FAS Senate

AN ELECTED BODY OF THE FACULTY OF ARTS AND SCIENCES YALE UNIVERSITY

FAS Senate Meeting October 15, 2020 3:30 PM – 5:30 PM Via Zoom APPROVED

Present: Matthew Jacobson, Sybil Alexandrov, David Bercovici, Howard Bloch, Nicholas Christakis, Aimee Cox, Emily Erikson, Marta Figlerowicz, Joseph Fischel, John Geanakoplos, Alessandro Gomez, Miki Havlickova, Valerie Horsley, Jennifer Klein, Timothy Newhouse, William Nordhaus, Ruzica Piskac, Kathryn Slanski, Meg Urry, Paul Van Tassel, Steven Wilkinson

Rose Rita Riccitelli, Staff

Absent: Hélène Landemore,

Guests: 65 guests including Jill Campbell, Marvin Chun, Stan Eisenstat, Michael Fischer, Tamar Gendler, Emily Greenwood, Larry Gladney, Margaret Homans, Brad Inwood, Ruth Koizim, Christina Kraus, Naomi Rogers, Joel Rosenbaum, Stephanie Spangler, David Swensen

CHAIR'S INTRODUCTION:

Updates and announcements from the Faculty of Arts and Sciences Senate (FASS) Chair, Matthew Jacobson. **Mr. Jacobson** noted that the FASS was formed because of a minor uprising and debate on the part of the faculty who wanted more transparency in the decision-making at the University and wanted a broader sphere of participation in shared governance. It is the FASS's position that Yale still has a ways to go, however he said that it is important to acknowledge progress when, made and to give credit where it's due. He acknowledged how conscientious **FAS Dean Tamar Gendler** has been and also has been very generous with her time and has been meeting with he and the FASS's deputy chair on almost a weekly basis since he took the role of the FASS chair in early July 2020 and has fielded our own concerns and questions. He said the Executive Council's monthly meetings with **Dean Gendler** are soon to resume and noted that **Provost Scott Strobel** has agreed to meet with representatives of the FASS on a quarterly basis, which is quite a stride forward.

Mr. Jacobson proceeded to read his statement as chair of FASS in response to requests from faculty and students to address these dangerous historical times and what they require of us as educators and as elders at this institution. He said:

It has generally not been a pose of the FAS Senate to do much sermonizing, but a few colleagues and students have asked us to comment on the current sense of national crisis

and our response to it as educators. This is not a partisan issue, by the way—it ought to be a matter of universal concern that we are not assured of a smooth and peaceful transfer of power in the coming election, that its results might be questioned or even rejected, that white nationalist terrorist groups have plotted to kidnap governors in two states that we know of and are likely on the prowl even now, that polling itself and the aftermath of the election might be attended by violence, and on top of it all, there is an ongoing threat of foreign interference in our politics *and we're in the middle of a pandemic*. None of this is business as usual, and there are many plausible scenarios one might dream up that do not end well. None of us asked for these things to be happening in our country, but we all did ask to enter a profession that leaves a lot of young people under our care and guidance. It is important to know that our students are freaked out by the layers upon layers of crisis; but some of them are all the more freaked out in perceiving silence, avoidance, denial, or complacency in the elders who surround them. One student wrote to me,

I think that all professors should pause their coursework and be able to acknowledge, talk about and/or apply the topic of the political shit show to what they're teaching because everyone regardless of race, religion, SES status, sexual orientation, gender, etc. is impacted by the election (now more than ever in college students' lifetimes). Being able to talk about the trauma and stress ... is the bare minimum that schools should be doing and sadly some schools avoid a conversation altogether or neglect to discuss how marginalized groups in this country feel the impact to a greater extent. Expecting students to carry on without helping them explore their feelings or educate them on the many, many layers of damage due to our national crisis and how this damage bleeds into affecting mental health, the health care system, education, economics, international relations (the list goes on and on) is a huge part of the issue. It teaches younger generations to sit on anger or become passive during times like these. UNIVERSITIES NEED TO SPEAK UP I think is my point. [That was a recent grad.]

This is a moment that prompts the highest ethical, pedagogical, and caretaking responsibilities of our calling. I urge all of us—individually and collectively—to think about and enact the necessary conversations, whether in the classroom, in department town halls, in the residential colleges, in communications from the deans and other administrators, in teach-ins and programming. We cannot promise our students that everything will be fine; but we can promise that we hear them, that we are continuing to listen, that we share their concerns and fears and also their hopes, that we are all in this together, that we will have their backs as best we can, and that—as history shows—our shared and collective studies are among the antidotes to such periods of social and political travail. On a more quotidian and practical level, you might consider avoiding assignments and exams too close to the election and consider giving extra allowance for students who are struggling. Onward!

Presentation and Approval of Minutes from September 17, 2020 FASS meeting: Mr. Jacobson presented the minutes from the FAS Senate meeting of September 17, 2020 and asked if there were any edits or comments. There were none. A vote was taken and it was unanimous to approve the minutes for the September 17, 2020 FAS Senate meeting.

COMMITTEE REPORTS:

Committee on Instructional Faculty and Academic Support:

Sybil Alexandrov reported on the recent announcement from the Provost that all full-time nonladder instructional faculty who become new parents are eligible for teaching relief and for child rearing for one full semester. **Ms. Alexandrov** noted that the committee has been working on this for a very long time so it is most gratifying. She expressed gratitude to the administration for applying the parental leave to all faculty which is an inclusive policy. She said that many people have worked on this issue even before the FASS was created, and she thanked all of the senators who worked diligently on this issue. They are:

2015/16

Report on Faculty Diversity and Inclusivity Prepared by the <u>Ad Hoc Committee on the Diversity and Inclusivity</u> Emily Greenwood Beverly Gage Matthew Jacobson, Reina Maruyama Doug Rogers Charles Schmuttenmaer Vesla Weaver

2015/16

Report on Parental Policies Prepared by the Faculty Advancement Committee David Bercovici John Geanakoplos Shiri Goren, Matthew Jacobson Yair Minsky William Rankin, Katherine Trumpener Karen Wynn

2016/17

Report on the Status, Pay, and Conditions of Non-Ladder Faculty in FAS Prepared by the <u>Ad hoc Committee on the Status, Pay, and Conditions of Non-L adder Faculty in</u> <u>FAS</u> Shiri Goren Emily Greenwood Ruth Koizim Rona Ramos Jonathan Reuning-Scherer Charles Schmuttenmaer Joseph Wolenski

Ms. Alexandrov also recognized the following individuals for their distinctive dedication to this cause:

Howard Bloch, who commented that "It's the right thing to do." **Joseph Fischel**, who noted that "babies are babies." **Ruth Koizim**, who never missed a beat! **Shiri Goren**, who always looks for a solution. **Theresa Schenker**, who provided specific examples and the hope is that she will benefit from this new policy.

Mr. Jacobson called on **Stephanie Spangler**, Provost for Health, who spoke on the announcement from Tuesday evening on a cluster of Covid-19 cases on a Yale athletic team. **Ms. Spangler** requested that her comments not be part of the minutes as the information she is reporting on has not yet been made public, however she noted that it will be announced to the public in the coming days.

Mr. Jacobson introduced **Emily Erikson**, chair of the <u>Ad Hoc Covid-19 Crisis Committee</u> to update the FASS on that committee's work to date. **Ms. Erikson** said that she and the committee had an encouraging meeting with **Ms. Spangler** last week and learned that all in-person groups on campus have agreed to implement regular testing protocols/schedules.

Mr. Jacobson introduced **Valerie Horsley** to report on the <u>Diversity Committee</u>. She_noted that working with the *Women's Faculty Forum* and the FAS Dean's Office for Science and Engineering, an event on October 26, 2020 has been organized about inclusion and diversity in the sciences, which is the committee's initial focus. She said that the event comes after viewing a documentary "Picture a Scientist," – a very powerful documentary, and we are planning another viewing from the 21st to the 23rd that will be followed by this event. She noted that **Larry Gladney** is moderating the event, with two panelists – **Anjelica Gonzalez** and **Priya Natarajan**. She said it will be presented to the sciences initially with the hope of offering it to other areas in the future.

Faculty Advancement Committee. **Ms. Klein** noted that there is a new <u>CESOF Committee</u> this year and the <u>Faculty Advancement Committee</u> has contacted the chair of the <u>CESOF</u> committee inviting him to meet with the FASS. **Ms. Klein** noted that the main focus her committee wants to stress to <u>CESOF</u> is the idea of follow-through. She spoke of the many issues that <u>CESOF</u> has covered in the past, and now the question is why have not all of the suggestions and recommendations that have been put forward been acted on. She also said that her committee is focusing on the issues surrounding the inequitable burden of service time and compensation for service time. She noted that there are universities that have systems for compensating faculty for service time. **Ms. Klein** asked members of the audience to let the committee know if they have been part of a university that had such a system and how it worked so that we can learn how to convert our service time to time off.

Mr. Jacobson introduced Paul VanTassel for an update from the Science and Engineering

Committee. Mr. VanTassel said that the committee plans to host a Town Hall Meeting on science priorities. He noted that in 2018, Yale released its science strategy with five priority areas: Quantum Science, Data Science, Planetary Solutions, Neuroscience and Information Science – all being the target of investment over the next five to ten years. He said that at the Town Hall meeting, we will ask individuals from each of these areas to provide us with updates and how these initiatives are going. He said there is hope that common themes will emerge and common challenges that they are trying to surmount, and they can use enhanced faculty input. He noted that the committee is also working on a diversity postdoc initiative, and to enhance current postdoc programs and provide university funds to support cases that would enhance diversity. He noted that FASS senator David Bercovici will provide more details at a future FASS meeting. Mr. Van Tassel said that the committee has been dealing with Covid-related extensions to faculty term appointments, and pointed out that when the pandemic began, the University extended the appointments for all the junior faculty for one year. He said that it turns out that junior faculty who presented their tenure cases before the pandemic, but whose cases were unsuccessful, are not eligible for these Covid-related extensions. He mentioned that Ms. Horsley called to our attention one particular individual who has been affected by this situation and the committee is advocating on his behalf, and we suggest that the FASS advocate for this sub-group as a whole for all those who did not receive tenure this year and have not been granted a Covidrelated extension.

Mr. Jacobson introduced **William Nordhaus** to speak about creating a working group to look into the *Early Retirement Incentive Plan for Tenured Faculty Age 70 and Over*. **Mr. Nordhaus** explained that in August 2020, the Provost announced this program and **Mr. Nordhaus** noted that this plan was developed with zero faculty consultation and that there are some obvious questions by faculty that need to be addressed. He noted that we are taking an unusual step here because this policy has important impacts outside FAS that we thought it useful to have a committee with members from the FAS and from outside of the FAS, and that we will call it the Inner-School Faculty Working Group on the Retirement Incentive Plan. He said that this plan covers 177 faculty, of whom 82 are in the FAS, 71 in medicine, and 24 in other Yale schools. He explained that we have 3 members from this body, one each from the Medical School, the School of Management, and the Law School. He said after discussion and deliberation among the group, we have some points that have come up:

- 1) The proposed buy-out is 100% of this year's salary for those above \$200K and below \$125K, and the question is if this is a fair and effective level.
- 2) The proposed buy-out is for the academic year's salary for the FAS, and we want to know if this is appropriate.
- 3) We want to know what the parameters are at other schools/universities.
- 4) There is concern that the base is in a year of a salary freeze and we ask if this should be adjusted.
- 5) We want to know if the plan is tax efficient.
- 6) There are questions about the timetable and the fine print and whether there are supervisions that are unreasonable or unlawful.

Mr. Nordhaus proposed that the FASS authorize the working group to consider the incentive plan and make a report to the FASS and provide this report to faculty of the other non-FAS

schools represented on the committee. **Mr. Nordhaus's** proposal was seconded by **Kathryn Slanski**. **Mr. Jacobson** asked senators only to indicate their approval by raising their hands. A vote was taken and the proposal for the FASS to authorize the working group to consider the incentive plan and make a report to the FASS and on behalf of the other members of their own schools and provide this report for their faculty passed unanimously.

Mr. Jacobson turned to a motion put forth by the <u>Diversity Committee</u> and presented to the FASS by **Ms. Horsley**. He said it is a resolution on the *Yale Prison Education Initiative* and is a follow-up on a presentation at the FASS September 17, 2020 meeting given by **Zelda Roland** of Dwight Hall that included remarks by faculty colleagues **Elizabeth Hinton** and **Phillip Goff**. As a result of their remarks, he said that the FASS drafted a resolution of support and listed three of the reasons for the FASS support:

- 1) It is a deep commitment to a devoted core group of FASS faculty.
- 2) It has yet received the material support that the FASS feels it deserves.
- 3) *The Prison Education Initiative Program* is just the kind of social justice effort that lines up well with the articulated aspirations of the University in this moment of national reckoning in the Black Lives Matter era and in the wake of uprisings around issues of criminal injustice and racial injustice.

Mr. Jacobson happily reported that the administration has already begun to take beginning steps towards granting the kind of support that the we are calling for, so this is in no way an insurgent resolution. Therefore, he said, we are putting forward a resolution as a means of recording the FASS's strong support for the program and underscoring key aspects of the requirements for the *Prison Education Initiative Program*.

Ms. Horsley thanked the committee for their assistance in creating the following resolution which she read to the audience:

Resolution of Support for a Prison Education Initiative at Yale

WHEREAS, the Senate of the Faculty of Arts and Sciences of Yale University (FASS) was established as an elected representative body by a vote of the Faculty of Arts and Sciences; and

WHEREAS, systemic racism in American institutions has led to mass incarceration of over 2.3 million people in the United States and disproportionately affects black, indigenous, and people of color; and

WHEREAS, Yale's mission statement states that "Yale is committed to improving the world today and for future generations through outstanding research and scholarship, education, preservation and practice. Yale educates aspiring leaders worldwide who serve all sectors of society"; and

WHEREAS, the Yale Prison Education Initiative at Yale has provided its faculty an opportunity to teach incarcerated individuals and has set the standard for institutions of higher learning in this venture; and

WHEREAS, on April 28, 2020, the Report of the Ad Hoc Committee on Prison Education at Yale recommended that the Dean of Yale College 1) appoint and authorize representatives from the Yale Prison Education Initiative and 2) pursue a prison education partnership with another institution for the purposes of offering courses, credits, and degrees; and

WHEREAS, on April 28, 2020 the Report of the Ad Hoc Committee on Prison Education at Yale recommended that the Dean of Yale College and Provost's office create initiatives to support education of incarcerated individuals; and

WHEREAS, the Yale administration has not responded publicly to the Ad Hoc Committee on Prison Education's report;

THEREFORE, the FAS Senate of Yale University resolves as follows:

RESOLVED, that the FASS urges the administration to enact the recommendations of the Report of the Ad Hoc Committee on Prison Education at Yale, a prison education partnership with another institution and that the Dean of Yale College or University Provost appoint a faculty committee to oversee the academic components of this partnership; and

RESOLVED, that the FASS urges the administration to enact the recommendations of the Report of the Ad Hoc Committee on Prison Education at Yale that the current arrangement of offering credited, tuition-waived Yale Summer Session courses through YPEI continue; and

RESOLVED, that the FASS urges the administration to lift its constraints on YPEI offering credited Yale Summer Session programming only, and authorize YPEI to develop a blueprint for offering year-round credit-bearing Yale courses to incarcerated students; and

RESOLVED, that the FASS recognizes that knowledge and analysis are a basis for enhancing social justice and in this case, Yale's support of prison education aligns with Yale's mission and addresses a social justice crisis in the United States.

Ms. Horsley made a motion to approve this resolution to support the *Yale Prison Education Initiative.* **Mr. Jacobson** asked for comments before the vote was taken. **Nicholas Christakis** commented that about four years ago he tried to hire someone who had what he considered to be a mild prison record and said Yale would not let him do it. He wasn't sure if this was specific to this individual or if it was a systematic situation, however they did go through a long process, and in the end he was able to hire this person. He asked if anyone knew if part of this initiative is to be able to hire people who have a record and need to be reintroduced to society. **Mr. Jacobson** asked if anyone knew the answer and **Ms. Horsley** noted that this question is something that the <u>Diversity Committee</u> can take charge of. **Joseph Fischel** said that it would be good to encourage faculty to be involved in this initiative and **Ms. Horsley** said she could certainly add this point to the resolution. **Mr. Fischel** said he did not feel it was necessary to add this point to the resolution but simply to make sure faculty are encouraged to participate in the Prison *Education Initiative Program*. **Mr. Jacobson** agreed that this will be something that the FASS can encourage without it being added to the resolution. With no further comments noted, **Mr. Fischel** seconded the motion to accept the *Resolution for the Yale Prison Education Program*. A vote was taken and it was unanimous to accept the *Resolution for the Yale Prison Education Program*.

Mr. Jacobson introduced the topic of the childcare crisis at Yale during the Covid crisis and more generally. He said that the FASS has been working closely with the Women Faculty Forum (WFF) and the Working Women's Network (WWN), the Committee on the Status of Women in Medicine (SWIM) and the unions on childcare arrangements that are available to faculty and staff at Yale. He said these have been productive conversations and should not only be of interest to parents of children who presently are in need of childcare, but should be a concern of everyone, even those who no longer need childcare or those who are not parents, because it impacts all work being done at Yale on every level. Mr. Jacobson introduced Naomi Rogers of the WWF to make a statement. Ms. Rogers noted that working with the Women Faculty Forum (WFF), the Working Women's Network (WWN), the Committee on the Status of Women in Medicine (SWIM), the FASS, and the unions, and from that work, there has been a new committee established - the Yale Childcare Consultative Committee that will address childcare in its broadest forms. She also noted that over the past few months, Yale has added spaces to a number of childcare facilities which has helped a small number of parents, and we are grateful for this. However, she said, the concern is how Yale has managed the issue of childcare. She said it is economic and also speaks to the space constraints that are not Covid related issues, and that there are a number of parents who simply cannot afford any of the spaces that Yale currently offers and includes the money that Yale provides for a certain numbers of days of childcare costs. The committee, she said, is looking at the economic issue and more broadly at the way the Covid crisis tipped over the edge those who were already trying to balance their work and childcare and are losing that balance. The committee has many demands and proposals, and Ms. Rogers noted that they have already had a useful meeting with the Provost and the FAS Dean, and they were able to articulate a few initial demands which includes setting up a Provost's Childcare Taskforce and asking that the Provost consider expanding "crisis care days" which are currently 20, and we have proposed 50 to the end of 2020. And, she said, we want this task force to think about some of the structural issues around working conditions and work culture which many face. Ms. Klein asked Ms. Rogers if she would like people to offer feedback and suggestions. Ms. Rogers said they welcome any information offered, including people's experiences and testimonials. Mr. Christakis suggested that one small thing the University could do is to provide larger life insurance policy options specifically for the males - a demographic who is impacted but not recognized.

BUDGET COMMITTEE PRESENTATION:

Mr. Jacobson introduced **John Geanakoplos** who then introduced **David Swensen** to offer information on where the University's endowment stands. **Mr. Swensen** noted that when he last spoke to the FASS, he was pretty negative on the prospects of the endowment because we were in

the midst of a pandemic and therefore we took a different approach to asset allocation from what we had ever done before. He explained that we have this technique of mean variance optimization that is wonderful if markets are behaving normally, and one of the fundamental assumptions of the mean variance optimization is that returns are normally distributed. When you are in the midst of a pandemic in what we call the fat tail of the distribution, we know that securities' returns are not really normally distributed and there are more extreme events and the markets would then be consistent with a normal distribution. He said that we mapped out the pandemic, with assistance from Akiko Iwasaki and Sten Vermund, and their discussions were very helpful and prescient. He noted that they also had help from economists William Nordhaus, Rick Levin and Ben Polak, and the economic implications of the pandemic that we outlined are pretty good as far as economic predictions go, and then it was left for the investments office to figure out the market implications of the course of the pandemic and the course of the economy. He said he could give the pandemic prognosticators an A, the economists an A, and he would give the investments office an F, because we were, and continue to be concerned about the damage to the real economy and the potential damage to the endowment. Mr. Swensen said that we ended the year – June 30, 2020 – with a 6.8% return – a number that he is quite proud of. He said that the median return for colleges and universities was about 1.1%, which is an extraordinary gap between the median return and Yale's result. He noted that our venture capital portfolio led the charge with a 24.5% return on the more than 20% of endowment assets, so it had a significant impact. He said foreign equities had a double digit out performance of the market returning 13.2%, and emerging market equities had similarly double digit out performance with 15.9%. This, he said, brings our 10-year return to 10.9% per annum - one of the top results in the country, and our 20-year number is 9.9% per annum, which is the top result in the country, and for context, that added almost \$26 billion in value relative to the average college and university. He said that the \$26 billion has shown up in part over the last 20 years with higher spending and in part with higher endowment value today. He said that in terms of the current market, we are off to a very strong start for this fiscal year - somewhere in mid-single digits even though we're only a few months in, and he is concerned with the speculative nature of this market. He noted that there is also a happy side to the speculation and he is working very hard to preserve as much of the gain as prudent and he is certain that Yale ultimately benefits from the investments. He said that we don't control the sale of the shares our partners do - and in one instance the shares are not salable because it's under a lock-up which is a management problem, however he believes it will work out to be to Yale's benefit. He said that right now, 6.5% of the endowment is in Unicorns - a cute name for private companies that are valued at more than \$1 billion. He said we did not buy in at the \$1 billion valuation. He said that 3.5% of the endowment is in publicly traded venture companies so we have that 10% clearly exposed to these speculative markets, and he said the only analogy he comes up with is what we saw in the late 1990's with the Internet bubble, and in December of 1996, Alan Greenspan said that the markets were in a state of irrational exuberance and it wasn't until March of 2000 that the bubble collapsed. He said that it could be that the market becomes rational tomorrow, or next week, next month or two or three years from now - and it's really impossible to say. He said one of the things we are preparing for is a collapse in valuations, and in part we did that with borrowing \$1billion from the bond market to provide support for the endowment in the event that we have a serious market decline, and it is supposed to protect us from being

forced to sell our risky assets at depressed prices and also provide money that we can play offense with in the event that market prices become depressed. He said he is still concerned about the near-term outlook but thinks Yale is very well prepared in terms of the endowment and operations, and even though we may have a bumpy road ahead, the University is, relative to others, in a very, very strong position. **Mr. Jacobson** thanked **Mr. Swensen** and noted that his job is to make the money and not necessarily to spend it, however he asked if there are any lessons he would like to share with us about University strategy going forward. **Mr. Swensen** responded that he thinks the University is in a good position to make selective investments in the future. He said he believes strongly that they should be focused on the faculty and the students and worries about administrative bloat and feels we should continue efforts to operate our support functions more efficiently. He said we are in a position of relative strength and feels on the margin that we can take advantage of that. **Mr. Jacobson** turned the conversation over to **John Geanakoplos** who thanked **Mr. Swensen** for his performance and for his talk. **Mr. Geanakoplos** spoke on how Yale should take advantage of our opportunity. He said:

The Covid pandemic has brought the world terrible suffering, and most of us awful inconvenience. It brought us a health crisis and a financial crisis.

I remember the days in early August when school after school announced they were not taking students back onto campus, including my Harvard senior son. I would like to express my heartfelt thanks to the administration for handling the Covid health crisis so well. They listened to the science and did what other schools could not. They looked at Yale's resources and strengths and took calculated risks that even many faculty thought were too dangerous. That is leadership. They once again made me proud to be at Yale. Thanks to Scott and Peter and Tamar and Marvin.

Now I hope the Yale administration will listen to the science of financial crises and take the right calculated risk to deal with the Covid financial crisis. Yale is unlikely in the next 50 years to have so good an opportunity to make progress in faculty excellence and diversity as it has right now (and to be honest, may continue to have for another year or two). Many other first tier schools like Penn and Chicago and NYU and Berkeley and all the state schools are having financial troubles and are unable to do their usual hiring and graduate student recruiting. The opportunity now is huge. Seize it. Make us all doubly proud to be at Yale.

Fortunes are made and organizations are transformed when you can buy low. Seeing an opportunity is rare. Seeing an opportunity while having the money at the same time is truly extraordinary.

The Provost Scott Strobel told us in his open meeting with the faculty a few weeks ago that he has not forgotten his pledge to close the excellence deficit that has built up in faculty size and faculty salaries compared to our competition. Now is the best time to make good on that pledge. Financial economic science speaks with crystal clarity. The financial situation of Yale does *not* require a 50% hiring freeze, it does *not* require a continuing salary freeze, and it does *not* require a *pause* in graduate admissions.

The Covid Pandemic is a terrifying threat to life and work. It is completely understandable that a responsible and prudent Provost would be alarmed and frightened. We were all frightened and we still are. It is not surprising that a Ship's captain going on his maiden voyage and immediately confronting a once in a decade storm would want to Pause.

Though the new captain may not have experienced one before, scary *financial* storms have blown through many times before. Every experienced investor knows the sickening feeling you get when it seems your fortune and your life plans are suddenly in jeopardy of being destroyed. An entire financial economic science and investor folk wisdom has been built up around how to cope with this very situation.

The first and most important rule is not to panic. Stay the course. Do not make changes that will be expensive to reverse if things return to normal. Crises usually seem to be worse at first than they ultimately turn out.

Imagine if in March, David Swensen had said uncertainty is high, Yale will take a pause from the market, and will sell the endowment assets off and wait until uncertainty resolves and then go back in. We would have been selling while the market was 20% lower than it had just been and would be again a few months later. The *additional* transactions expense of selling it all then buying it all back would also have been huge, and that is the loss that should absolutely be avoided. Pausing like that would have been called panic selling.

The second rule is that in a crisis the advantage lies with the investor endowed with money and the ability to borrow. Such an investor cannot be forced into selling. The rational behavior of the liquid investor is radically different and in fact often completely the opposite from the cash constrained investor.

The third rule is that in crises there is *opportunity*. Buy low if you can get the money. Jack Welch, for whom I indirectly worked for five years, the CEO of General Electric and the most famous business leader of the 1980s, said that you can best judge a manager by how he does in the down cycle.

The wisdom in these three financial principles is enshrined in the celebrated Yale Endowment spending rule. It was created by the greatest macro-finance economist in the world James Tobin and his Yale disciples, including David Swensen, and imitated across the country. It recognizes the advantages Yale has from its huge endowment. It is designed to protect the long run intergenerational excellence of the University. Surprisingly, but in accordance with financial economic science, the Yale endowment spending rule protects the future by ensuring stability for the present.

The Senate explained this in three documents last year. You know of course the Yale spending rule that specifies expenditures of 5.25% out of the endowment. Some of you might not know that it is not 5.25% out of the current endowment, but 5.25% out of the average historical inflation corrected endowment. The reason for that is a windfall gain or loss in one year has only a small effect on the long run average, and so only a small effect on spending until the change is revealed to be more permanent. The rule stabilizes current spending.

In recent years the endowment had been doing very well and increasing in real terms. The endowment spending rule therefore prevented the current generation from profiting from these outsized returns and prescribed only 4.70% spending out of contemporaneous endowment last year.

The beauty of the spending rule is that it is also a recipe for how to cope with financial crises, which Yale has seen many times. In short, the rule specifies slow and gradual adjustments in spending even in the face of big fluctuations in the endowment. The financial losses from Covid have been small compared to past financial crises, yet the cutbacks to faculty hiring and salaries and graduate admissions are disrupting the core mission of the FAS. The appropriate response would have been to STAY the COURSE.

Stay the course at least until we find out how bad things really are. Most financial crises look scarier than they turn out to be. Things very often return to normal. Stay the course because abrupt changes are unnecessarily damaging, like selling off a portfolio and then buying it back. Freezing hiring in midstream loses candidates and time and cannot be made up by hiring twice as fast later when things turn around. Stay the course because if there is a genuine crisis, it takes long deliberation and planning to sort out what the right response is. Panicking today in the misguided effort to protect tomorrow is the surest way to compromise tomorrow.

Stay the Course because the fundamental principle of Long-Term Sustainability, which is the mission of the Yale endowment manager, is to leave every generation equally well off. That means the current generation does not have the right to disproportionately consume windfall gains (say from alumni contributions) but also it means the current generation should not be crushed by bad luck, such as from Covid. The gains and losses must be spread across all generations.

Administration employees are often quoted in the Yale Daily News saying that we need to cut spending now to preserve the endowment for future generations. That is a misunderstanding of the letter of the Yale spending rule and a grievous misunderstanding of the spirit of the spending rule. The spirit is exactly the opposite of insulating the future from what is happening now. It is the current generation that is meant to be protected by passing on windfall fluctuations to the future. That is how best to protect the future excellence of the University.

By the Provost's own accounting in the letter he sent us, the total losses so far, including last year's expenses, all the hospital losses, this year's tuition loss and the extra zoom equipment etc., have come to \$250 million dollars. That sounds like a large number. But it is ONE DAY's average fluctuation in the value of the Yale endowment. The Yale endowment spending rule is designed to prevent expenditure fluctuations based on only one year's move of the endowment. Imagine how foolish it would be to radically change spending on the core mission of the university due to one day's average fluctuation in the endowment.

Of course, there are rules constraining what the current generation can spend. These rules guard against the temptation every college president has to say now we are facing an unusual problem that requires extra spending. But there is no clearer case imaginable than Covid to describe a legitimate windfall expense that should be treated like an endowment loss and not like irresponsible overspending.

The administration and the Trustees have the freedom to spend more. They have it because we have a huge endowment, and because David Swensen has squirreled away hundreds of millions of cash to protect us against such a crisis, and because he has maintained Yale's AAA rating to borrow.

But most obviously, there is lots of room to spend more because we ran a \$125 million surplus last year! The salary freeze in FAS saved us \$5 million. Was running a \$125 million surplus instead of \$120 million worth freezing salaries of an underpaid faculty? Why of all years would we want to run a surplus?

Nothing seems more natural than to pause in a world pandemic. It almost sounds like common sense. But that is because pausing sounds like holding steady. Staying the course is in fact the right thing to do. Pausing by contrast is a euphemism for cutting. The Senate released a report last year explaining the damage Yale has inflicted on itself by partially freezing hiring and salaries in past financial crises. Every hiring freeze led to shrinking the faculty and to declining excellence of the Yale faculty.

Pausing graduate admissions will have the same deleterious effects. There is no better moment to recruit good graduate students, when so many other universities cannot. Pausing Graduate admissions for a year means missing out on an entire cohort of students, just when we can get the best. It means Yale will award fewer PhDs. The graduate dean Lynn Cooley sent a letter to chairs recommending that departments pause admissions for a year. She said it would not be a sign of weakness, but of strength. No, it most certainly is a sign of weakness. It is also a signal to graduating seniors that Yale does not value the PhD degree. Pausing to get the cuts over with might make sense for some departments faced with a budget balancing rule that for every student given a seventh year because of Covid, a year must be taken out of the prospective new class. (One less new student means six less years, so pausing for a year looks to me like an overpayment.). But why would we impose such a budget balance rule on the graduate school for Covid expenses? If a once in a century hurricane blew off a roof, we wouldn't say you can fix that roof, but not next year's roof. Somebody has to spend less if we spend more on roofs this year, but it doesn't have to be right away, and not in something so important as roofs, or the core mission of the university.

The PhD is becoming a more important degree, not a less important degree. It is increasingly required for many more jobs and not just professorships. As sure as the sun will rise, the number of PhDs will grow, just as the number of BAs has grown. Reducing the number of PhDs at Yale is moving in the wrong long run direction. Of course, some reallocation of the number of students across different departments might be needed. The model of paying full tuition and \$35,000 stipends might not work forever given that more and more PhDs will not become professors. But there is absolutely no reason to pause admissions when we do know the number must eventually grow just because we don't know the details of the future.

We lurched around the university last year with hiring freezes, pay freezes, and actually persuading departments to renounce graduate students for next year (art history for example). Now we are lurching the university back in the other direction by restarting some of those searches. The cost in lost time, missed candidates, and a demoralized faculty shows the wisdom of the Yale endowment spending rule, which is meant to prevent such waste.

The markets didn't end up as low as the administration worried, nor did our donors abandon us. The medical school hospital is giving colonoscopies again. This isn't a divine reward for our prudence. This turn back to normal is what usually happens in crises and is precisely the reason why the endowment spending rule is not to cut, but to stay the course.

The cuts last year were ill advised. Consultation with the faculty about the budget was almost nil. But bygones are bygones. All in all, the Provost and the administration did a remarkable job getting us through last year, especially considering it was his first semester on the job in an astoundingly difficult situation, with much more than just finances to worry about.

But the grading standard is tougher this year, because the path forward is so much clearer. We have a huge intact endowment. We have the world's best endowment manager. We are in a completely different situation from almost every other university because they have no choice but to cut back. As the second and third principles of financial management make clear, the institution with the money and the ability to borrow should act differently from everyone else. We have a once in a generation chance to hire good faculty and to recruit good graduate students. Maintaining hiring at half speed and pausing graduate admissions is profoundly irrational. Missing this opportunity would be unforgivable.

The Provost and President have a chance to have their names reverberate through history. Most great institutions reached greatness in jumps, not smoothly. And often because the competition was hamstrung. Think of Yale in the 1930s. We had just gotten the Sterling donation in 1929, which improved our faculty, and our buildings, and our student support. Think of the Harkness donation of 1930 that allowed us to build 8 residential colleges during the depression, when building costs were at their lowest. President Angell was loath to accept the contribution from Harkness because he thought a new college system was too bold. It might upset the alumni who were devoted to fraternities. Only after Harkness gave Harvard \$11 million for their houses did he come around to taking the money, which Harkness raised to \$14 million to keep his alma mater ahead. Now is the time to be bold. I was reminded of this last Monday when the Nobel Prize was announced in economics. One of the winners Paul Milgrom had been a professor at Yale in the 1980s when I was a junior professor myself. We wrote papers together and played basketball at his house. Once he left for Stanford we stayed in touch but never wrote another paper together.

The late 1970s and early 1980s were a difficult time financially in the country and for Yale. But Yale had decided to get the business school up and going and was willing to be bold. The economics department already had two Nobel prize winners, the retired Tjalling Koopmans and the magisterial James Tobin. And a third dazzling young economist named bill Nordhaus, who of course would go on to win a Nobel Prize. Yale hired Steve Ross, who died just before getting what would have been Yale's fourth Nobel. It hired Bob Shiller who was the fifth Nobel to be at Yale in the 1980s. It hired Paul Milgrom, who was the sixth Nobel laureate to be. It hired Oliver Williamson, the seventh. And again, in the same few years while I was a junior faculty, we hired Bengt Holmstrom, who also went on to win the Nobel Prize. I spent my junior years at Yale with 8 Nobel Prize winners, 5 of whom were recruited in a very short period of time when Yale decided to be bold while others couldn't.

We can be bold again. Bold enough to be the best again. Mr. Provost, seize your moment for us all.

Next **Mr. Jacobson** called on **Meg Urry** to comment on the sciences. The following is **Ms. Urry's** statement "Science at Yale 2020+":

Two years ago, Yale announced an ambitious science initiative enumerating specific priorities and cross-cutting initiatives. The university wants science departments to aspire to "top 10" or even "top 5" national rankings. This increased attention to science contrasts with substantial underinvestment over the past century, which other speakers have described.

How can the university advance in a field where it starts behind peer institutions? In normal times, it is an uphill battle. Now, however, the pandemic scourge that is so negatively impacting the world has nonetheless left Yale in far better shape than many peer institutions. Now is the time to be bold, to move when others cannot, to think big. We should invest in hiring exciting new science faculty, at both the junior and senior levels, and we should embrace bold initiatives that make us more attractive to those scientists. For example, we could make graduate student stipends and tuition free to faculty (as it is in many other departments at Yale, and as had a very positive impact on the Music School). We could develop a world-class program for brilliant postdoctoral scholars that is prestigious, interdisciplinary, and inclusive; as these scholars move on to other top institutions, they will send us their best students and help build our reputation. We could start an Institute for Advanced Studies. We could say "yes" to great ideas rather than, as is more often the case, "no, sorry, we're not Caltech."

There is no reason Yale science cannot be better than others. We are bigger than Caltech. We are richer than Berkeley. We have the means and motivation to create a highly visible, highly successful science landscape at Yale.

Which brings me to this year's Nobel prizes in science. One of the winners of the 2020 Nobel Prize in Physics is Andrea Ghez, a professor at UCLA and an old friend, who proved the existence of a massive black hole at the center of our Milky Way galaxy. Fifteen years ago, after it was obvious her work was Nobel-worthy but before she had received an avalanche of accolades, I suggested we try to hire her away from UCLA. I think we had a chance but it would have meant a big investment in telescope facilities and other incentives. We didn't even try.

This year's Nobel in Chemistry went to Jennifer Doudna and Emmanuelle Charpentier for their discovery of CRISPR, a novel technique for editing the genome. (This is the first time the Nobel has been given to a team of women only. How wonderful that so many women have been recognized this year!). Doudna was on the Yale faculty until she moved to UC Berkeley in 2002. What if we had fought harder to keep her? What if these two Nobel prizes had come to Yale? What if many other Nobel prizes in STEM had come to Yale?

We can do this. We just need to be ambitious and leverage our considerable financial advantage at this difficult time.

Next **Mr. Jacobson** introduced **Howard Bloch** to offer a humanist view of the sciences. The following is **Mr. Bloch's** statement "Missed Opportunities":

So much of what goes into making a university great has to do with meeting and matching the moment.

Science at Yale began with such a recognition. When a meteorite fell on the morning of December 14, 1807 in Weston, CT, an enterprising young Professor of Chemistry, Benjamin Silliman, and a colleague, James Kingsley, who taught Hebrew, Greek, and Latin, set off two days later to bring it back to New Haven. The paper which Silliman presented to the American

Philosophical Society in Philadelphia in 1809 engendered a national debate and was probably the first scientific paper in America since those of Benjamin Franklin to attract notice in Europe.

When it came to the natural sciences, Yale was unsurpassed by any American university in the nineteenth century, which began with Silliman and ended with Josiah Willard Gibbs whom Albert Einstein, leaving all relativity aside, pronounced "the greatest mind in American history."

But science lagged at Yale in the twentieth century, in part as a result of missed opportunities.

Yale failed to hire Jewish scientists exiled from Germany and Hungary in the wake of the rise of Nazism in the 1930s and 40s. None of the exiled physicists who played major and supporting roles in the quantum revolution, Jewish or not, ended up in New Haven, but were welcomed at Princeton/IAS, Columbia, Harvard, MIT, Cornell, the University of Chicago, UC-Berkeley, and Caltech. When we missed the revolution in physics in the first half of the century, we were ill-suited to participate in the revolution in genetics in the second half.

This failure stemmed from a reluctance to recognize the importance of the intellectual exodus from Europe that was compounded in the 1950s by Yale's slowness to accept government funds. President Whitney Griswold, suspicious of what government money might mean in terms of a loss of intellectual freedom, remarked that, "We must be sure each time that we can ride the horse and that it bears no trace of Trojan ancestry." It was also fed by an unwillingness to invest in the space needed for science. We apparently lost E. O. Lawrence, a Yale Ph.D. and Assistant Professor, who left for the University of California in 1928 with a salary offer of \$3500 while Yale only countered with \$3000 and could not match Berkeley's space, which is another way of saying we lacked the money to build sufficient laboratories and offices. Lawrence went on to win the Nobel Prize in physics in 1939 and to found the Lawrence-Livermore Laboratory with an annual budget of \$1.1 billion today.

Yale is now in a stellar position to recoup whatever we may have lost over the course of the last century. We have the vision, we have the space, we have the resources, we have aligned our departments, schools, and programs to meet and match the moment.

While our peers "freeze" or "pause," Yale should pounce decisively and immediately, not only in the sciences, but in every field, at every level, and from every part of the world where there is an opportunity to bring to campus faculty whose presence builds an intellectual future without which the financial future is fruitless. Not to do so actually means falling behind, and catching up, as we know, is a slow, expensive, and tricky business.

Mr. Jacobson introduced Alessandro Gomez to talk about engineering at Yale. The followings is Mr. Gomez's statement:

I feel compelled to speak a few words on Engineering since Meg Urry and Howard Bloch elaborated on the need of the sciences to recoup lost ground at a time when the competition to hire talents is restricted to the few universities that can afford it. This applies perhaps even more to the School of Engineering and Applied Science (SEAS) for which the talent pool might even be larger in view of the concomitant slump in industry hiring.

SEAS has about a hundred faculty members, including the recent return of Applied Physics. This is about one third of the size of FAS devoted to science and engineering. As a result, any reinvigorating action on SEAS will impact a sizeable fraction of FAS directly.

I will focus briefly on the tortured history of Engineering at Yale. It all started with the establishment of the Sheffield Scientific School (SSS) that initially covered chemistry and civil engineering. J. Willard Gibbs received the first Ph.D.'s in engineering in the US from SSS for a thesis on the design of gearing, a quintessential topic in mechanical engineering. Eventually he left his mark in thermodynamics and statistical mechanics and became the preeminent scientist of the nineteenth century. Fast forward a century, to the late 70s and 80s, when John Fenn, a professor of chemical engineering, was working on his development of electrospray ionization that revolutionized the field of mass spectrometry, and ultimately lead to his 2002 Nobel Prize in Chemistry. It was the first Nobel prize awarded for work in an engineering department!

While Fenn's work of the '70s and 80s received accolades everywhere, Yale President Benno Schmidt, to save money for building upkeep, proposed a reduction in FAS faculty in the early '90s that would have resulted in the shutting down of Engineering and Applied Science. This was the most striking example of the dissonance between perception of Yale administrators and the reality on the ground. The proposal was rejected by the faculty and both President and Provost stepped down from their positions in short order. Some of us on the Senate were at Yale at the time, and we vividly remember those turbulent days.

The truth of the matter is that no administration has ever resolved its ambivalence towards engineering, from the days of President Griswold in the '50s to the present time. Griswold did not like Science, and Engineering even less, and he did not encourage any kind of government money. So, Yale lost ground with respect to the competition, as our peer institutions received lavish support from the government and expanded science and engineering programs in the transformation of funding of scientific research that took place after WWII. It is difficult to play catch up with a 70 years handicap!

A brief "renaissance" took place with the Levin's administration when Allan Bromley, a physicist and chemical engineer by undergraduate training, was appointed Dean. Through the sheer force of personality, Bromley managed to establish a new department of Biomedical Engineering and a program in Environmental Engineering, both of which are thriving. Engineering was not labeled a School until 2007, but it remained a school in name only, without either financial or hiring independence and the administrative awkwardness of a school (SEAS) within a school (FAS) was not resolved. Traditional engineering departments have not grown: Mechanical Engineering, for example, has stagnated at its pathetic level for roughly 30 years, even though enrollment has tripled in

the same period and department research productivity has grown, with citations figures comparable to those of the top engineering schools.

Even now, the Science Initiative has been largely "silent about engineering" in the words of Provost Strobel. As to the recurring aspiration to higher ranking, it can't be realized without providing resources and space to flourish. There is, in fact, a clear correlation between size and ranking, as the recent climb in the ranking of Columbia, Penn and Johns Hopkins show. Being the smallest engineering departments in the country flies in the face of any ambition to better ranking.

In conclusion, there is plenty to recriminate about. To remedy the mistakes of the past, we should seize the moment and kickstart a substantial growth of engineering and applied science befitting a premiere educational institution like Yale. Timing is of the essence!

Mr. Jacobson introduced **Sybil Alexandrov** to comment on instructional faculty. The following is **Ms. Alexandrov's** statement:

I agree with my senate colleagues that Yale is in a uniquely advantageous position in these precarious times and should think big, act boldly and move forward on various initiatives. But while Yale scours the world for the best and the brightest, there are other matters that need to be addressed. With regard to instructional faculty, what is most urgent is a careful and honest examination of existing conditions.

To begin, I would like to underscore that instructional faculty at Yale are first-class educators: they are skilled and accomplished; a great number have earned PhDs, engage in research, publish scholarly articles and author books. But first and foremost, instructional faculty are committed to exceptional teaching.

On October 14, in his message "Building a Stronger and More Inclusive Yale" President Salovey stated that:

A diverse faculty and student body – who are fully included in the Yale community – form the foundation for everything we do at Yale. We will work across many fronts to achieve a university environment where everyone belongs and can thrive, so that we can continue to teach and conduct research and scholarship of the highest caliber.

Although the message addresses diversity, it specifically mentions inclusion. Instructional faculty are frequently not fully included in the Yale community. They, like all other members of the community, deserve to belong and to thrive.

The university has recently demonstrated support by equalizing the parenting leave for all faculty. On September 24, Provost Strobel announced that "all full-time faculty and managerial and professional staff earning less than \$85,000 per year will receive a salary adjustment of 1.5%, effective October 1, 2020". Without question, the gesture is

appreciated. In my own case, this translates to an additional \$118 a month for the 9 months it will cover. Since my Yale Health Care contribution is now \$111.00 per month, I am now \$7.00 ahead each month.

To thrive one needs to feel financially secure. Is it possible to make rental or mortgage payments, pay for childcare and cover college tuition for one child or more on a salary of \$75,000? Incidentally, I earn considerably less.

You might wonder how instructional faculty cope. For some, summer teaching is a welcome source of additional income. Many look forward to the experience. But summer teaching is not available to all, which means that it is not an equitable option. And one must consider what happens to those who need to teach one or even two summer terms year after year just to make ends meet. Not only is it exhausting, it leaves little or no time to reflect on the teaching process, for updating existing courses or creating new ones.

There are problems, but there are also potential solutions.

- Summer salary for instructional faculty. This would mitigate the financial burden, obviate the necessity of summer teaching and encourage instructional faculty to devote focused time to course development and enhancement.
- Salary adjustment. Review and adjust the salaries, particularly those at the lower end of the spectrum. Is the current salary adequate?
- A nuanced sliding-scale applied to childcare subsidy, college tuition reimbursement and health plan contributions

These measures would make a considerable difference.

To conclude, I would like to return to President Salovey's message: "All the academic investments support the work of our faculty members, who define Yale and are the university's greatest strength."

I look forward to the university's continued and increased support.

Mr. Jacobson introduced **William Nordhaus** who presented the following comments on "Budget and the Pandemic":

Since our last Senate meeting on the budget and the pandemic, Yale has faced and weathered an unprecedented shock. It has continued its primary missions of teaching and research – not without struggles and some hardships, but admirably in the circumstances.

But the outlook has changed. The university budget ran a surplus last year, and the central campus ran an even larger surplus. The time is ripe for a bold move to improve

Yale's standing among our peers. We have the resources, the liquidity, and the structure to do this.

The opportunities here are ones that come only once in a generation, usually in crises when the fainthearted dive for cover. Universities are hunkering down. Last week's edition of *Science* magazine reviewed academic positions and found, "Faculty job openings at U.S. institutions are down by 70% so far during the 2020-21 academic cycle." More precise data is collected on economists, where the most recent survey found that "job openings for full-time academic positions in the U.S. this year are... down nearly two-thirds (64.1%)." While there are no similar statistics for Ph. D. programs, I suspect that admissions for Ph. D. programs is also substantial.

This drop is foremost a terrible blow to the academy as it means we will lose a cohort of scholars and teachers. Yet the implication for Yale is clear. While the fainthearted are absent, Yale should use this opportunity to invest in the future. We should do it with the highest of goals and the highest of standards. We should recruit the top scholars of today and tomorrow to come to Yale, and we should start right away. Recruit at every level, in every field, at every rank, from every country.

Earlier speakers today have recounted some of the successes and failures of nerve and judgment in times of crisis. We have heard of the success of building the colleges in the Great Depression, of leading other colleges in the admission of women in the 1960s, and of standing firm during the financial crash of 1987. We are at such a turning point today. Yale has the opportunity to use its resources to improve our status markedly and quickly.

Military strategists win wars through bold thinking in times of crisis. A bold strategy today for Yale would deploy our fiscal and reputational strength to promote excellence on all fronts with an intensive flank-speed recruitment program. Let's not waste a day.

Mr. Jacobson noted to his colleagues that the humanities, like all fields, should be built in the same way and for the same reasons as our colleagues have been discussing for the sciences. He said he knows there are many of the most famous humanists in the country on this call, and that they would agree that the humanities should not only be built on senior and junior faculty, and it is a mistake to talk about the splendor of the humanities at Yale by talking about the building at 320 York Street and many find that statement irksome. This, he said, might seem like an unfair criticism of the administration, however it is experienced that way by many of us. **Mr. Jacobson** thanked our guests, and thanked **David Swensen** for taking time to join our conversation, a conversation that will be ongoing and one that he is proud of and feels privileged to lead his colleagues in, and that makes him feel a sense of awe. He commented to the administrators on the call that "this is your faculty speaking", and to his colleagues on the call, he wants to say, "this is your Senate working!"

The meeting was adjourned at 5:30 PM.