going to be a very brief report. Everything in this meeting is
committees that the senate has established this spring. It’s
week’s time for voting. Gerald?
the ballots should go out tomorrow. Then, we’ll have around a
incoming 45 faculty senate members can run for the SEC and
We want to give a brief report about two new ad hoc
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We want you to know this committee is underway; Harry
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You can see the other members of the committee here, and the
committee is also looking to add other members from student
and staff groups, including, I assume, the parking office. No?
Groenevelt: We’ll definitely be talking with them.
Groenevelt: So that is one committee that has been formed.
Harry, quick question from me and Chunkit to you: What is
your timetable?
Groenevelt: My timetable is as you’ve told me, Gerald. We’re
going to try to get something to you by December.
Gamm: That would be awesome. Thank you, Harry. And
thank you for the work you’re doing. The committee has
gotten off the ground, they’ll probably meet a bit this summer,
but they’ll meet a lot in the fall. I’m sure they’ll be coming to
the faculty senate in the fall with a report.

The other ad hoc committee that we have established is the
committee on community-engaged scholarship. Most of you
will recall that in the fall we took up a series of proposals to
update promotion and tenure standards that included
community-engaged work. The senate decided in the fall to
update standards for teaching and for service but not
scholarship. The senate was not ready this past fall to change
any of our language about scholarship and how scholarship
should be treated for tenure and promotion cases.

We’ve established this committee, chaired by Theresa Green,
which is looking at the question, is there a way that we can
incorporate community-engaged work into the scholarship
piece of a promotion and tenure review case? Theresa is
chairing the committee as you’ll see; this is the membership of
the committee, drawn from across the university. They’re
hoping to have a report to the senate by fall 2019. They’re
charged to consider additional revisions to the handbook

\textbf{Members Present:}  
\begin{tabular}{|l|l|l|l|}
\hline
Bocko & Mark & Anolik & Jennifer \\
Clark & Rob & Ares & Nancy \\
Covach & John & Bernstein & Zack \\
Curry & Mary Jane & Bidlack & Jean \\
Davis & Colleen & Bisognano & John \\
Doughty & Kristin & Chimowitz & Eldred \\
Dwarkadas & Sandhya & Esse & Melina \\
Feldman & Rich & Ghaemmaghami & Sina \\
Fung & Chunkit & Gilda & Daniel \\
Gamm & Gerald & Green & Theresa \\
Gibson & Tom & Hartman & Scott \\
Groenevelt & Harry & Ingle & John \\
Haefner & Ralf & Jones & Courtney \\
Kearney & Maggie & Klumpenhouwer & Henry \\
Kingsley & Paul & Kruschwitz & Jennifer \\
Lerner & Amy & Lin & Feng \\
Mejido & Josef & McFarland & Kevin \\
Misra & Ravi & Mohile & Nimish \\
Nozfiger & Anne & Monahan & Seth \\
Olivares & Telva & Reis & Joseph \\
Scott & Michael & Seplaki & Chris \\
Seidmann & Avi & Storozynsky & Eugene \\
Stone & Randall & Swanson & Dena \\
Tan & Raymond & Turner & Bradley \\
Teitel & Stephen & Vates & Edward \\
Watson & Dan & & \\
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\textit{Ex officio} Members present:

I. \textbf{WELCOME FROM THE SENATE CHAIR}

\textbf{Fung:} Welcome to the last faculty senate meeting of the academic year. We have a very full agenda today, and we want to start with report from the co-chairs. Just as a reminder, there’s a SEC members election – there are 4 openings for this coming cycle. Four of us will be staying – Gerald, myself, Scott Hartman and Michael Scott.

The deadline for nominations is tonight by midnight. Only the incoming 45 faculty senate members can run for the SEC and vote. Please send us any last-minute nominations, and then the ballots should go out tomorrow. Then, we’ll have around a week’s time for voting. Gerald?

\textbf{Gamm:} We want to give a brief report about two new ad hoc committees that the senate has established this spring. It’s going to be a very brief report. Everything in this meeting is going to be time constrained because we have a lot on our agenda.

The first committee that we have established is the committee on parking and transportation. You can see the charge in front of you. Just briefly, it’s to analyze the parking situation throughout the university, considering the demands and constraints on parking, the impact of parking space allocation on faculty recruitment and retention, issues of equity and fairness, analysis of need for any additional parking or new methods of allocating existing parking. You can all read this.

We want you to know this committee is underway; Harry Groenevelt is here and has agreed to chair the committee. You can see the other members of the committee here, and the committee is also looking to add other members from student and staff groups, including, I assume, the parking office. No?

\textbf{Groenevelt:} We’ll definitely be talking with them.

\textbf{Gamm:} That was Harry Groenevelt clarifying they will include perspectives from students who park on campus and staff who park on campus and the committee will be consulting with members of the parking office and working with them as they recommend solutions.

\textbf{Groenevelt:} And higher up.

\textbf{Gamm:} So that is one committee that has been formed. Harry, quick question from me and Chunkit to you: What is your timetable?

\textbf{Groenevelt:} My timetable is as you’ve told me, Gerald. We’re going to try to get something to you by December.

\textbf{Gamm:} That would be awesome. Thank you, Harry. And thank you for the work you’re doing. The committee has gotten off the ground, they’ll probably meet a bit this summer, but they’ll meet a lot in the fall. I’m sure they’ll be coming to the faculty senate in the fall with a report.
I think this is going to continue over time. The college has agreed to replace the existing college communal principles by these values so they’ll be a more uniform expression of these themes throughout the university.

There’s a lot – I won’t go through everything and I certainly won’t detail any of the facts about the changes, but among the things that have changed in the last year or so are new guides and flowcharts to explain procedures for addressing misconduct, revision of Policy 106, revision of the intimate relationships policy, a revision of faculty grievance policy, revision of the IT and faculty email policy, creation of a respectful workplace policy which is just about completed and will be discussed with trustees next week.

We’ve changed and strengthened our mandatory and elective training options for people. We had new reports on bias incidents, sexual misconduct incidents and you’ll be pleased to know a report on Policy 106 violations has been completed and will be released very soon. It’s getting formatted by the communications office.

All that reporting has been completed; we hired a new investigator to work on investigations of reported claims. We are very close to concluding the search for a new Vice President for Equity and Inclusion; I expect an announcement to be made within a week or so on that, and a creation of the new office that person will lead is underway.

Lots has happened to address policies, the administrative structure, to address issues of campus climate and a lot of attention to it. I think all this attention affects – it’s in people’s consciousness in a way that I think is beneficial to us.

And there’s more still to come. There’s discussion of a new university-wide ombuds program so there are sources of support for anybody who might feel there’s a problem that needs to be addressed, and a pilot of a new staff council will be launched in the fall. It’s been seen by many that staff are often lost in the discussions of key issues on campus and there will be an opportunity for staff to have a stronger voice in university governance. A lot has happened under that heading.

One of the things that’s been particularly important to me during my time in this office has been to make sure we didn’t give the impression that the entirety of what the university was about were issues of campus climate and culture – to make sure that the business of the university continued and it was evident to people around the university that the business of the university went on. And it surely did.

All of you continued in your research and teaching and were productive in many ways and there’s no – it’s surely not possible for me in these remarks to highlight all the accomplishments. I want to just identify a few things that stand out of what happened in recent months.

One is a real point of pride for the university – our graduate Donna Strickland being awarded the Nobel Prize in physics
last December along with Gerard Moreau, her advisor. A really wonderful accolade for the university. As you may know, she will be back next week to deliver the address at the commencement ceremony and various other events around commencement weekend. A really wonderful achievement on the part of one of our alumni.

Other notable points to make about what’s happened over the last year or so is the arrival of two deans at the university – Donald Hall, who’s here and is the Dean of Faculty for Arts, Sciences and Engineering. He came to us from Lehigh. And Dean of the Warner School, Anand Marri, came to us in January from the Federal Reserve Bank in New York. Both off to strong starts with us.

Much else going on. Let me just mention one initiative that I think is important in its own right and indicative of something about us. This is something I’ve come to appreciate more strongly in the past year and a half. That’s this. For all the talk about decentralization and the like at the university, one of the things that’s really striking is that we’re a remarkably collaborative place and we’re good at taking advantage of the proximity of the various parts of the campus to one another and working with one another to support various programs.

I’ll just mention one of these that’s been quite a while in the development but now has been launched, and that’s the Eastman Performing Arts-Medicine program, a collaboration between the Eastman School of Music and the University of Rochester Medical Center. The idea of this program is to enrich the healthcare environment by integrating music that calms, nurtures and inspires the well-being of our community – patients, caregivers, employees and students. So, using public space in the medical center for music that can really enhance the lives of the people there.

This is a collaborative project, as I said, many years in the making; it includes healthcare for performing arts and wellness education for the artists. There are impacts of being a performer and healthcare can assist them. Musical therapy and clinical patient care, research to explore the potential of the arts in therapy, rehabilitation and performance, and music performance integrated throughout the hospital environment to make it a more welcoming and soothing place. So, a fabulous program with a kind of collaboration that works remarkably well for us.

Moving on, our faculty continue to distinguish themselves. There you have pictured 4 of our young faculty who were awarded National Science Foundation Early Career Development awards. This is the most prestigious recognition for junior faculty members. Pictured there are (Chao Dawn) from Electrical and Computer Engineering, Frank – I’m not sure how to pronounce his name – from Chemistry, (Anthony Larasquete) from Biology and Wyatt Tenhaeff from Chemical Engineering. So, 4 young faculty members earning distinction to join the ranks of already distinguished faculty here. Another indication of the strength of our faculty.

I will say that among the things that has been an enormous pleasure for the past year and a bit is traveling around the university and encountering people and meeting with folks that I didn’t previously know and learning about all the things happening in all the parts of the university. It’s really impressive and gratifying. We have an enormous amount to be proud of, and these awards are just one example of the things we should acknowledge.

I want to turn next to some other things that are happening. It was also important for me while I was in this role that we continue the kind of growth, continue to make the kind of progress on various university priorities we’ve had in mind for a while, and so we did. In an effort to make the parking problem even greater...

[laughter]

… construction will begin on the Monday after commencement, so less than 2 weeks from today, on the Sloan Performing Arts Center. It’s scheduled to open the following fall. It’s next to Todd and I think it’s a wonderful project for the campus; it will bring much greater space for performance in theater, in dance, and in music and bring that together in a lovely and engaging new environment. A wonderful project made possible by a significant gift from our trustee Tom Sloan and others – another real benefit to the River Campus.

Other projects are underway too, including two very large med center projects – one is a new orthopaedics and ambulatory campus. The orthopaedics program is enormously successful, has outgrown the space that it has over in the medical center and is looking at a new building off-campus to house its ambulatory surgery program. That’s in development and being thought about; spaces are being investigated and that will continue along in the coming months.

The other much needed development is a new emergency department and in-patient tower to accommodate growth there. The emergency department – I don’t have the numbers in front of me, but the emergency department was built to accommodate a number of patients and the number they in fact accommodate is multiples of what they are built for, and that’s a desperately needed project. These are paired projects in that the first helps make possible the second one. Both of those will be coming along over years – these are multi-year projects.

As I say, the first is on campus and the other is, in the med center. It will also free up space for single rooms and upgrade what happens there as well. That’s just some of the key examples of continued physical development of the campus.

Turning to another theme, community connections have been something of real importance to me. I think our role in the community has obviously grown enormously over the years. We’ve gone from being a pretty remote, ivory tower type place to a deeply engaged university at the economic and social forefront of our community.
As many of you know last year, a committee was appointed with Teresa Green and Glenn Ceresaletti as its chairs to look into applying to the Carnegie Foundation for recognition as a community-engaged university. That application was completed a couple of weeks ago and has been submitted. It’s really quite remarkable what was uncovered during the committee’s work. You see some of the data there.

There are 337 unique community-university relationships; that means some group on campus or individual on campus working in an ongoing way with some community partners. There are 250 partners. Lots and lots of work in all kinds of domains – arts, economic development, health, and education. There’s a report we’re trying to get prepared very quickly to highlight at least a high level what the scale of this is so it can be presented to the community so we can tell our story in a more effective and compelling way.

Regardless of what happens with the Carnegie application, we will know and better be able to talk about the kind of community partner we’ve become.

Then there are so many other things – I’ll mention some very quickly – about the community. The East High engagement continues quite successfully, numerous healthcare activities and academic programs in the community. It’s really a remarkable story.

I want to turn next to some points about transitions. There are really 3 that I’ll talk about, but first 2. I’ll save one for the very end. The two I’ll mention now, as I think I said a while ago, we’re nearing the end, a successful conclusion for a new Vice President of Equity and Inclusion and Chief Diversity Officer. I think that will be concluded right away, and we’re doing the groundwork to create that office so when the person comes in, much of the groundwork will have been put into place with the people who will be reporting and the reorganization that entails.

The search for a new vice president and general counsel is underway. That will extend well into the summer and perhaps somebody could be in place sometime in the fall – that’s unclear just when it will be done, but the position has been described and advertised and the search firm is doing its work so that process is well underway and moving along as it should.

I’d like to take just a couple of minutes to say a little bit about the transition and moving forward and perhaps a couple of words about key issues. I think all the work we’ve done regarding the culture of respect sets the foundation, but that’s ongoing work; it’s not that you check a box and you’re finished. It’s ongoing and important that we keep our eyes on it. I think the presence of a person in the new vice presidential role whose job will be to organize that work is a really important thing for us.

I have a better sense of how just having someone who has that as a priority in the mix of people at the university is a really important thing, even if the rest of us care deeply. Somebody whose job it is makes a real difference to what voices are heard and what pressure there is on the administration to keep their eyes on this. I think that will continue.

I think our issues regarding diversity – diversity of the faculty, diversity of the staff especially at the higher levels, diversity of the student body – continue to be issues that we need to continue to address. Our numbers steadily grow a little better but there’s certainly work to be done and that has to remain a priority for the university.

Then there are a number of other issues; I have a fairly long list, but I’ll mention just a couple of things – some are local and some are national, that is, facing all our peers. The rising cost of education is a national issue that’s gained lots of attention. Lots of people are very worried about tuition, what it costs to attend college; I think it’s a complicated story. The financial aid we provide – we don’t tell our story very well, I’m afraid given the sticker price isn’t what most people pay and people don’t understand, but it’s going to be an ongoing issue that we and our peers are going to have to think about.

I do want to say, I want to note that despite the concerns about costs, our applications at the undergraduate college level continue to grow at a pretty good pace. I think it was a more than 5 percent increase this year. They continue to grow and we continue to attract very talented students, so there’s something of a mixed message there. You might say ‘This can’t go on’ but it does.

I think the other thing for the university – and then I’ll end with this – is we are, our healthcare operation is a major part of the university, both in terms of people and in terms of finances. If there’s a part of the economy that carries with it a lot of uncertainty, it’s certainly that. You’re dealing with the government, with insurers, changes in technology, and then competition that’s just growing from other regional hospital networks, that make it all a very challenging, very difficult area to deal with. An enormous amount of uncertainty and I think we have remarkably strong leadership in our medical center, but that’s certainly going to be something that produces challenges for the university going forward.

The last one on my list, a very different kind of issue but one that seems to me is very important for us to continue to think about are issues about free speech on campus and how we deal with that, and how we balance what is absolutely an essential component of a university environment that we welcome free speech, that differing opinions can be expressed, but in an environment where sometimes people are so sensitive and hurt by things that get said, and how to navigate through some of those issues is a real challenge for us.

Those are a couple of the issues that are on my own list, but if we can go to my final slide and I’ll end with this, there are the kinds of things that Sarah and I talk about some. She and I talk about once a week or so; I’m thrilled that she’s going to be joining us July 1st as our new president. I think she is a warm, intelligent and thoughtful person, with great experience, grounded, and I’m confident will be a great leader.
I feel enormous confidence that the university will be in great hands when she joins us then. I am delighted by that.

With that, I will end. I don’t know what our schedule is, but if there’s time, I’ll answer any questions. If not, I’ll just sit in.

**Gamm:** Maybe time for 2 or 3 questions or comments.

**(Joanie):** Rich, I was under the impression that the application for the Carnegie classification wouldn’t succeed if we didn’t have scholarship, community-engaged scholarship –

**Feldman:** I think that’s incorrect. I’ll tell you what I think and then maybe Teresa can correct me. It’s a factor – it’s one of many, many factors. What appears to be true is that we’re quite strong in a number of things they look at; there are others where we’re not quite where we ought to be, and it’s unclear how all of that will add up.

The thing that Glenn and Teresa said in a conversation recently, Glenn said this – was that early on, Carnegie will sort the applications into unlikely or ‘no’, maybe and yes. He feared at best we’d be in the middle category and now he’s thinking in the no category or the top category, that our story is actually better, partly because they did such a good job of collecting information and telling the story. Anything else? Thank you.

**[applause]**

**Gamm:** I have something to add. As we talk about presidential transitions, I want to credit our last presidential transition. Rich became president at one of the most difficult moments in this university’s history. He became president at a time when this university was dealing with great trauma on a range of fronts, and he became president at a time he’d just stepped down as dean. I’d never seen two happier people than Rich and Andrea Feldman on the day that Rich was stepping down as dean and he could finally return home and start having a normal life again.

And Rich clearly understood this was a moment the university needed him and where he had an opportunity to contribute to the university in ways he’d been contributing to the university for decades. Knowing Rich, I have to believe he did it because he thought it was the right thing to do. I have to believe he did it because he knew that he had an opportunity to work with all of us to make this a better place, and he was not doing it for himself.

For me and Chunkit to partner with him over this past year, to work closely with him, is to see someone I’ve known over my entire career here at University of Rochester, someone who is fundamentally decent and honest, who has great integrity, who values our enterprise here as scholars and teachers, and values the staff here and values the students here, and wanted to leave the university in a much better place, and he accomplished that.

You’ve been a great partner, from all the things we’ve discussed over the course of the year, times we’ve agreed and times we’ve disagreed, you’ve always listened to us seriously and often you’ve taken our advice.

The latest example of Rich’s contribution to the university that I want to put on the record is the email that he sent out to the university community about his decision regarding the proposal to arm public safety officers. I think that was a model of reasoned thought; it was a model of somebody who’s paying attention to the whole community and paying attention to advisory committees that have come together to study this question, and whether you agreed with his conclusions or didn’t agree with his conclusions, you had to respect deeply the decency and the power of thinking that went into it.

On behalf of all of us in the senate, I want to thank you for what you’ve given us.

**[applause]**

**III. REPORT FROM THE ETHICAL INVESTMENT ADVISORY COMMITTEE – RANDY STONE**

**Gamm:** Okay, so our next order of business, to which we’ve allocated precisely 25 minutes, is the report from the Ethical Investment Advisory Committee, which is going to be offered by Randy Stone, chair of the committee.

**Stone:** Thanks. You have our report, which is in the materials that were distributed by email and also on the back table, so I’ll try to be brief and leave as much time as I can for questions and comments.

We are particularly interested in your reactions to the report and to our proposals and it would be very helpful if, when I talk to the trustees next week about the report, I could say something about what the Faculty Senate thinks about it. We are also looking for suggestions about what our work program ought to be for the coming year, so anything along those lines is very welcome.

You might remember that this committee came about because of the impetus of the student government resolution calling for divestment of our endowment from fossil fuels. We have taken that impetus seriously and have grappled with what is feasible, what is politically feasible, and what would work as an investment strategy and so forth.

We’ve come to the conclusion that a categorical divestment is not feasible for the university at this time. We’re not recommending that, but we are recommending some very significant, symbolic changes and some engagement that will catapult us from being a laggard on climate change issues to being a leader among our peer universities.

We don’t know whether this proposal will be accepted at this point. Doug Phillips, Senior Vice President in charge of the endowment, is cautiously optimistic that it will be accepted by
the investment committee, but we shall see. At any rate, I’d characterize our relationship with Doug Phillips as very collaborative and very positive. I’ve learned a tremendous amount working with him, and he’s been very supportive of our efforts along the way.

A number of things have changed. There’s an interesting balance here between transparency and confidentiality. The university has signed confidentiality agreements with all the various firms that invest the endowment on our behalf, which limits what information the university can make available and under what circumstances.

I’ve signed a confidentiality agreement and so I have access to all the data about what the university invests in and the performance of all these various firms, the objectives of those firms, the social responsibility policies of all those firms and so on and so forth. The other faculty and staff on the committee also have the opportunity to sign confidentiality agreements and dig into the data as well.

That is a kind of transparency. We can tell you some things, and there are some faculty now who know what’s going on, but we have to maintain confidentiality about those things. I also participate in the investment committee meetings, so again, that’s been an educational process; I’ve learned a lot about how the endowment is managed, and I can share some of that with you if you’re curious. I’ve become convinced they do know what they’re doing. The strategy is a very sophisticated one, and it’s very much in our interest to have a strategy like this be implemented.

We also have a website so you can see what we are doing; its www.rochester.edu/endowment/eiac - or you can Google it and you’ll find us. It includes the minutes of all of our meetings, it includes the CSR policy which was adopted last September by the Board of Trustees, and it includes this report which I’m going to present to the trustees next week, so there’s a lot more information out there than there was before.

The CSR policy contains a lot of details, but I want to focus on one thing: it identifies what our core values are and puts them out there publicly, which had not been done before. We enumerated the following (quoting from the document): “Freedom of expression, equality of persons, respect for cultural diversity, dissemination of knowledge in the public interest, fair labor standards, human rights, democratic governance and environmental sustainability.” I think that’s a pretty good summary of the University’s values, it I feel good about the fact that we stand for those things.

The proposal that we have put forward has two parts. The proposal is that the university, first of all, become a signatory to the Climate Action 100-Plus Coalition. If you don’t know about that coalition, it is described in the report. It’s a pretty heavy-hitting list of financial institutions that are involved. It does not have very much buy-in yet, surprisingly, from academic institutions. Amherst College and the University of Toronto are signatories; we’re hoping we will be the third.

Doug is interested in lobbying his counterparts at our peer institutions to get them to sign on as well.

This is an organization that is targeting the 100 or so biggest carbon footprint corporations in the world, trying to get them to sign on to three things: signing on to the principles of the Paris Accord on Climate Change; adopting governance reforms internally that will make that operationally meaningful; and thirdly, doing something to reduce their carbon footprint. That’s a powerful kind of engagement.

The coalition currently represents organizations with $33 trillion under investment, so it seems to be the best hope for getting investors behind an engaged policy.

The second thing we want to recommend is that the university pledge to make no direct investments – that’s an important distinction; direct as opposed to indirect investments – in companies engaged in substantial production of thermal coal or oil from tar sands. This is symbolic in the sense that the university does not have any direct investments in those firms. We think that might make it palatable for the trustees to foreswear investing in those things.

This would place us in the forefront of universities on climate change policies. There are half a dozen universities, whose names you would all recognize, which have pledged not to invest in thermal coal. No one yet, to our knowledge, has pledged not to invest in oil from tar sands; we think these are obviously really bad sorts of unsustainable investments that ought to be discouraged, and sending that sort of symbolic message could be very useful.

So I’ll stop there and ask if you have any comments or reactions.

Gamm: Okay, my question is, reading the report, the only area you seem to be focusing on is climate change. Are there any other issues that the committee took up this year or sees itself taking up next year beyond climate change?

Stone: That’s one of the reasons we’re here; we’re hoping you’ll suggest some things, and I have a pen to write them down. We did think very seriously about the issue of private prisons. That was something that came up in our town halls last fall and we had a number of conversations about it.

The members of the committee are convinced we are uncomfortable with investing in private prisons. The university does not have any investments in private prisons, and it might be a similar sort of category. We ended up deciding not to put it on the agenda this time around because we wanted to study it further. In particular, Randy Curran thought it would require a lot more in-depth study of the pros and cons and the related philosophical debates than these issues did. We’re leaving that on the table for future discussion.

Seidman: Avi Seidman Simon School. One of the early concerns when this initiative was brought to the university
leadership was putting any constraint on the investment committee would reduce the financial return on the endowment. What was the impact, or the expected impact of those ethical investments? How are we going to pay for it, or did it have no impact on the investments?

**Stone:** There’s a memo that accompanies our report in the briefing materials that goes to the Investment Committee where the Investment Office makes an assessment as to what would be the impact, and they very strongly endorse the first part of the proposal, joining onto the Climate Action 100-Plus group, and they indicate they don’t think there would be any impact of refraining from direct investments in thermal coal or tar sands as they don’t anticipate they would want to make those investments in any case. Those are not growth areas.

The thermal coal industry is declining and the tar sands investments that have already been made will not break even unless the oil price rises rather substantially. There aren’t any new investments being made in that industry. That could, of course, change. If oil goes back to $100 a barrel, then tar sands will be back in development.

There is a caveat in the proposal that if the fundamental circumstances change, we might revisit this, but we think that in any case the technology of extracting oil from tar sands is not really a technology of energy production, it’s a technology of conversion of natural gas into petroleum. You burn so much natural gas to get the bitumen into a liquid state so you can pump it up out of the ground, and then you still have to refine it and so forth. At least for the deep deposits, where most of the resources are, you’re getting an energy out to energy in ratio of 1:1. It’s an expensive procedure for producing petroleum which can be more cheaply extracted elsewhere. So, we don’t think it’s likely that we will need to revisit our recommendations.

**Haefner:** Ralf Haefner, BCS. Could you please comment more on the difference between direct and indirect?

**Stone:** Yes. So our investments are made in two ways – well, more than two ways, but there are private equity firms we invest in and that’s about a third of the endowment, which are very long-term, illiquid investments. We invest in chunks of $20 to 30 million at a time for 10 years in these particular companies and they manage the money. We don’t control what they purchase.

If we were to put screens on the private equity share of our endowment, it would make it very difficult to participate in this portion of the industry, which turns out to be a very lucrative way for private institutions to invest.

On the other hand, we also have firms that invest and buy stocks on our behalf, like a mutual fund, and those are direct investments. We can tell them we don’t want them to buy any of XYZ and they won’t. Yes?

**Haefner:** Would it make sense to try to steer investments towards those that are more in line with our values? What way do we have to incentivize them to do that?

**Stone:** For about 10 years now, the investment office has been sending a questionnaire to all of our investment managers, which includes the private equity managers, and it asks, ‘Do you have a corporate social responsibility policy? Do you have a policy for environmental, social and governance (ESG) considerations? Please provide a copy of it. If not, are you working on one?’ It sort of nudges them every year and in the spring we receive responses to this questionnaire from all of these firms.

Most of them do have some sort of policy; in particular, all of the energy and mining firms do have such a policy. The hedge fund firms do not have such policies, but the equity firms and private equity firms do tend to have such policies. So, I have a booklet of all their policies and all their responses which is confidential, but I’ve been reading through it. Some of these policies are very thoughtful and detailed and responsive.

Some of the companies say ‘Well, our objective is to maximize the return of our investors. That’s our policy.’ So you do get some responses like that. But, most of the firms that don’t have policies are ones we’re transitioning out of, and we think that our nudging over the years has had an effect of getting them to develop such policies.

One could ask ‘Should we rate these policies and figure out which ones are the better performers?’ Well, we’re working on that – that’s something we want to do in the coming year. It’s a big project.

We’re not bringing a resolution for a vote here because we’re an independent committee, but it would be helpful to have a sense of whether people are broadly supportive of these proposals?

[A number of hands were raised.]

Thanks. That’s helpful.

**Gamm:** Randy, thank you for the work you and committee are doing.

[applause]
Zoom. You’ll be hearing over the next months and years a lot more from the research policy committee than you have for the past few years, partly because until about a year and a half ago, it stopped existing for several years.

There have been a few issues that have emerged to importance that the committee is dealing with at the moment and other issues that have arisen because of a survey the committee gave out to the faculty that some of you might have noticed and filled out. As we go along, we will be dealing with those major issues.

At the moment, the issues we’re working on are mostly issues of open scholarship and open science, the role of UR Ventures in raising money and provoking patents out of the fertile minds out of the faculty, and the one I’m going to talk about today which is a sector of potential scientific research funding that we haven’t been involving ourselves in, having to do with export controlled ideas, materials, devices, and so forth.

I should say at the beginning I’m not going to try to explain anything of the policies that go with this today because they are long-winded, boring and very detailed, but there are important surface issues of research that deals with export controls that everybody in the university is going to have from various different vantages a lot of strong reactions to, and we want a discussion to take place so we know how we can craft a research policy that can potentially allow us to engage in export-controlled research and still satisfy all of the other concerns that people will bring up about it.

Today from us, just an introduction to some of the export control issues and why such an arcane sounding topic should be brought in front of the faculty senate.

First, export controls – what are they? Well, here they are. There are all sorts of things, and some of these things are immaterial things like information, but matter, special states of matter, special devices you make out of matter, that you’re not allowed to take outside of our borders and you’re not allowed to provide access to them by non-US persons anywhere on earth unless you first obtain export licenses from the authorities that handle the regulations.

There are two main authorities for the kinds of materials that I’m talking about: there’s the Department of Commerce that has something they call the Export Administration Regulations, or EAR, and we’ll be abbreviating it EAR as we go along, and then there’s the Department of State and they’ve got the scary-sounding one, the International Trafficking in Arms Regulations, or ITAR. Those of you who aren’t scientists probably heard your scientist friends cursing about ITAR issues over the decades because they can really get in the way of scientific research.

So those two Cabinet-level agencies are in charge of regulating these kinds of materials. What kinds of materials am I talking about? First of all, anything that’s created in the US that’s deemed to have military applications whether it’s secret military applications or no-secret military applications.

There’s an incredibly long list of these sorts of things that’s called the United States Munitions List. It’s Part 121 of ITAR and it takes up the lion’s share of the weight of that document.

Next, anything that’s created in the US that’s deemed to be a sensitive trade item like, for example, something that somebody might have slapped a tariff on or something that has dual use. That means it might have legitimate civilian applications and military applications, and there’s a list of those things too – it’s called the Commerce Controlled List and its part 477 of the EAR.

It’s important to note that if you go around creating materials, producing intellectual property, it can be slapped with one of these regulations and slapped with restrictions whether you like it or not. Your intent has very little to do with the export controls that can be placed upon your creation.

A couple of questions right off the top: Does this mean the same as classified information, classified devices? Is this military secrecy we’re talking about? The quick answer is no, it is not. There is another level of secrecy and control that has to do with military secrecy; I think it’s fair to say that not only does the university not want to get into that and would be ill-advised to try. Although there are universities that do classified research on campus, it does tend to be a mess.

Now, does export control mean there is some restriction to freedom of bringing research results into the research community or the broader community? Does export control mean that the work has publication restrictions? The answer to that is no as well, but this time the no gets a bit of an explanation.

Built into the EAR and the ITAR are a bunch of phrases that are called the ‘fundamental research exclusion’. The idea that goes with that is that if you’re using your export controlled materials in the cause of fundamental research, you should be able to publish the research results as long as that publication does not constitute ‘export’ – that is to say, it doesn’t provide direct access to those controlled materials.

The way this usually works is, for example, if you’re using an export controlled device to make a measurement, you can report all of the measurements and the modeling and theory that goes along with that set of measurements and as long as you don’t reveal the secret to how that device works, there’s no restriction on your publications. Go ahead, Michael.

Scott: Michael Scott, Computer Science. But if I devise a new material, a new polymer, and it gets slapped with one of these restrictions, the application seems more problematic there – if I want to talk about the process of synthesizing it, for example.

Watson: Yeah, if – there are some timing problems. If there’s – I guess the way to phrase it is if you publish first and it’s in the public domain, it’s much harder for export restrictions to be slapped onto it. But that is a complicated area and we have all seen ex post facto things like this happen to inventions.
Josef, you want to comment on that? I haven’t introduced Josef yet, but Josef Mejido over there from ORPA is our content expert on ITAR and EAR. Go ahead.

Mejido: Even if, let’s say, an item is highly export controlled where you may not be able to send it to any country outside the United States, you could still very likely publish about it – you may just not be able to export it out of the country. But you could still have a publication all about it, which may not entirely make sense but it’s reality.

Watson: You’re right, Michael. There are ‘gotchas’. There are also ways this can creep into research that are fake, too. Many of us who do research in the physical sciences and engineering have collaborators in industry, and industry has a different level of control. They also have proprietary issues and to work with them you have to sign memoranda of understanding that you won’t give away any of their proprietary information.

They are so protective – lots of these companies are so protective – of proprietary information that they will often allege to us that it might be ITAR sensitive as well, and thereby hide their proprietary issues behind ITAR or EAR and provide a little bit of extra strength to their admonishment to us never to reveal any of the important things in their recipes for making super conductors or semiconductors or whatever it is.

Here is a domain of examples in which the same kind of device can fall into any of the 3 categories; this is a device whose picture you can see over there with Craig McMurtry’s hand behind it. It comes from the lab of Judy Pipher and Craig McMurtry and Bill Forrest and their students who collaborate on the making of infrared, large format detector arrays for astronomy done in space. One of their main collaborators is Teledyne Corporation in Thousand Oaks, California.

There are all different kinds of arrangements of these same kinds of devices that you wouldn’t be able to tell apart; the devices that are in the lab upstairs in B&L right now are designed for low light levels of space astronomy and they are not currently mounted in a space-qualified detector mount that could be put in a satellite and launched. So, there’s no restriction on the stuff that’s upstairs right now at all, although we do have to protect it as if it is.

On the other hand, if we took those same devices and used the latest in very fast readout electronics, we would be able to operate them at the high light levels that are appropriate for ground-based astronomy. The high light levels of ground-based astronomy are similar to light levels that are encountered in surveillance, and that would endow that device with dual use – a surveillance use and a pristine, ivory tower research use.

That dual use makes that fall under the category of things that the EAR restricts. However, that’s not what we really want to do – we don’t want to soup up our warm electronics; we want to optimize the use of these devices for ground-based astronomy and that means that we would really need to incorporate something in the read-out circuitry that gives it optimal performance at the high light levels of ground-based astronomy.

Now it’s really in the domain of surveillance and that would be ITAR sensitive, and as it’s currently arranged, it would be hard for us to do that kind of research in Bausch & Lomb, so we don’t. But it is important in all of these areas to notice that this kind of research that infringes on this is going on and it currently suffers no publication restriction at all. The papers that you see referred to up there are led by two of Judy’s and Bill’s graduate students.

What happens if you violate export control regulations? Well, bad things can happen. There are lots of minor transgressions that happen probably 5 times before lunch in industry that aren’t considered very serious violations, but if the factors all stack up against one, one can lose one’s research funding, one can go to jail, one can be subjected to large fines, or any combination or permutation thereof.

This goes whether or not the act of export is unintentional or unknowing; even if the act of one’s violation is committed by another person, I can offer an example of how that would work if you’re interested, and institutions that these people work for can be held liable as well if it can be demonstrated that they lack protocols for the protection of the export controlled materials, or if they fail to obtain the proper export licenses before the materials pass through their hands into export hands.

I’m sure you’ve seen over the years some scary examples of this. The worst one which this link up there leads to – that has the very descriptive link of ‘honest, unprepossessing plasma scientist that they thought was a Chinese spy’ and he went to jail for 10 years because he in fact did transgress in 18 counts the regulations of ITAR. This was a professor at the University of Tennessee, Knoxville. He just got out of jail – was convicted in the late 00’s. So bad things can happen if you violate the export control regulations.

So with all this scary stuff, you’re probably convinced now we would never want to touch any of this, but there are good reasons why you should think about that. And that’s why we’re bringing this up today. Like Randy, I’m not going to call for a vote, but the Research Policy Committee would like to begin a faculty-wide conversation about whether or not it is desirable, ethical, moral, or on the other side, useful for university research to involve export controlled materials.

There are several things to consider. One, that you can probably guess by my tone of voice, is that there are certain fields of scientific research that are really handicapped without access to export controlled materials. I see, casting my eyes around, several people who have already been seriously harmed by the lack of access to a way through export controls here.
The lack of access to export controlled materials can be both a really big impediment to scientific research and it can be a competitive disadvantage if all your competitors work for universities that have worked out how to do this.

On the other hand, it’s also a given that one of the slickest ways to violate these export control restrictions is to have the export take place in your own office or lab, simply by imparting that material to somebody who is not a US person – that is, to somebody who is not a citizen or a green card holder.

That doesn’t mean the regulations absolutely rule out anybody who’s foreign working on that research, but in order to involve, say, overseas students in this research, you have to seek the right permissions from the cognizant agencies. These permissions in general are called ‘export licenses’ and that’s a term that you hear a lot in this area, whether you’re trying to take something across the border or you’re trying to talk to somebody who isn’t a US person about that material.

Another issue is that compliance with the regulations can be pretty expensive, because it requires a lot of administrative apparatus to demonstrate that the export controlled material is being protected properly. If you don’t comply, if you don’t have a protocol for compliance, that can be very risky. One’s institution and one’s self can be exposed to a lot of legal liability.

The costs aren’t always huge because there are many ways of bundling the cost of maintaining a compliance protocol into the cost of doing research. I know of universities that do this by having different indirect cost rates for different export categories of research projects. The ones that deal with export-controlled materials can reap a little bit larger indirect cost recovery rate in order to pay for the compliance.

Now, quite a few of our peer institutions conduct export restricted research, either on their campuses or near their campuses. It turns out if you look at people’s sponsored project webpages that almost all of our peer institutions have policies that allow them to conduct export-restricted research on campus under certain conditions. And we do too – I’ll show you the policy in just a minute.

There’s no complete list anywhere that you can look up of universities that conduct export restricted research on campus, but here’s a list of some that do and some of them are on campus, some of them are off campus but pretty close by, and some of them put quite a few miles between the campus and the place where the export-controlled research is sequestered, like Johns Hopkins and APL, which are separated by about 30 miles.

Now, research at the University of Rochester can, in principle, involve ITAR controlled information or materials and therefore because it’s easier, EAR controlled materials as well. But rarely. It’s actually allowed by a presidentially granted exception that I’m sure Rich has had to deal with every morning – no, not really; we haven’t brought this up in front of Rich.

We have a policy on open research and free dissemination of ideas and information and if you click on this link, and if you have the electronic version of this, all the links are live so you don’t even have to type it in, you will get – among other things – the text that’s on the next page.

The management of this policy goes to ORPA and the Office of Counsel. If you had material that falls into this category and are wondering what to do about it, the first people you would encounter would naturally be the people in ORPA and probably Josef would be the first one you would encounter in that, but if Josef’s at lunch, Gunta is the one who would be dealing with it.

Here’s what they keep their eye on. This is from that long page of the UR Open Scholarship And Free Dissemination of Information policy; the active ingredients in it are the ones that are bolded and it goes ‘It is the policy of the university that it will not undertake research that would prohibit students, scholars, staff and faculty, whether US or foreign citizens, from participating in intellectually significant portions of educations and research activities at the university.’

If you didn’t know that permissions could be got, you would look at that and say ‘Well, we can’t do ITAR sensitive research’ but since we can get permissions under certain conditions, there’s a way out, as follows:

‘Exceptions to the policy can be made only in the rare instance where the area of work is extremely important to the university’s educational or research mission, or necessary to serve the best interests of society. These considerations outweigh the principles of the university set forth in its policies expressed above. Such an exception must be approved by the president.’ So that’s currently the only way out, and that has inhibited the propagation of export controlled research on campus.

Now obviously that’s a bit restrictive, especially if you consider that there are good reasons for getting permission for international students, for example, to get their PhDs in laboratories that are doing research like this and that wouldn’t disfranchise those international students. A less restrictive policy would enable university researchers’ access to funding pathways that they don’t currently have access to, and devices and other materials that they currently don’t have access to.

So the Research Policy Committee and various other people whom you can see around you in the room are considering whether it’s time to create a more formal process that doesn’t first warn you off and then make you hunt down the president to get your proposal signed off. A protocol is under construction for a test case in which we can see exactly what is entailed in this. Another committee is forming, called the Science and Security Committee – that is not the same as the Research Policy Committee but will probably include
representatives. If you want to know more about that, you can ask Rick Waugh because he knows the most about that.

They’ve formed to consider these kinds of implications of EAR and ITAR sensitive research and to vet international collaborations so some of these problems can be headed off. The Research Policy Committee is interested in making this test go forward so we can see what there is to gain and what there is to do in order to gain, and what gotchas there are out there when we consider the potential disfranchisement of students and the restrictions on their participation in research.

Everybody who’s described on this list would like to make sure there’s adequate faculty involvement in and scrutiny of whatever the policy is that would emerge from this, and would also like such a policy to allow saying ‘yes’ to some proposals and ‘no’ to other proposals so there’s some judgment imparted in the decision of whether or not to go ahead with this kind of research.

So, that’s why we’re bringing this in front of you. We’d like you, as researchers, to gradually make known to us your views of all the intersections of export-controlled research and all the other things you think about all day – open scholarship, ethics, morals, and everybody’s research in this domain.

There’s one good way of thinking about it: if we don’t do this, we’re leaving money on the table because we’re depriving investigators of the ability to access these kinds of funding pathways. On the other hand, if we all decide it’s immoral, then we shouldn’t do it. If we’re leaving too many students out, we shouldn’t do it.

This is the beginning of a conversation we hope will involve the faculty and the student body; right now all you know is the words and that there are dangers of restrictions on research, so if you want more information, either talk to us on the Research Policy Committee or talk to the various other committees or administrators, or go to the ORPA website on which there is lots of information about export restrictions and compliance. Please go there first before you try to read the ITAR or EAR – both of them are longer than the redacted Mueller report.

**Fung:** Thank you so much.

[applause]

We have 5 minutes for questions.

**Haefer:** Ralf Haefer, BCS. To what degree does this apply to software or hardware?

**Watson:** It applies to software just like everything else. That in fact has been the subject of the most vigorous prosecutions.

**Haefer:** So are things like machine learning, encryption techniques, been subject to these regulations?

**Watson:** Lots of them are. I bet Michael could tell you about that, but let me point at Josef first.

**Mejido:** Software is almost treated like a tangible item for the regulations essentially. And then the source code is treated like it would be information, so they’re actually treated as two different pathways. Encryption software is treated as its own special circumstance that’s really a completely separate thing. It’s pretty protected.

**Haefer:** But not the final compiled (binary) (), but the published information in Computer Science or a statistics journal?

**Mejido:** Yeah. If it’s about encryption and its things you would generally publish about anyway or freely share in the research community that should be a product of fundamental research. We can look at it in more detail, but if it’s something you would publish in a journal, that you would share in the research community, that should be okay.

**Watson:** Remember, if it’s not currently restricted, then even if it’s got restricted elements in it, the fundamental research exclusion can permit you to publish it, but then they might come around later and say ‘That was all right, but anything else you do with it is covered by ITAR.’

**Rubin:** Joan Rubin, Humanities Center and History Department. I’m not clear – this is the first I’ve heard of this and I’m not completely clear about what you think the ethical issues are, nor do I need you to answer that question now. It sounds like there are multiple ethical issues and it’s not just leaving students out of access to research.

**Watson:** Right. That’s just where it starts.

**Rubin:** But there are also the uses of these work products and it just seems to be complicated. I would like to offer the Humanities Center as a forum for the discussion of the ethical issues that pertain to this kind of research.

**Watson:** That would be a great thing. Efforts like that are exactly what we were hoping for in bringing this up. It should maybe be pointed out that on the Research Policy Committee there are precisely 2 members of Arts Sciences & Engineering who belong; they’re both physicists, and they have blind spots. We count on our esteemed colleagues to shine light into our blind spots to help us see. That would be great, Joanie.

**Ignatovic:** Zeljko Ignatovic, Electrical Engineering. Then I have a question for Josef. How do we know now that we are in compliance with these ITAR? For example, I’m building those cameras that can see through the walls, through clothes, so definitely there is both a dual military and civil applications. I have no idea if I’m violating anything.

**Watson:** Yeah, there are problems. Almost all of the devices on campus that cross into dangerous territory are known to ORPA and there is some sort of protocol protecting them from falling into the wrong hands. For example, the detector array that I showed you a second ago is up on the fourth floor of B&L but you can’t get there because it requires going through
a couple of doors with security locks on them and warning signs that say it’s escort only. The only people that are allowed in there are people who know how the protocol is supposed to go.

Those are devices that if you operated them you would know they don’t fall under either EAR or ITAR, but we protect them as if they do. We err on the side of caution in practically all instances.

**Speaker:** So we have someone that reviews those proposals and can see potential danger?

**Watson:** There’s software available that is supposed to capture all the ITAR technologies; we have access to that.

**Mejido:** And it also gets complicated because there are distinctions between the tangible items itself – let’s say it’s a camera – the tangible item being export controlled maybe every other country but Canada, but certain information about it may be freely sharable. That’s where it gets a little confusing and would involve an analysis. With respect to items, it’s easier when things are coming into the university because typically the providing party is going to put us on notice as to the export control status of it, as opposed to something that’s created here. We may not necessarily know about the item unless we see it at the proposal stage.

**Fung:** Two last quick questions and comments.

**Curry:** MJ Curry, Warner School. My research obviously has no bearing on this. But this is a little concerning that someone who’s doing research in an area that might be relevant is not aware and this is part of an ongoing conversation about faculty information training and development, etcetera. It sounds like we need better communication.

**Nofziger:** Anne Nofziger, and I’m monitoring Zoom. I have Valentina Kutyifa on Zoom confirming what you said, Dan. She said we welcome all ideas for further discussions. You can email RPC or Dan Watson at any time or Valentina.

**Gamm:** Thank you. And we want to thank Valentina and Dan and the Research Policy Committee for their work.

[applause]

We’re transitioning now to an unrecorded session. All faculty who are not administrators are welcome to stay. We want to thank the faculty who are administrators for joining us for the rest of the meeting. This is also an opportunity for us to welcome new members of the faculty senate. We’ll do more of an introduction in September, but we know there are some new faces in the room, new members, and we want to welcome you. We want to encourage you to consider running for the Senate Executive Committee – it’s an eight-person committee and whether or not you run, to vote for your new senate executive committee.

End of Recorded Session.