

**Minutes of the Academic Council
Thursday, February 16, 2023**

Erika Weinthal (Chair, Academic Council / Nicholas School of the Environment): We're going to get started because we have a busy agenda today. I want to thank everyone for being here on a gorgeous day. The campus is buzzing outside, and you can walk around the Bryan Center and it's busy and lively. I'm going to start with some announcements, as everyone else trickles in. The first announcement - I'm going to note that President Price regrets his absence today and will not be joining our meeting.

My next announcement is a big congratulations because I get to announce the next Chair of Academic Council. I'd like to congratulate Trina Jones. *(Applause)* Trina Jones is a Jerome M. Culp Professor of Law and has been elected the next Chair of the Academic Council. Her term will begin on July 1st of 2023 and she will serve until June of 2025. As part of the socialization process she will start attending our weekly ECAC meetings as her teaching schedule allows. I also want to thank Manoj Mohanan, from the Sanford School, for his willingness to stand for election. And I know Trina is already thinking about how to tap Manoj for lots of committees. You are a tremendous asset. *(Applause)* Thank you both.

As you all are probably aware, the annual election of the Academic Council members is currently taking place. I want to ask you to encourage your colleagues

who appear as nominees for your school or division to serve if they are elected. The election will close at the end of this month and once the Academic Council for 2023-24 is in place ECAC will begin the process of who to consider as nominees for the election of new ECAC members in April, (the Executive Committee of the Academic Council), a slate of 8 faculty from the Academic Council membership will be put forth for election to fill four open spots on ECAC for next year. According to our bylaws, any five faculty as a group can nominate a member of the Academic Council to stand for election to ECAC. Note that this nomination goes to ECAC for consideration and that consideration for the open slots is based on the schools or divisions not already represented in the four continuing ECAC members for next academic year. Council members will receive an email next month containing more information about the process for nominating faculty to ECAC. So, as always, please pay attention to your inbox.

Before we go further into Academic Council business today, I would like to acknowledge and express deep concern for those impacted by the devastating earthquake earlier this month, affecting both Turkey and Syria. Many of our colleagues in the university have family and friends in Turkey and Syria, and are grieving the loss of life and complete destruction of entire communities. The earthquake will also have ripple effects on

academic life in Turkey and further put at risk vulnerable communities in Syria. Thus, I want to encourage you to reach out to colleagues who may be affected and continue to support faculty, students, staff with families hit hard by the earthquake.

APPROVAL OF THE MINUTES OF THE JANUARY 19 ACADEMIC COUNCIL MEETING

Next, I'm going to turn to the approval of the minutes from our meeting on January 19th. Are there any corrections to the minutes? May I have a motion to approve? Thank you. A second? Thank you. All in favor, please say aye. Any opposed or abstentions? Thank you.

[Minutes approved by voice vote without dissent]

VOTE ON THE PROPOSAL TO CREATE TENURE PATHWAYS FOR PROFESSORS IN THE CREATIVE ARTS

Our first main item is to vote on the proposal to create tenure pathways for professors in the creative arts. I want to note the change in title to professors in the creative arts versus those in the performing and visual arts, as it was listed on our agenda and presented at our last month's meeting. Based on last month's discussion, and the questions that surfaced, William Johnson, the Dean of the Humanities and Arts, is here again with us today, made the request for the language change as it matches the wording of the report that was provided for the discussion. This was confirmed with Interim Provost, Jennifer Francis. The supporting material was posted, again, on our agenda for today. I also want to remind all the members of Academic

Council that this proposal and report was one of several recommendations that came out of an earlier report from the Ad Hoc Committee on Regular Rank Non Tenure Track Faculty Designations that was led by Sherryl Broverman, who was then a member of ECAC. We will plan to have a further update on the other recommendations this spring. Before we proceed to our vote, I want to ask if there are any questions concerning last month's presentation or the vote? Okay, we are going to turn to the vote. May I have a motion to approve? Thank you. A second? Thank you. All in favor please say aye. Any opposed? Any abstentions. I will note there is one extension.

[Item approved by voice vote with one abstention]

With that I want to thank all and say that the proposal to create tenure pathways for professors in the creative arts at Duke has been approved by the Council, and it will go to the Board of Trustees later this month at their meeting for approval as well.

JENNY LODGE, VICE PRESIDENT FOR RESEARCH AND INNOVATION, PRESENTS ABOUT THE RESEARCH POLICY MANUAL

Our second item today relates to the creation of a standalone Research Policy Handbook. This is essentially pulling from the Faculty Handbook the various appendices, which are P and O, along with Chapter 5 that relate to research at Duke, while also making some necessary updates where needed given the various changes in rules and regulations that an R1 university needs to abide by. I will note this is part of a larger process that we are undergoing right now to update

the entire Faculty Handbook. So, you will see more meetings where attention will be focused to particular appendices and the front matter of the Faculty Handbook. But, for today this is just the Research Policy part, and we welcome back to the Academic Council Jenny Lodge, who is Duke's Vice President for Research and Innovation, to discuss with us along with her colleagues, Geeta Swamy, Associate Vice President for Research and Vice Dean for Scientific Integrity; Chris Freel, Associate Vice President for Research & Innovation; and Mary Frances Luce, who just started her new position representing the Social Sciences, Humanities, and Arts in the Office of Research and Innovation. I will note that you have received various information from Jenny's team. It was posted on Duke's Box, so I hope everyone was able to access Box and read it. Within that material was also some historical context on why the need for pulling out the research sections of the Faculty Handbook.

[\(Slides used in presentation.\)](#)

Jenny Lodge (Vice President for Research & Innovation): Thanks Erika for that welcome, and it's delightful to be back in front of Academic Council and seeing so many faces as I'm still starting to get to know many of you. It's really been a fantastic year. What I'm here to talk to you about is a Research Policy Handbook that would really be a companion handbook to the Faculty Handbook. It would be on the same platform. They would be side by side. Searching one would pull up hits in the other. So, we really see this as a way of keeping the research policies separate and clearly applicable to everyone doing research at Duke, but also still very

integrated and as a companion with the Faculty Handbook. I'm going to talk a little bit about how this whole idea originated. It started well before I was here, and what the purpose is, what the structure is going to look like. And then also, I'm going to talk a little bit about how we're thinking about revising policies, because as you all know, policies are never set in stone. They're always being refined and updated. And then also how we generate new policies when necessary.

One of the things that happened back in 2018 is that President Price commissioned a committee that he called the President's Advisory Committee on Research. This committee was really charged with thinking about research and research integrity, and the culture of research here at Duke. They came back with a series of recommendations, but one of the strong ones was that as they looked at our documentation and our policies, it became clear that they were scattered in different places. Some were in the Faculty Handbook in different chapters and different appendices. At that point in time they weren't organized. I think they've grown organically over time, and then some were on various websites and that sort of thing. Then the other piece of this is that being in a Faculty Handbook almost implies, if you think about human factors, that these apply to faculty. But, our research policies apply to everybody at the university - including trainees, including staff who are doing research, including visiting scientists or visiting scholars who are doing research here at Duke. We need to have a place where it's clear and well organized that coalesces these policies, and where we can continually keep them updated and organized. I have sort of

already gone through this, but these policies apply to everybody, and we need a place, which is clearly applicable to everybody engaged in research at Duke.

Another piece of this, is that also around that time, 2018 – 2019, President Price developed a committee that...I'm looking at Chris [Freel] because he gave me all the history of how this committee was formed. But, eventually was called the Executive Research Oversight Committee. Then part of that committee was also a Faculty Subcommittee, and some of the faculty on the Subcommittee sat on the Executive Research Oversight Committee as well. And this was really to provide leadership and oversight of our research activities here at Duke. In addition, part of the President's Advisory Committee recommendations is that we have a university wide Office of Research, which has now become the Office of Research and Innovation and we have responsibility for these university wide research policies. And we want to make sure as we are modifying policies, or as we are developing new policies, that we have significant engagement from the faculty, from ECAC, from Academic Council, and from other faculty groups as well and stakeholders. That as we modify policies and as we develop policies, that we have good input and engagement with various groups because that really is at the core of shared governance.

I'll just give you a little history, back in the fall of 2019, the Office of Research was established and the Vice President for Research position was created. The EROC or Executive Research Oversight Committee was formed and charged with overall implementation of research excellence and integrity. In April of 2020 there were discussions with the Chair of

Academic Council, Kerry Haynie, who's here today, to talk about this whole idea of the Research Policy Handbook. We got agreement, at that time, that this is something that we should be working on, and the areas that we thought about, as Erika mentioned, were Chapter 5, Appendices O and P of the Faculty Handbook. I believe there's some in Chapter 6 as well. Then in 2021, we commissioned the Research Policy Advisory Committee. They were charged with developing this Research Policy Handbook. So, what they've been doing is gathering all of the research policies that are out there, no matter where they're located. Geeta [Swamy] is on that committee, and she's nodding so she'll correct me if I misstate anything. Looking at these, some of these haven't been updated or revised for over a decade. Some of the language is outdated, some of them referred to things that we don't really do anymore, and some just needed updating. So, that's what this committee has been working on. They've also been thinking about what's the right structure for this handbook, so that things will be easy for everybody to understand and find. Also, in 2021 the Provost and the Academic Council Chair talked about developing this Research Policy Advisory Committee and at that point there was also a discussion of expanding the faculty subcommittee of EROC. Because at that time, when it was first formed, the focus was on the biomedical sciences and so it was very heavy in Arts and Sciences and in the School of Medicine. So, we really needed to get more university wide representation on that committee. So, just this past summer, in collaboration with a lot of the Deans and ECAC, we got additional names, and we have expanded that Faculty Subcommittee of EROC. They

have started meeting, and the two chairs are Andrew Muir and Sonke Johnsen.

I just wanted to give you an idea of the membership of these committees. (*Refers to Slide*) Here's the Executive Research Oversight Committee. You can see that it has Vice Presidents on there, it has Deans, and it also has folks to advise us on risk, people like our General Counsel for whom the risk is real, Daniel Ennis, our Executive Vice President for Administration and Finance, as well as the Provost. So, these are people for whom when things happen here at Duke the risk and the responsibility for correcting that risk lies with them. Gene Washington, the Chancellor of Health Affairs is also on there.

Here's the current membership of the Executive Research Oversight Committee Faculty Subcommittee, and you can see that we've got folks from Trinity, from Pratt, from School of Medicine, from Law, from Fuqua, from the School of Nursing, Nicholas, and so we have fairly good representation across the university, and these are all folks who are significantly involved in research and scholarship. We're really pleased with the composition of this committee, and they understand that part of their remit is going to be to look at policies with the faculty eye to see whether or not there's things that would impact how our faculty do research in a significant way.

The Research Policy Advisory Committee includes people from the Provost office, people from my office, as well as people thinking about the financial compliance that we have to deal with. We've got folks from the Office of General Counsel, and then we also, in consultation with ECAC will be adding a member this summer

after the new members are elected, and ECAC decides on the roster of who is going to be doing what responsibilities. And I think this person is going to have a very important role on this committee. A big part of their charge is going to be looking at any revisions to policies, any development of new policies with an eye to ask, "Does this impact faculty in a significant way? Does this impact researchers in a significant way?" Because sometimes our revisions are behind the scenes to the faculty and the researchers. They may have to do with how we report things to our funders, or it may have to do with the names of different offices, that sort of thing.

As I've mentioned, this process in terms of developing the handbook has been ongoing for a couple of years now, and we've had some challenges in that. First, I'm the third Vice President for Research to hold this position during this process. So, every time you've got a leadership change it requires people to get up to speed and understand what the issues are. We had a new chair of Academic Council come on. We've expanded our Faculty Subcommittee of EROC, and we've also now changed over our Provost as well. There were also some technology challenges. The web-based platform that we had been counting upon to do both the Research Policy and the Faculty Handbook changed vendors. But, as of this past summer we've finalized that contract and are ready to roll with that platform. There's been a lot of timeline uncertainty in terms of how do we do this in a way that is coordinated with the Faculty Handbook and ensure that we don't have conflicting policies out there. I think that's really important, and that's one of the concerns we have right now with policies on the website, policies in

the handbook, and some of these might conflict. We certainly don't want to put out a Research Policy Handbook and still have the old policies sitting in the Faculty Handbook. So, we would have to figure out how to handle that. And I think there's a mechanism to do that if we don't publish simultaneously. So, today we've got policies all over the place, and we have revised policies ready to go into the handbook. We've got a few policies that we consider under revision because we feel like they are substantial changes and we need to get more faculty and stakeholder input before making those changes. I'll just bring up the process that was used for the research data policy - where a policy was drafted, it was published, people had an opportunity to comment on it, there were town halls on it, input was received and that input was published, and then there were changes to the policy based on the input or we couldn't make changes for various reasons, but we explained why those changes couldn't be made, and then we had an approval process, and this policy has been approved, and will go into effect in May. I can't take any credit for that process, because I wasn't here. This is Geeta [Swamy] and John Dolbow and others who really drove that process, and I think it was a really good process and we ended up with a better policy because of that process.

So, the Research Policy Handbook, as I mentioned, will be a companion to the Faculty Handbook, and will be on that same website. They will have dual search functionality, so that if you search one you'll pick up hits in the other one as well, and we will be very careful about cross referencing when needed. The organization of this handbook - it's being organized into chapters, so that hopefully

if you have a collaboration, when you want to know what policies govern that kind of collaboration there'll be a chapter on that. So, the policies should be easier to find when you're looking for them.

Then, when we think about how we're going to move forward - the first thing is that we'll need to identify that a policy needs to be reviewed, needs to be revised. All of our policies going forward will have a date, will basically have a schedule for when policies should be re-reviewed. It may be that no changes need to be made, that would be great, but sometimes changes need to be made. So, we can either do that by this schedule or if there's changes from a Federal funder, Federal regulations, or State regulations that we need to make a change that'll identify policies that that need to be revised. The other is that if we get feedback, that a policy is just not appropriate, and is really inhibiting research that might be another trigger to look at these policies again and make revisions. Once again, this will be done in the Research Policy Advisory Committee with an ECAC member sitting there who will be thinking about whether or not this is a substantial change that really needs greater faculty input and we will develop those revisions. If these have material changes, we'll do that input process and get community feedback. Then there's the approval process and then finally, we need to have a mechanism to socialize these and communicate any changes to our stakeholders. We want to make sure that we engage our faculty and community feedback. I've talked about the member of ECAC on the Research Policy Advisory Committee and if there are material changes will bring them to EROC and to ECAC and to the Faculty Subcommittee of EROC and they'll

provide that faculty perspective on proposed revisions. We'll also ask Deans and the Chancellor and the Provost, etc. if there are other venues that we really need to provide that sort of communication to as well. Then we will once again, just like the Research Data Policy, provide what the input was and what our response was to that, and revise draft policies as needed. And then the final approval for research policies will be the EROC, and then the socialization. We will be consistently documenting those and communicating those out to our community.

I'm happy to take any questions about this.

Kerry Haynie (Political Science, African and African American Studies):

I want to start by saying that it was a partnership with the faculty and the administration. I remember hearing Geeta Swamy talk about this. I have a question about the approval process, you mentioned ECAC. Is there a role for this body to play a part in the changes? Erika, and also the handbook changes? Would that require a vote of this body?

Lodge: I'll speak to the research policies and then you, Erika, can speak to the Faculty Handbook process. I think ECAC would make a determination on whether or not to ask Academic Council for input or approval and we will respond to that input very thoughtfully.

Weinthal: Given the way this was structured, right now this is largely a listening and informational session. In ECAC, we've had discussions already on the data policy. There will not be a vote on this, but there will be a vote on other changes to the Faculty Handbook. When

we get to Appendix N, Appendix Z, those will come to Academic Council for a vote. **Haynie:** The reason why I ask is because it's always been a back and forth with the Office of the Provost of who owns the Faculty Handbook. And I want the faculty **not** to relinquish that ownership...

Weinthal: This is part of the reason we have asked that there is ECAC representation [on EROC], so that faculty governance and oversight is maintained. Because many of these changes are because of federal regulations, and they have to happen. But we want to make sure that all of this comes to Academic Council and anything that affects academic life is discussed here for input. We've already seen some changes in how things are being presented through these conversations.

Joe Izatt (Biomedical Engineering): I just want to ask a little bit more about that point. We've had some discussion among the faculty in engineering about this and I'm not real clear on what the rules are for approving Faculty Handbook changes. But as long as I've been on the Academic Council, we have voted on them. Therefore, the changes to the Faculty Handbook have required approval of the Academic Council. Now we're proposing removing rather large chunks of content from the Faculty Handbook into a committee that doesn't require approval of the faculty?

Weinthal: So, we will have a discussion of the entire Faculty Handbook in April, is what we are aiming for, and we will be voting on the revisions. There will still be research components in the Faculty Handbook. This came largely - maybe Jennifer [Francis] will also want to comment - that these policies apply to a

broader constituency than just the faculty and the need for a separate Research Policy Handbook. There are parts that if people feel the need to be discussed more here, we can bring it back and have further discussions. This is not going to move forward until Academic Council feels comfortable with what's happening, but there are changes that are required by Federal regulations and those have to happen.

Lodge: I think you said it very well, and I think the issue is this applies to everybody who's doing research at Duke. I think the other big piece of it is, many of these policies are driven by the kinds of regulations that the Federal government, the local government puts on us, and we have to be able to have policies that really address those regulations and honor those regulations. I'll just give you a quick example. I know people are tired of hearing about the NIH, but they do provide about 80% of our research funding, and not just to the School of Medicine, but across the university. And they've given us 60 days to change our conflict of interest policy, because it doesn't comply with their policy. So, we have to do that. We have to do it quickly. It's not material changes in terms of what the faculty have to do. It just has to do with some of the processes that we use. So, we've got to be able to move quickly on that kind of a change.

Cam Harvey (Fuqua): Actually, I have two questions. The first, is on the new Chapter 3, which is research integrity and details the elaborate process going from an allegation, through multiple steps, all the way to a Deciding Official. Most faculty are not involved with this, and that's actually a good thing, (*laughter*) but it is opaque, I think. The faculty really do

not have an idea of how many cases there are, what the penalties are. For example, if we saw the number of cases or new cases decreasing, that would be like a positive thing. But, we do not have that information right now. And you heard me ask this at APC, are you willing to, in the revision of this policy, introduce a reporting requirement? So that the standing committee on research misconduct annually gives ECAC and Academic Council the summary data. So, we see new cases, number of cases resolved, number of retractions, nature of violations, penalties, and any other a relevant information. It would be aggregated so we don't identify people. I think that having this transparency would likely reduce the probability of research misconduct.

Lodge: I think you're right. And Geeta did you want to speak to that?

Geeta Swamy (Associate Vice President for Research and Vice Dean for Scientific Integrity): Yes, I think that's a really great idea. I agree with you. I think that having transparency into what's happening at our institution is helpful. What I would probably suggest is that we have some, not appendices, but some number of that, because that actual policy does have to be submitted to the government, and the policy as it's written, is compliant with the Office of Research Integrity's requirements to the policy. However, we can have an additional sub policy that talks about required reporting at our institution. We have to report those numbers. Not all the other details you describe, but we have to report those numbers to the government already, but I think we have certainly done aggregate anonymized, say less than 5 type of things in those categories. So, I think we could

certainly do that and work with others that might be interested on what that type of annual reporting could look like.

Lodge: I would just caution you. I think one of the things that we've been working really hard to do is raise awareness around research integrity and research misconduct and trying to encourage people to report it. And so, if the numbers are going up, it's probably not that people are doing bad things more often, but that people are more aware of it, and are also thinking about the gray zone. And so things are being reported at a higher frequency than they ever used to be.

You said you had two questions.

Harvey: In 2019, and Geeta remembers this, we altered our definition of research misconduct. We narrowed it to fabrication, falsification and plagiarism. And the old policy had a fourth category, which was other practices that seriously deviate from those that are commonly accepted within the research community for proposing, conducting, or reporting research may also constitute a misconduct in research. That was deleted in 2019. And thank you Geeta for explaining to me why because of the federal regulations. However, I've noticed in looking at other universities handbooks and policies, that they basically did the same thing that we did, but they retained another category of professional misconduct. And within the professional misconduct things, like leaking information about a grant proposal you're reviewing, or a paper your refereeing, not reporting research misconduct, or other research malpractices. So, what's interesting is some of these schools use the same process. Going from the allegation all the

way through to the deciding official for that type of misconduct. So, are we willing to reintroduce something like that into a revision of our new research policy to send a clear message that what we want to do is to eliminate, not just the hard research misconduct, the plagiarism, falsification and fabrication but, all of this soft misconduct that could be very serious and damage our reputation?

Lodge: That I think is a discussion that has gone on in the Provost's office. In terms of where does that professionalism misconduct sit, how does it get adjudicated, and who ends up providing that final resolution for it. Jennifer, I don't know if you want to say anything or just recognize that this is not a question that we're unaware of, and it's an active discussion.

Jennifer Francis (Interim Provost): Part of it is some of what you've described is more of a Human Resources type of issue. It's not strictly on the research side. It could be more behavior related...Where exactly it sits and how exactly we would work through that will need to be determined.

Swamy: But, to Cam's point, research sponsors are expecting us to report many of those things and they're using different terms. Some are calling it professional integrity, some are calling it safe work environment, and equity in work. So, I think it is something we need to get input connected across various areas.

Harvey: Just to be clear that you're actually thinking of putting this into a revision of the Research Handbook?

Lodge: I'm not sure where it belongs.

Francis: I'm not sure.

Lodge: This is a very broad and gray area and there can be activities related to research. You could say it's related to research, but it's professionalism, and it bleeds over into other aspects of academic life as well. And so, I don't see it as strictly a research issue.

Weinthal: So, what I might say is that we've had lots of discussions at ECAC on bad behavior, lack of professionalism, and this is a topic that we can revisit following this meeting today in our conversations with the Provost and with Jenny. This is an ongoing discussion, and needs to be addressed and we will continue having those discussions on the agenda. I want to make sure others who have questions get to ask them, because this is really opportunity for Jenny's team to get feedback.

Don Taylor (Sanford School of Public Policy): Just to make real clear the point. I think the key is there can be research misconduct that's not covered under 45CFR46. That's what, as a professor, I'm saying and I think that's what Cam is saying. And we just want to acknowledge that.

Weinthal: And that's where we're trying to figure out where that goes.

Terry Oas (Biochemistry): You made several references to the Research Data Policy that is rolling out in May. I wasn't here at the time that that was brought to this body, but I'm wondering to what extent it's integrated with the Research Policy.

Lodge: So, this would be a policy within the Research Handbook. The question was the Research Data Policy which has

been approved and is going into effect in May. Where would that sit? And how is that part of the Research Policies? This is a Research Policy. It's Research Data Policy and it would be within the Research Policy Handbook. And in fact, there's a chapter on research data and that's where it would sit.

(Applause)

Weinthal: As you can see, this is going to be an ongoing discussion, and it's tied to the broader Faculty Handbook revision. So, you are going to see a lot of what's been taken out, what's staying, and specific changes to parts of the Faculty Handbook that will have to be voted on at future meetings.

PANEL DISCUSSION REGARDING DUKE'S CLIMATE COMMITMENT

For the last agenda item for today we wanted to shake things up a bit and not do the traditional presentation. As many of you know, Duke has launched its Climate Commitment. Dean Toddi Steelman, from the Nicolas School, is also here today. It was launched last September. Rather than having a formal presentation, we wanted to have this be for the faculty and by the faculty. To hear from our faculty who are working in the area of climate change, but also as a way to encourage other faculty to learn about the Climate Commitment and get involved. So, to have a more of a university-wide climate conversation - and this came out of conversations at ECAC where we really wanted to involve the faculty. Many of you might have already attended some of the events. A few of you might have participated in the university course, "Let's Talk About Climate Change," but there will be a large

number of future events. There's a call for proposals that is out right now that is tied to Duke's Climate Commitment.

So, I want to ask the faculty who are going to join the panel to come down today. Some of them are not members of the Academic Council, and some are. It's great to have different faces here. I'm going to start with some introductions. On the left Norbert Wilson, who is a Council member and a member of the Divinity School. He also serves as the Director of the World Food Policy Center. He's a professor of Food Economics and Community at Duke Divinity, joint appointment at Sanford School of Public Policy. He works on access, choice, food, waste, domestic food systems, and before he came to Duke he was a professor of food policy at the Friedman School of Nutrition, Science and Policy. Next to Norbert is Professor Betsy Albright, who is also a Council member from the Nicholas School. They work on issues related to policies and decisions that are made in response to extreme climate events. They are interested in collaborative decision-making processes, particularly in the realm of water resource management. Their geographic interests are in the southeast US and central and eastern Europe. Next to Betsy, is Emily Bernhardt, an Ecosystem Ecologist and Biochemist, whose research is principally concerned with tracking the movement of elements throughout ecological systems. I will note that Emily helped co-lead the university course, "Let's Talk About Climate Change." Her research aims to document the extent to which the structure and function of aquatic ecosystems is being altered by land use change, global change, and chemical pollution. And lastly, Saskia Cornes who teaches in the environmental humanities through the Duke Franklin

Humanities Institute. She also leads the Duke Campus Farm. She has led that since 2014, and for those of you who are not familiar with the Duke Campus Farm, it is Duke's best kept secret. And I would encourage you to get out to the farm and bring your students. Saskia has designed experiential curricula in critical food studies for different institutions. So, this is really going to be sort of like a conversation you can hear from the faculty, and for you to ask questions of the faculty who are working in this climate space, but also for a way to bring all of you into Duke's Climate Commitment. I just want to ask each of you to start by telling us anything you want about work that I did not mention that you are doing in the climate space.

Norbert Wilson (Director of the World Food Policy Center, Food, Economics and Community): I must admit when you initially asked me to participate, I was like "I don't really...do I really work in climate?" And I actually thought, "I guess I actually do." So, I've been doing some work on food waste. It's funny because I came at that concern from a different perspective. I wasn't coming at it from a climate concern. I was thinking about it in terms of food access issues. But, it didn't take more than a minute to realize - no, this is a critical issue about food that is wasted or lost. This is a use of resources that generate climate house related gases, and therefore, if we can mitigate this waste, we mitigate this loss. We might have started helping reduce some of the challenges that agriculture produces. I will say, that was the way I thought about it. I will say, more broadly, given the work that I'm doing at the World Food Policy Center - one of the things I think is critical for us to do is to think more critically and more carefully about how we can address

issues around climate change and agriculture. Which I'm sure Saskia will tell us some more things about. But, I think this is a critical space that maybe we're missing out on.

Betsy Albright (Nicholas School of the Environment): Thank you for the introduction. Thank you for having us here. Thank you to the administration for providing this opportunity for all of us to think about the climate, to engage with issues of the climate, both as faculty, as teachers, as researchers, and as humans living on Duke's campus. And so what climate issues do I work on that Erika didn't mention? I think this will hopefully tie some threads on what I'll speak on later, I've been involved in a number of Bass Connections projects and working closely with arts, with music, with the Center for Documentary Studies. I'm an artist captured inside a body who teaches statistics. *(laughter)*

Weinthal: And is really good at it!

Albright: It's really important that the climate crisis affects all of society. Therefore, climate solutions need to incorporate all of society. By all society, then that to me means all of the university. So, my most thoughtful engagements have been with the Franklin Humanities Institute, the Center for Documentary Studies. Artists, musicians working across disciplines to address these challenges.

Emily Bernhardt (Biology): I guess I'll say, talking about research - climate change as a scientist is inescapable. But, I guess I'll talk about my teaching. So, I've been teaching climate change to undergrads and general ecology for 18 years, here at Duke. And to graduate

students in my Biogeochemist and Analysis of Global Change for the same amount of time.

When I say the words, "Let's talk about climate change." How does that make you feel? Not good. Right? I've been asking this to lots of different audiences, and however you feel our students almost universally feel much more anxious, more angry, more sad. And I think I have felt over the last 18 years - initially, I felt like prior to Al Gore's *An Inconvenient Truth* that a lot of my students didn't believe me. Because it wasn't consistent with their economic goals for themselves. Not everybody believes you but they are really sad. And I sometimes feel like in my science classrooms I only make them more sad. Because, it's not just bad, it's worse than you thought, is a lot of what our science classrooms do. So, for me, I'm super appreciative of the chance to have been part of the "Let's Talk About Climate Change" university course last semester, co-designed with theologians -- 14 faculty from 14 different departments and schools around the university. Designed to help students who are coming in feeling anxious or completely avoiding the subject, start to have conversations about climate change. And I have to say it was life changing because students talked in their final essays about how transformative this was for them, how they felt empowered. How they had felt when they came in that only scientists were qualified to talk about climate change, and that they had realized that they actually had a place to be active. I am so excited about what we saw in that course, and I would love to see us creating that same kind of community and conversation at every level of this university and greater alumni network. So that's my message.

Saskia Cornes (Program Director Duke Campus Farm, Environmental

Humanities): I was part of the “Let's Talk About Climate Change” course, and I will echo that it was in fact life changing for a lot of people. And I can pick up some of where Emily left off. So, I think the work of the Duke Campus Farm is really to offer students the opportunity to move beyond despair. To take this climate anxiety that they're feeling and actually do something. I'm a humanist by training. So, I'm interested in the *what* of climate change. But I'm actually more interested in how we make meaning from it because I think the meaning we make of these events will impact really deeply what we do. If you don't know about the Farm - it's a one acre working farm. It's about seven miles from here. We grow almost 19,000 pounds of organic produce, using regenerative practices with two and a half staff people, 21 students, 1,000 volunteers, not to mention several billion micro-organisms. (*laughter*) I will say that our main output remains is actually students with a sense of self efficacy. They see the impact of their work at the farm, the collective impact of these micro efforts of students much like themselves over a long period of time. They can see that it's really possible to leave a landscape better than you found it. The idea, even just for a moment, that one could have a positive impact on the nonhuman world, I think that is really transformative.

Weinthal: I love listening to all of you speak! I'm going to ask another question. For those of you that have not paid attention to the Duke Climate Commitment, it has four core areas that are concerned with energy transformation, climate and community

resilience, data-driven climate solutions, and environment and climate justice. But I want to hear from the four of you - given these core areas and the Climate Commitment overall, what would you like, as part of your vision, to be included in the Climate Initiative, or the Climate Commitment? What would you like to see that may not be there or how to build out some of these four areas?

Cornes: I think this is...I feel like I've been wanting or channeling or willing this opportunity into being for so long and it's really amazing to see it manifest. This is really an unprecedented opportunity, in terms of a mandate coming down from Board of Trustees level. There's a lot of Presidential support, there's a lot of resources behind it. I also feel like we have a very short window of time. We have a very short window of time both to address the actual crisis that we're facing ecologically and otherwise. We also have, I think, a very short window of time to... save isn't the right word, but it's the one that is in my mouth so I'm going to use it - to save our students, and maybe even ourselves, from lapsing into a kind of cynicism. That this is a marketing campaign or a rebranding or something that's going to sort of pass in the next few weeks. I think our window of opportunity is actually quite small, and I would love to see more people seeing themselves in this work. I think we all have our own professional agendas, research agendas, our own lives, but I think it's really sort of past the moment to start thinking about this as the work of some other disciplines, some other sector, some other generation. I think we all want to be on the right side of history here.

Bernhardt: I agree with all that! I think, when I heard about the Climate

Commitment, and because I was asked to work on the course with Norman Wirzba, met with Vince Price and Sally Kornbluth to find out what they meant by the Climate Commitment, and Vince wanted us to be the Climate University. I had to say I was sort of like, really? And Stanford I mean, how much money did they just get? 1.1 billion dollars to do so. We're not going to win in climate science, which I think is what everybody thinks when you hear the climate university. That's what we have to get over. And when Vince said, which I know is quite compelling is that he wants to be the climate university and do what is Duke's special sauce, which is actually have people from all perspectives engaged in dialogue and debate and scholarship. And I'll echo, the most important thing that we can do to really put Duke on the map in this space is to have it be a conversation about Climate that permeates every single part of our scholarly work. I will also say it's incredibly important, so I'm glad it's a pillar, that we are also operating our facilities in the most climate progressive way that we can. Because I tell you our students are paying attention. "How are you telling me this in class and why are all the lights on in all these building everywhere all the time? Why is there so much food waste in the cafeteria?" So, I think it's really important that's a pillar of that as well. But the most important message is we need to find ways to make space and time and opportunity for every faculty member with any interest in climate change.

Albright: I echo everything Saskia says and everything Emily says. I'm going to focus on one of the specific pillars that is of most interest to me and that I think is less developed than the others. That is the climate and environmental justice pillar.

The work that I do, as Erika said, is I study how humans experience climatic disasters. Be it wildfires, be it floods. I see it every day in my research, every day in my class. And so that's the lens from which I'm coming. For the risk of sounding too "Greta-like," the world is on fire. That's how I approach it. I think what's key there is that we know that the climate crisis is affecting people differently. We know that there is disproportionate burdens on Black and Brown communities, disproportionate burden on the global south, disproportionate risks of climate on underserved and under resourced communities. And it affects our youth, our youth are our students. Right? So, I think we need to really think as a university, how we engage in issues of justice. And that can be, how we engage with communities, with society outside of our walls. I think that means thinking about the history of Duke, and taking a lens of humility as we engage outside of the walls in our research and our education missions, and I think we really need to think hard about this. We are in a world of such changing climate matters. What's the role of the university in engaging outside of the walls? And I'd really love a thoughtful engaged discussion of faculty across the whole university on issues of justice, of structural racism. Again, climate change is a risk amplifier of risks that are already across society. I really see it as an integrative challenge. And again, an opportunity to say thanks to the administration.

Wilson: I'm going to say, I agree with everybody. *(laughter)* I really was hoping to bring something and say, "No, this is all wrong." But, it's not. I'm really appreciative of these comments and I really want to pick up on Betsy's

comment and make a broader comment of what we're doing now. So, the issue of justice is a critical one. I'm not a philosopher. I know there are philosophers in the room. But I think justice and how we determine what justice looks like is a critical question. And as I've been in conversations around this I hear differences of opinions of what justice looks like and I think that is something we have to deal with. Because, my justice may look different than yours. That's not a problem necessarily, but we need to at least have that open and honest conversation about what do we mean by enacting justice. So, I'm fully in agreement, but I think that's the conversation that's sometimes a difficult one. Because that means we've got to really lay out our values and what matters to us. I would say one of the challenges I'm seeing with this initiative is there's money on the table. Lots of people are seeing it and then lots of folks trying to figure out how do I get my cut of whatever this is. And that sounds really greedy, the way I'm talking about it. And I don't mean it that way, but it's a real opportunity. And I would hope that we could find really productive ways of helping us coordinate, because there could be so much expended resources.

In another phase of my life, I work with charitable organizations. So, I've been in a couple of different conversations...I even led one conversation trying to figure out like, "Okay, there's this new amount of money. How do we do this?" You're not going to get the best that I can offer without that careful coordination of the funds. I just really encourage us, as we move forward, let's make sure we have some ways of doing this efficiently. I would even argue equitably, because there will be certain folks who will be

able to access this money a lot more readily than others. But, as this conversation is led, we all have something to offer as you're in one discipline or your background is something doesn't mean you don't have something to offer.

Weinthal: I really appreciate the comments. I just wonder if you want to build on that discussion. Given that there are people in the room who are really listening. If you could put forth a few ideas of where you would like the university to go with this Climate Commitment in a way that brings everyone in that doesn't create this competition for resources. But, we're in this together. There is a climate crisis. Our students are grieving. When you ask them in the classroom some of them are experiencing deep grief. And this is about rebuilding Duke as a community. It builds on other initiatives of Duke, and addressing, you know, racial injustice. So, how do we tie some of these initiatives together where we are working as a collective on an issue that requires all hands-on deck. Then, after you respond, I'll open it up if there are others who have questions.

Bernhardt: I don't have an answer, but I was in one of the faculty groups in sort of pre-lead up to this and I was also on faculty 2030 right before that. One of the conversations we kept coming back to...all of the conversations were like, "Nobody has any time." We all are doing this job because we wanted to have deep intellectual conversations with brilliant people, and we mostly spend time...as part of one of these last conversations...filling out forms and watching safety videos and stuff. Honestly, how do we create opportunity to do what we all came to do, our jobs. I

think that's really the issue. Our retreat with all the climate faculty fellows, last May, we selected folks and we all spent two days together. In that space we could talk about how hard it is to teach about these things and to think about how not to make our student scream. We need that. I don't know how we get it, but if you can solve that problem?...*(laughter)* This would be a different place.

Cornes: Maybe there is a possibility for a different incentive structure. So, an RFP with funding is one kind of incentive structure.....

Albright: Going off the incentive structure, I think a lot of the work, particularly in the field of environmental justice, it's slow. It's not going to be published in maybe the top tier journals. I think we need to think about the incentive structures for promotion. And how do we think about issues of community engagement? That's a long-term process, and maybe that should be given weight in your decisions. Greater weight than it has been historically. To really get at these issues of justice, of equity that may not lead to top tier journal publications.

Bernhardt: I think that's so interesting. I'm going to use a metaphor from the class, but I think it's just a lot of what you're saying. The dominant majors in our class, I think we had mostly economics and computer science were the big majors in the class. We had 150 students. And all of them were just like, "What's the solution?" And our first set of faculty speakers were Adriane Lentz-Smith talking about Katrina, Ryan Emanuel talking about environmental justice and indigenous experiences of climate change, and Deborah Reisinger

talking about the climate refugee crisis. And they're like you're just making it worse. When do we get to the good stuff? *(laughter)* And I think the danger is, if we go too fast, or we try to get quick pay off we're going to come up with like technological solutions to just a tiny part of the problem instead of the actual problem which is why climate change is tied to everything.

Wilson: There's an idea and for those of you who are NSF world you know that they talk about convergence. I'm still struggling with that concept, because it just sounds like souped up intradisciplinary. But I do believe there is this desire for something a little bit different. And when I hear this conversation and just looking at the people on this panel, I see that as a potentially. How we do this is in trying to come up with convergent research. And as I was in the conversation recently with someone, they said, "Well, that's really hard." And I agree. The idea of different disciplines having the intellectual ability to say, "this is hard" has to offer something to this conversation and that by collaborating, not just showing data, but actually deep collaboration, and asking a different question than our discipline informs us to ask. That offers something good. But it's also unwieldy and it's not going to lead in the typical way of "Oh that's going to show up in this particular journal." And again, it's not to call into question doing that work, but I'm asking, "What is the space? What does that look like?" I know Duke prides itself on being interdisciplinary. So, I think it's not out of character for us to think this way.

Weinthal: I want this to be an opportunity to bring everyone in to this

discussion on climate. So, if people have any questions that any of us can respond to or anything you would like to contribute.

Don Taylor (Sanford School of Public Policy): My people are tobacco farmers. So, when I walk my dog in the Duke forest, it's volunteer tobacco all over the place. So, it wants to go back to how it used to be. I was curious of what could you do with 10 acres?

Cornes: What could I personally do?
(laughter)

Taylor: What could the Duke Farm do? We're the biggest land owner in Durham and Orange County and I'm sure some of it could probably grow vegetables and maybe the community could...what would you do...like that's an asset that's roughly speaking, laying fallow, and has been for 100 years.

Cornes: We can do a lot. So, I said we grew almost 19,000 pounds of food last year. We grew that on soil that's technically not agricultural soil. That land was abandoned in the 1920's because it had completely given up the ghost, after about 200 years of plantation agriculture, and it's still healing. Our primary problem right now is access. So, I said we're 7 miles from this campus. We're probably the only teaching space on campus that's only accessible by private vehicle and it actually doesn't have a flush toilet. But, we're still working. We're still producing and we still have a lot of people joining us in this work. We're trying to kind of re- envision our economic model. So, right now we're selling most of our produce through a community supported agriculture model, mostly to Duke faculty and staff, a handful of students. During

the COVID pandemic we started donating all of our food through a sibling organization on the medical side of campus, Root Causes. And I think if we had more acreage we could be doing wonderful things in terms of serving their Root Causes population. If you're not familiar with that organization, it's a medical student led organization that's thinking about social determinants of health. And in response to some of what they are seeing, they started what's essentially a vegetable prescription program for outpatients who screen positive for diet related diseases. So, it would be amazing for us to be growing more food for them, and I think that could also potentially meet more of the justice and community needs and food insecurity needs.

The last place before I came here was in Northern California and when I came here I literally cried. The soil is like a cataclysm. And I think there's going to be more and more of that. So, if we can, given the resources that we have, show how you can grow food on this. I think that has the potential to catalyze some positive things.

Taylor: And the soil here makes you sad?

Cornes: Yeah. It's farmed out. It was never good to begin with and then it got farmed out. And there's human cause to that. And people are still farming, I recognize that too.

Karin, Shapiro (African, and African American Studies): I'm interested in the social justice piece of this, and I was wondering whether there's been much engagement with Warren County. In particular, I think there was a Duke undergrad, there was a report on all of

that. So, in thinking about environmental justice, are we using North Carolina potentially as our lab or our environment space?

Albright: Thank you for the question. In terms of Warren County, Erika and my Bass class actually went down to the 40th anniversary of the birth of the Environmental Justice Movement in Warren County. Our students have, in both of my environmental policy course and the Bass course, learned and looked at the history in North Carolina. I think we shouldn't stop there. I think it's really important and there's so many interesting things in Warren County and Eastern North Carolina, Western North Carolina. So, I'm all in, and think we should do what we can to integrate it. And I like the idea of both as campus as a lab, as Durham, as North Carolina. The wording I think we need to work on. As a resident of Durham, I don't want to be called, you know, a lab per se, but I think it's really important to engage in Warren County, engage in Durham. But, doing so justly and humbly.

Josh Sosin (Classical Studies): I'm generally a pessimist, and I feel, I think, the same as your students who report just feeling dispirited about this. I'm a little encouraged hearing all of the intention to complexity and discouraging students from easy solutionism. But, I have a really mundane question, in my household I am the electricity and water and gas tyrant. *(laughter)* And what is the answer to the students who say, "What are you talking about? I'm in this place in which all of the lights are on 24/7." The heater, well not in the student's rooms, but in my room is probably older than my grandfather. What is the answer to the range of things that we, as a campus, are doing? Maybe this is a URL you can point ignorant me to.

But that we can each contribute to in that sort of small and steady way that turns us toward optimism.

Bernhardt: That's a great question, and it'd be awesome to see many more communities across campus thinking about it. I'll just highlight my business manager in biology, I say mine because I'm the chair so he works for me theoretically. But, he's been there for 28 years, and he started green sustainable labs which has now spread to universities around the state. He was just at a conference. That's a really beautiful movement to think about how do we actually use less stuff in our labs? And how are we more energy efficient? We need more of that sort of leadership, kind of at every scale. Tavey Capps is the sustainability director, and she's thinking about that at the university scale. But you have to act really locally, in your buildings, and in your in your research spaces. What are you doing personally to have a lower impact? And I think we could all use help. And then I'm all for major facility investments in HVAC improvements.

Sosin: Is there some place where we can see what the strategic vision is and how we're starting to deal with these big issues?

Toddi Steelman (Dean of the Nicholas School of the Environment): I also have the honor of being one of the co-leads on campus for the Climate Commitment, joined by Brian Murray from the Nicholas Institute and Tavey from Sustainable Duke. The Sustainable Duke website has their strategic plan and everything that's going on around the campus. It's really amazing. I don't know if there's any room or any space, I know you guys are

slammed in terms of the number of things that you're hearing about, but it would be worthwhile hearing from Tavey about all the things that are actually going on, because it is a hidden, invisible story about all the great stuff that's going on on this campus. We need to get better at telling that story. We just hired a full-time communicator to help us tell that story. So, I think that's coming, but I think it's really empowering once you hear about some of the things that are going on now. That's not to say we've got our work done. We certainly have our work cut out for us. But, Sustainable Duke, if you just Google their website. There's a slew of resources up there, and a better story for us to tell.

Pat Halpin (Nicholas School of the Environment): Everything that you guys are talking about is fantastic. I am interested, though, in looking at how the portfolio of things we're doing with the Climate Commitment can be expanded beyond what we're doing locally. Hopefully globally. But, Duke does punch above its weight in a lot of areas. There're pockets of work we have a global impact, we have national impact. And I've never really seen that extracted out in this commitment yet. And I think there's lots of stuff we could leverage that is huge. And it's not to say you don't do all these wonderful things we're doing on campus and for the local community, but in addition to that, we actually can compete with the Stanfords of the world and people like that. Maybe not at the same level of a billion-dollar gift, but we have areas that we have very strong suits. I go to the UN all the time, and those people in the UN know Duke. So, we have some places we can really have a major impact, and it's kind of hidden. So, I just would like to see the next generation of Climate

Commitment to actually start to build that portfolio out. I think it's great to start with the local issues, I think it's wonderful, but I think we've got other great areas we can move on.

Kathy Andolsek (School of Medicine): This has been a great presentation, hopefully the first of many that we get to hear about. And I guess the question I've got is, are there opportunities in any structural changes to how we organize what we do at the university? You sound like you've been a great group of people that have kind of connected, finding out about one another, using networking informally, or whatever. But, just structurally we're so organized in schools, within schools and departments, and it innately almost leads to more silos and less opportunities for interdisciplinary work. So, I guess I'm wondering structurally the things you might imagine differently. I don't know about the structure of institutes, whether that's even a reasonable thing or just more stuff to worry about, not really helpful to being a unifying force, but just a way that you can really grab hold of those people like you in all of our schools and departments. That really kind of build the capacity that you offer, and the teaching commitment, and the quicker to share the opportunities for grants and teaching and resources.

Bernhardt: I think that's such an interesting question. When Norman Wirzba and I were asked to run this class and decided we want to bring in people from as wide of a range of disciplines as we could in a 14-week course, we sent out an email to all the faculty across Duke saying, "Which of you would like to be involved?" And I actually was really worried. I sent it to my own faculty as

their chair, that we might get nothing back. But we actually had like 75 people who immediately responded from all across the university that said, "Yeah, I want to be involved." About 40 of them were willing to commit to be faculty fellows. So, that was really encouraging. And before we even started the course Norman and I asked about 50 people over the course of several dinners and breakfasts, that we just heard were thoughtful people not necessarily having ever done anything on climate change, "What do you think?" Everyone said yes to our invitations, which again is unique in my experience at Duke. So, it just suggests this hunger to talk about it, and we just need to create opportunity. We are going to be sending out invitations for a bunch of dinners and some breakfasts over the course of this spring to talk about that very thing. How do you build community? What kinds of things would actually get people in the room together to have these kinds of enriching conversations? I don't know the answer, but I bet, amongst all of us we can come up with some pretty creative solutions. And there is some money behind that. Thank you, Provost. *(laughter)*

Weinthal: I just want to echo what Pat was saying, because I think it's really important that our community also extends beyond Duke through our partnerships with whom we work, but also our alumni who are all over the world, and who want to be engaged in these conversations.

Nicole Larrier (School of Medicine): Thank you, everyone, I'm very glad to hear everything that's going on. I'll tell you one of the things I've done over the last 10-15 years is. Like many of you, I have a little garden at home. And you

have extra stuff, tomatoes, cucumbers. As a doctor, I get to see patients who have to come see me. You know what I do? Get a bag and bring them and give it to people. Captive audience. And it's weird, because when I first started doing it, it didn't occur to me how much they trust their doctor. My doctor is giving me food and what is the food? And how do you grow the food? And have a conversation about that.

But, what I'm asking about is, I'm aware of sort of where we're living within the United States. There are a lot of people who don't believe in climate change. How do we deal with our neighbors? I go up to a rural hospital every Friday and interact with a lot of people who think this is a political gimmick. And if some place like Duke is promoting this, then that plays into the political gimmick. If I have a little pin that says, I support Duke Climate or whatever.

Albright: So, the first thing that comes to my mind is talk about climate change without using the term climate change. As you're speaking with a farmer ask, "How has your growing season been? How does it compare to the last year?" Or when your family is on the phone, or if you're talking to fishers, it's the same thing. People are in touch with the seasonality, with the weather, particularly in rural areas. And I think if you can tap into that without saying, "Do you believe in climate change?" I think that's a place to start. If I want to engage with community members, I personally love to fish. So, I go out and fish in places and start up conversations based on fishing and talk about what fish species are being caught. How has that shifted over time? So, I think there are ways to get at some of the same issues and challenges without that,

unfortunately, politicized climate change or global warming.

Bernhardt: One of the assignments in our class was every student over fall break had to have a conversation with someone who didn't believe in climate change and then write about it. That assignment was set by Nick Carnes in Political Science and he teaches about how we find bipartisanship; how do we bridge the political divide. And it was pretty fascinating. A bunch of people got back in touch with people from high school on Facebook and talked to their grandmother who just does not believe in this. I would say that most of them were like, "What I really tried to do was start from a place we care about." Really recognizing that we have things we care about that are the same, and you shouldn't ever talk about climate change after you establish some connection. So, in summary, they still don't believe me, but at least we were able to talk about weather, drought, fire. The people can talk about the more direct causes without using the words climate change and causing a knee jerk reaction. Students were like, "I feel ready to go have those conversations rather than sit quietly. I feel like I want to engage in those conversations." Wouldn't it be an amazing global export to produce all of these Duke students, graduate students going out in the world really prepared to have these conversations. That would be pretty cool.

Larrier: I think that for graduate and professional students.

Cornes: Keep bringing the tomatoes and cucumbers!

Weinthal: I want to ask everyone to join me in thanking everyone on the panel. *(Applause)* Our next meeting is in March,

which is our Annual Faculty Meeting, where we will hear from President Price. So, until then have a very good rest of your day.