.7	-1.2	+1.1	-2.1	-1.3	-1.1	1.0	-1.7	-1.5	-1.2	+1.6	1.0	+1.3	+2.0	+2.9	-4.0	1.0	-1.1
	K417N	+1.6	+1.4	-1.1	1.0	1.0	-1.2	+1.7	-1.3	+1.1	+1.4	-1.3	+1.5	+1.4	+1.8	+1.2	+1.4	-1.5	+1.9	+2.0	1.0	-1.8	+1.6
	E484K	-3.0	-2.3	-3.9	-4.0	-1.4	-2.8	-1.3	-3.3	-2.2	-2.6	-3.2	-1.8	-1.9	-2.7	-2.1	-1.6	-2.9	-11.3	-3.3	-3.2	-3.1	-1.8
N501Y	+1.5	+1.1	-1.8	+1.6	-2.0	+1.9	+2.2	-2.0	-1.2	+4.6	+2.9	-1.2	-1.2	+1.2	-2.1	-1.6	-1.6	-1.5	-1.1	-2.4	-1.4	1.0	
A701V	-1.1	-1.2	-1.9	-2.2	-1.7	-1.6	-1.4	-1.7	+1.2	+1.1	+2.1	-1.1	-1.2	-1.3	-1.2	-1.1	-2.1	-1.5	-1.4	+1.1	-2.2	-1.5	

Red: resistance >2 fold; Green: sensitization >2 fold

Social Distancing Lab Dilemma



My Desk

Technician Desk

~3.5ft

Even with reduced laboratory occupancy, access to shared equipment/reagents inevitably results in close-quarter interactions. There is little to no space for ROs to eat eat/drink/rest and safely remove masks.

Conclusions

! Due to:

- ! The current ACHA guidelines on weekly testing,
- ! The highest rates of positive individuals found to date in gateway testing,
- ! The increasing SARS-CoV-2 variants and newly emerging US variants,
- ! The vaccinated and unvaccinated populations working together (unknown transmission vector), and
- ! The inability to effectively socially distance within laboratory spaces

The Research Officers Committee of the Senate, with support from the Commission on the Status of Women and the Student Affairs Committee – request mandatory weekly testing for all affiliates who enter the campus at least one day a week.

Furthermore, consideration for a negative COVID PCR test, following a positive COVID diagnosis, be required prior to returning to campus.

Thank you for your attention.