[LS 106] 14:02:06

Good afternoon, everyone. Just as a reminder, we will

[LS 106] 14:02:13

be recording this session. So with that, why don't we get started?

[LS 106] 14:02:21

All right. Good afternoon, everyone. Thank you for taking the time to participate in today's vision seminar as a part of UC Riverside search

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for the Dean of the Bournes College of Engineering. My name is Tanya Adams. I'm the Director of Human Resources and Executive searches, and I am pleased to be supporting this search.

[LS 106] 14:02:37

We are delighted to welcome Dr. Bill Lin.

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Bill currently serves as the Associate Dean for research at the Jacobs School of Engineering and as a professor of electrical and computer engineering at UC San Diego. Please be advised that we've provided Dr. Lin with a prompt for the vision seminar, and he'll spend about 25 minutes or so discussing the following topics.

[LS 106] 14:02:58

The key opportunities and challenges facing higher ed over the next several years, the specific opportunities and challenges he anticipates for the Bournes College of Engineering, and his vision for BCOE, and how he would work to achieve that vision.

[LS 106] 14:03:13

At the conclusion of Dr. Lin's presentation, we'll open up the session for questions. But with that, I'll hand it over to you, Dr. Lin. Thank you very much. Is this too loud, or is it okay?

[LS 106] 14:03:23

If it's

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a bit loud,

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I can lower it to… it's okay, all right. I tend to be pretty loud, just in lecture style. So thank you, Tanya, for the wonderful introduction, and thank you all a little loud. Okay, all right, let me see if I can…

[LS 106] 14:03:38

Better now? Okay, better. Okay. All right. So thank you all for spending time with me. I recognize many people in the audience that were part of the my two day agenda. So thank you for the warm welcome and wonderful questions that we've had in the last 2 days. I'm honored to be here to be considered as a candidate as your next Dean.

[LS 106] 14:04:03

And I hope this is the first of many conversations that we will have. I usually like to stand in front of an audience like this, but I realize that I don't actually have a confidence monitor in the back.

[LS 106] 14:04:18

So just bear with me. I might actually turn around and look at it, or I might actually move behind the podium. So I don't know yet what I'll do, so just bear with me. The title of my slide, the first line is what I see from the outside, which is a university that has.

[LS 106] 14:04:34

Tremendous momentum with world-class research, and it's the job of the NICS Dean to turn that momentum into lasting strength. And the second line is why I'm here. How do we take the Bourne College of Engineering to the next level together?

[LS 106] 14:04:52

So I want to start by, uh, uh, it's not one of the prompts, but I want to tell you a little bit about myself, and hopefully it'll help inform the way I see the world. I was born in Hong Kong with a family of four other siblings, there were five of us. With my parents, we grew up in Hong Kong.

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Probably a 600 square foot housing unit. My mom brought us over to the United States when I was young. We moved to Orange County, so Southern California is my home, just down the 191 freeway from here.

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And so I grew up in Southern California. Like most teenagers, when I graduated high school, I wanted to go far away from home, so I went to UC Berkeley for my undergraduate degree, as well as my PhD.

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Uh, and after I got my PhD, I took a detour and went to Europe, and I worked in a research lab for those that are in microelectronics, people will know AMEC is the independent research lab that does the.

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Pathfinding for TSMC, Intel, and all of the major Samsung major foundries. So AMEC does all of the future generation nodes. They're working on beyond one nanometer, and I had the privilege of running a research group at AMEC while I was there. I also got to, uh, on the left-hand side, you see a 13th century Bekenosh.

[LS 106] 14:06:18

which is a UNESCO World Heritage Site, so I got to live there while I was there, and I live on one of the top floors of the unit, so it's really a nice experience to have a combination of a modern research lab, as well as living in a 13th century.

[LS 106] 14:06:38

place in the city. So I've lived on three continents in the world, uh, but I came back home to UC San Diego in 1997, and I've been part of UC for almost my entirety of the UC… of my career, except when I took a detour to Europe.

[LS 106] 14:06:55

I was very fortunate to have a position open at UC San Diego and during my career, I've published 250… over 250 papers, generally in the area of chip design.

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Um, and, you know, chip design evolves quite a bit over three decades. In addition to the 250-plus papers, I have six patents and two of those patents became the basis of two startup companies that were venture backed.

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that were eventually acquired by 2 S&P 500 companies. So I've had the fortune of experiencing academic life through research, but also through translations into industry in different forms. So, like I said, I've been there for nearly 20, uh, nearly 30 years.

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In 2019, uh, actually, in 2017, the department chair at that time asked me to be the vice chair, and I go, Oh, great, this is, this is wonderful, and I didn't realize that the department chair actually did most of the work, at least in my case. So my department chair was very nice to me.

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And I agreed to, uh, my department voted me to be the department chair in 2019, so I agreed to take on the role. And what I didn't know was that seven months later, uh, we would have to COVID pandemic.

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And so looking back, I'm actually very grateful for the experience because I got to spend the first — I had seven months before the pandemic hit, where I had the chance to work with the faculty, the staff, and the student leaders.

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to develop a strategic plan. It was a process that involved everyone to decide on new hirings, on changing the curriculum, on TA allocation. We had just got into a new mission-based budget model when I started as department chair, so there was a department-wide discussion of how to deal with the resources were available at the time.

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And I think my own research style, my own leadership style is to engage people, uh, to be part of the process, including having everybody aware of the problems, um, so that they appreciate the challenges that we all face together in the same boat.

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And I think we're very fortunate to have at least that seven months headway before the pandemic hit, because when the pandemic hit, we had to move 2,500 students to online courses. We had to move 60 instructors to online, and we had to move a staff of 40 people to work from their kitchens.

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And the commitments that the faculty and staff made, I think, is a consequence of them being part of the voice in the strategic plan that we developed together. So I understood during those years that academia, university leadership is a team sport.

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And everybody has to be part of the team. And I'm very grateful for the experience.

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But I think the bigger challenge during the five years wasn't really the pandemic, it was the profound transition that we went through in the department. So we have 12 senior faculty members retiring who retired during those years, and we recruited 18 faculty members during those years.

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So as a department of about 65 people, 30% came through when I was department chair. And so the big challenge is, how do you deal with the situation where 12 senior faculty that brought in a lot of money left, and then we have new assistant professors who need to gear up.

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To, uh, to get the funding, and I think we managed to go through the 5 years with $40 million of research expenditure undiminished, uh, but it was a huge challenge to integrate everybody into the culture of the department.

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And I think I was very fortunate to have experienced many scenarios in which I would not — I think many people would not have experienced in the same five-year period.

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Um, so, uh, the 18 faculty members that we recruited, they together they won 25 prizes and recognitions. So these are the Vissel Popov Prize, two Donald Ekman Prize, a couple of IEEE medal.

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faculty member becoming inducted to the National Academy of Engineering. So I think the department really came together to integrate the new faculty members to in a way that I think led to a lot of success. So, of course, the awards and recognitions are.

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the result of the faculty. But I think as a department, we did a lot to to bring everybody together.

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So I finished my term in July 2024. My dean asked me to join his senior leadership team, and I jumped at a chance mostly because I wanted to see.

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how a dean creates the condition for the school to succeed. And my specific role started off to be research related to computing and microelectronics, and my portfolio brought into all six departments in the School of Engineering and all 14 research centers.

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But what I really value the most is to… we have senior leadership meeting with all the associate deans, the executive development director every two weeks, and we report to each other our pipeline of things to do. And so, as an associate dean, I get to see firsthand.

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how we approach philanthropy at the Jacobs School. I got to see firsthand the thinking that we're doing right now in terms of how to integrate AI into education. So all aspects of the Dean's office, I think I…

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very grateful that I have a front row seat in many of those discussions.

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So in addition to my role as an associate dean and department chair, I've been the principal investigator of a student success program funded by NSF called Empower, and is a program for low-income transfer students.

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across the six engineering departments. And so I really appreciate the opportunity to be able to work with all six departments, both at the research level, as well as at the student success level. And I'm very proud of this program.

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wonderful program review just two weeks ago. And very successful. And what I really appreciate is really working with students in a very different way that professors normally work with a student. I, you know, I got to see how they… how the students grew over the.

[LS 106] 14:13:34

the 2-3 years that they were part of the program. I saw the way they that they changed the way they saw themselves and how they believed in themselves. And and I think I'm very proud of the success of how they see themselves. And so there are other numbers about 30%, you know, a better four-year graduation rates compared to other low-income students outside the program.

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So there are a bunch of statistics like that. So…

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Okay, so that's a little bit about me. I want to tell you, uh, talk a little bit about the headwinds. I think these are headwinds faced by all universities, certainly UC San Diego, and for my conversation in the last 2 days, I think UCR faces a similar.

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situation. Uh, the first one is the federal funding landscape has changed dramatically in the last few years. Uh, there's much more emphasis on.

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large center scale proposals that are interdisciplinary, and that changes a lot in the way that we approach things. I'll speak a little bit more to that later, but that's the headwind that I think many universities face, including.

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UC San Diego. The other is the international pipeline has changed dramatically, and you cannot read any of the major news outlet, like New York Times or Washington Post or Wall Street Journal in the last few days without seeing the headline that international students are turning away.

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from the United States. So that's a major issue that we have seen, and my understanding is also something that UCR has been seeing. The third is that the state support itself has changed significantly.

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And the… as a consequence, universities have to revise their budget models to deal with the reality of the situation. So these are major efforts, I mean, major issues. And the last one is that I think AI is fundamentally reordering education and research.

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in very profound ways. So in my view, I think that headwinds and things like this are opportunities, because they tend to shake up the world order, if you will. I think because of all these changes.

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I think engineering schools have an opportunity to really reorder the leadership board, you know, the ranking order in ways that are probably not possible in the last few decades. So for schools that view these headwinds and opportunities, I mean, these challenges as opportunities to really rise above.

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Uh, versus people that surrender to these challenges, I think it would make a huge difference. So, I see it as more as an opportunity, and I think there's a Chinese proverb that I don't know exactly how, something about, you know, maybe we live in interesting times, and we're definitely living in some extraordinary interesting times.

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So, I want to speak a little bit more about the AI. I think AI is — I don't mean AI as a research area. I mean AI, how it affects education and the way we do research. And I think we're seeing profound change.

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in this, one of which is that federal agencies are explicitly calling for proposals for AI-assisted engineering research, right, as part of the engineering discovery loop. And we're seeing how the research itself has changed. So my own personal experience.

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is that I'm able to use AI to write all the code for me. So literally in a few hours, I have a lot of code that would normally take a graduate graduate student.

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months, I mean, weeks to write. And so that's just an example of how it's fundamentally changing the way we do research. And my own personal view is that I think we can… we can set our sights much higher in terms of our research ambition if we get, uh, if we get this.

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done it in the right way. Um, so of course, this runs through every department, so I'm not talking about research on AI, although for computer science and engineering and other related areas, that's, of course, a very important research. I'm talking about the way that AI may change the way we do scientific.

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discovery. And that's changing in a very profound way. So I think, uh, um, uh, and I'll talk a little bit more about education. So I believe in bottom-up knowledge.

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Uh, so I feel like the dean's office can really shape this by working with campus leaderships and industry and donors to make sure that our professors have access to the compute infrastructure to do the research.

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I think the second point is that, at least in UC San Diego, we have actually a separate Associate Dean for AI, and that person's role is to see. It's not about research grants, but it's really about how to rethink education in the era of AI, and how to read how to provide support.

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for professors to do research in the area of AI, and part of that in the bottom of a process is just many workshops and seminars where professors are volunteering, so it's… dissemination as a professor, basically, is that this is how I'm using AI in my research, and, uh, you know, this kind of thing. So we're forming a lot of these.

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seminar groups at the department level and at the school level to, in a bottom-up way to have this constant flow of dissemination of best practices and this sort of thing.

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So the other thing I mentioned a couple of times throughout yesterday and today is that I think, in general, when things are shaking up so much, there are opportunities to create pilot projects.

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as demonstrate as templates for what is possible. I think, in general, trying to lift everything at once can be a very extraordinarily heavy lift. But I think in the era of AI, I would love to work with early adopters who want to experiment with different ideas, who want to be leaders in disseminating.

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how they do things. So I think there's a lot of that, and potentially the Dean's office can make some flagship bets to help support some of those efforts.

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The education side is the one that is hotly debated within my school of engineering. And there are two camps, and I suspect that probably similar two camps here. One camp really think that it's really important.

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that we train students to be critical thinkers.

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And we trained them to have the fundamentals, so they have some basis to think critically about.

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and that camp is generally against AI in the sense that they worry that students will just surrender cognitively to AI and and and and the belief is that unless we as humans struggle with a problem, we don't have a way to deeply encode the knowledge.

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And you cannot disagree with that logic, so I 100% agree with the logic. The other camp is to say we're moving into the world right now where if you, for those of you who deeply use AI, a year ago now, it's 10x difference.

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And I expect a year from now is another 10x difference. So the world is moving extremely fast, and the other camp basically says that we need to train students with the utmost level of fluency.

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Uh, in AI. In other words, it's not something that you can… if you… if you don't have deep experience with AI through your four years, it's not like when you go out for a job, you can magically, in a weekend, be able to figure out. You have to have experience yourself firsthand how to get AI to write lots of software for you, and how to get it to set up many experiments for you.

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And how to get it to collect lots of data for you, right? And so the AI fluency camp worry that if we just teach them fundamental, I mean, not just that if we somehow worry too much about AI, we want to take it away from… prevent them from using it.

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Um, that somehow they would be at a disadvantage going into the workforce that inevitably will rely on a lot of advances in AI. So I view this as a paradox and not as a contradiction, not as… and my own feeling is that.

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I don't know what the right answer is, and I think nobody knows the right answer. And I think if somebody tells you what the right answer is, I would myself would be skeptical. Instead, my own personal view is that we should set up many small pilots.

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And that may be one or two courses in one department, maybe another department can try different ideas. And I believe in a bottom-up approach where we try to create a community in which best practices can be shared between different departments.

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And I think teaching professors can play a very central role in thinking about a lot of these issues. So I don't view this as a contradiction. And I think if we accept that all these experiments is noisy.

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I think we will move towards the right direction. So I think the most important thing in having experiments is to have the right North Star. So in machine learning, we call it a loss function,

and at the highest level, I think the North Star should be that we want students to, uh, we want to train students to make.

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To change lives in the communities that they move into. I know that's a very ill-defined thing, but I think that is an important goal. And then I think when we move further down, I think we can refine the sort of the objective, and the objective will eventually, uh, to say that, uh, where is the contradiction between critical thinking.

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and AI fluency. And I think we'll get to those kind of questions. In terms of commitment on the other side, on the paradox side, I think it's important that we.

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We educate students to be accountable. In other words, if they are going to use AI as part of their education, they should be accountable for it. And that might touch on, you know, topics like ethics and these kind of things. But people should understand. We should emphasize on accountability.

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But more importantly, I think students going out into the workforce and becoming leaders in their own field, that they are educated in a culture that where they believe accountability is very important.

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Um, that means that they should worry about if they're maybe not just AI, but just hold the idea that technology can have very negative consequences, so they should be brought up in the culture to make sure that they understand their role in.

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The positive aspects of technology as well as potential negative aspects, but also be accountable to how they use AI and so forth. So I think those are things that are important. I already mentioned the issue about.

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leadership in two levels, I think every university is different, but we should have some leadership at the department level, as well as the dean's level, that supports some sort of community-based mechanism to develop best practices and for people to disseminate best practices to each other.

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Uh, so that's a second thing that I think is important. And then the third thing is, if…

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If some students have access to 3 models at 200 bucks per month per model, and another student has only access to the free model. There's a significant.

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potential issue for equity. I'm not sure I have a solution to tell you, but these are questions that I think a lot about, and so as part of these AI education, I think we should think a lot about how that affects.

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The student population and the diversity of student population to make sure that that we don't have a population that's put at a significant disadvantage.

[LS 106] 14:25:09

Okay, so switching gears.

[LS 106] 14:25:14

Part of my title is is turning momentum into lasting strength. UCR has a lot to be proud of in the last decade, and including becoming part of the AAU.

[LS 106] 14:25:29

Your research expenditure has increased 50%. Many of your junior faculty have all received a career awards, which is a recognition of the caliber of faculty that you have. You have many new centers, including RAISE.

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for AI research, you have CSERC, you have the Lithium Valley Clean Air Center. You've got the Oasis Park that's coming. So there are a lot of momentum. And their incredible strength within each department.

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And the Nick Steen's job is to how to get the world to recognize the talent that's already here, and maybe create more synergy among the faculty to create a bigger projection of the capability and talent that's within the school.

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The school, of course, is famous for, number one, being in social mobility, and I think there are probably no universities in the United States that can match UCR's combination of world-class research and opportunity and access. So I think this is.

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A university that should be a model for the rest of the country.

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So tremendous momentum, and the next Dean's job, and this is what I see from the outside. The next gene's job is to turn this into lasting strength.

[LS 106] 14:26:42

And okay, so…

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All right, so there's tremendous momentum that I spoke about, and I think part of the Nick Steen's job is to work with campus to make sure that that the 5,000 students already here, that the resources available. I understand this is a.

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a hot topic of discussion right now, but your student population has increased from 3,400 to 5,000, so it's a 50% increase in student, um, and so, uh, part of the discussion is to make sure that campus recognizes that.

[LS 106] 14:27:19

You cannot magically have 50% more students and not have the resources to match. I understand for UCR, the roadmap is to go from 27,000 students to 35,000 students in 2035. So that's another 30%. So part of the dean's job is to.

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work with campus to get the resources necessary to, uh, to, uh, match the size of the school. The second point is that.

[LS 106] 14:27:52

I think there are already these centers that I described, and there are many points of light, if you will, in terms of world-class research. I think part of the Gaines role is to understand the current landscape of what's going on in terms of support for these activities.

[LS 106] 14:28:10

Um, and create, uh, support to enable teams of faculty to go after larger center opportunities, but also to work with, um.

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faculty that want to be early adopters to, you know, certain things than to prove… to prove, uh, to provide more proof, uh, that, uh, that everybody, you know, other people can be successful in the same way. Um, and so that's sort of the research, uh, uh, uh, for faculty. We want to enable the highest ambition.

[LS 106] 14:28:39

of the faculty in terms of research. Graduate program, uh, at the standard of the best, I understand that the foreign students' enrollment issues have dramatically affected this university, as well as all universities. I understand that the funding landscape has created enormous uncertainty.

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creating more reluctance for faculty to bring in PhD students, and so forth. So those are all challenges that I recognize, and we will work together to tackle them together.

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The last two points, the BCOE have world-class faculty. And I understand that some of them have left to other places. Part of it is good news in the sense that the caliber of faculty are already at the standard of.

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these other places. Uh, the bad thing is, you know, that they've left. During my five-year as department chair, I worked on five retention cases, and they all stayed. Um, I think luck plays a very big.

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role in it, but I think in taking a personal role in discussing with the faculty to understand, you know, their concerns and fight for their retention package and so forth, they, at least in my case, I think it's lucky that they felt.

[LS 106] 14:29:56

That the support from the, uh, from the department, from the school, and what they've built up already would take much more to build up where they might be going. So, uh, but understand retention is an important issue. But I think the last issue is perhaps the biggest issue is, is.

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all the talent that's already in BCOE. Again, I see that there are a lot of great centers already recently launched, but the role the Dean's Office is to get the world to recognize.

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Just tell it much, much faster. Okay.

[LS 106] 14:30:32

Let me see if I can jump to a few things.

[LS 106] 14:30:35

So I think I spoke to a couple of these points. I'm going to just skip a little bit, but I think these are all the things that I see where the BCOE can go. So let me go on to a few more points. Okay, so I think I want to talk about four specific things, uh, in terms of an agenda that we can do to.

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Get to the goals that we described earlier. One is I want to understand what the machinery already exists in supporting large research efforts.

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Um, I think in my own experience at UC San Diego, and again, every institution is different, so I don't want to assume what works in one place will work in another place, but we've been very successful in creating models of success.

[LS 106] 14:31:19

Uh, so the best example I can give is we have 14 centers, five that are still in the middle of becoming a center. But when we did this two years ago, we called for… we went to the department chairs and say, what are your.

[LS 106] 14:31:34

What do you think are the best opportunities in your department for a multi-department effort? People step up with great ideas, but this time around earlier this year, we went to the six departments. We have three home run ideas from every department. So 18, right?

[LS 106] 14:31:51

And so, uh, the point I want to make is that I think we tried to create examples of success. And then other faculty said, well, how come we're not getting these benefits? And so I think we do a lot to create shifting of norms in a way that.

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by sort of examples of where we want the norm to move. So that's what I mean by support. I think when we incubate centers with forming teams across two, three engineering department, as well as a faculty from maybe another school.

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The great thing is that when large proposal calls come, you're not in a scrambling mode to find, you know, marriages, so to speak. So we've been very successful this year with ARPA-H, with a mechanical engineering department partnering with Health Sciences.

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electrical engineering partnering with the School of Medicine, what we call nanoengineering, which I think is closest to material science and engineering, with medicine. So these are different engineering departments partnering, and we won a total of $126 million across five awards that were announced this year.

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So again, I would want to understand what the landscape here is in UCR, your history, how you got here, because I think how you got here matters a lot in terms of what would work going forward.

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Uh, but generally speaking, I would try to take the approach of finding, uh, if we want to introduce new mechanisms, I would want to find early adopters who will be a partner in demonstrating success in those approaches.

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The second move is recruitment, retention, and recognizing excellent faculty.

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Recruitment requires slots to be allocated, so I think my approach has been to deeply engage the faculty in shaping the recruitment agenda, right? And if they're part of it, they're very enthusiastic. My job as a chair was to.

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get people to sign the offers, but the faculty were responsible for identifying candidates, making sure they have a wonderful experience on the visits and all that kind of stuff.

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But I think the retention piece is very interesting, because.

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I think of retention not as.

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Not as when they get an offer. So, the best example I can give you is that out of the 18 professors, 16 of them were brand new assistant professors. We invested a lot in getting them to become successful. What I mean invest, I don't mean money. I mean in terms of.

[LS 106] 14:34:28

We did many initiatives to connect. So one example is we had every professor to give a one-hour seminar to only professors in the EC department about their vision 5 years from now or 10 years from now. What is the paradigm shift? What are they seeing that other people are not seeing?

[LS 106] 14:34:45

And that really gave them… well, one, it allows them to think about what is their 10-year agenda, but also got the rest of the faculty to see where the opportunities to collaborate. So we did many things like that, where I think the new faculty members feel like they're really.

[LS 106] 14:35:02

But being supported, and I see retention as…

[LS 106] 14:35:06

that those early kind of thing where people want to stay. Anyway, those are things that we did. I'm not again. It would be different for every every institution. But we, uh, when I was department chair, we were very loud in in advertising success of.

[LS 106] 14:35:22

professors and staff. So every awards, everybody knows. So it became kind of contagious.

[LS 106] 14:35:27

Um, the… the…

[LS 106] 14:35:31

I'll try to wrap up very quickly. I think I talked a little bit about education already, that we want to train the most critical thinkers, but I think also with a high level of AI fluency, but also a culture where they understand what it means to be accountable.

[LS 106] 14:35:46

of what they do. And I want to touch on one more point, which is, uh, I'm constantly thinking about this issue that an era of AI, what happens when somebody can afford really, you know, multiple expensive bottles versus someone who cannot. So I think a lot about these equity issues.

[LS 106] 14:36:04

All right. So the last thing I want to say is I believe the world is a competitive place, and I feel that engineering is in the center of a lot of potential collaborations. The most natural collaborations is with Peter's department. I mean, college in natural and agriculture sciences.

[LS 106] 14:36:25

their natural partnerships with medicine and health sciences, as I already indicated, but I feel like in our current era, there are many opportunities in terms of how technology affects society. So I see many opportunities with arts and humanities.

[LS 106] 14:36:40

and social science and so forth. So, my view is that we should broadly collaborate with all the talent across campus. My own personal experience is that you don't need to worry that much about who is… who leads these things.

[LS 106] 14:36:57

Because trust is more important, so once you form trust with another school and another college, and there's been success, I think in any kind of collaborations, there'll be natural critical mass. So if medicine… if the proposal.

[LS 106] 14:37:11

The center of gravity is in medicine, then they should lead. If the center of gravity is in engineering, the engineering should lead. And if it's not obvious, then I think a working relationship is something that should resolve those issues quite naturally.

[LS 106] 14:37:27

So I'll close by thanking all of you for inviting me for these two days visit. I've really enjoyed it a lot. Like I said, I grew up in the UC system and I grew up in Southern California. And I mentioned to several people that my cousin's son graduated from here is he met his wife here.

[LS 106] 14:37:49

at UCR. Um, so with that, I wanted to close and thank all of you for coming. So I'm open to questions.

[LS 106] 14:38:02

Thank you for that presentation, Dr. Lin. All right, and with that, we'll open up the session for questions. Just a friendly reminder, if you have a question, raise your hand. One of our team members will come to you with the microphone and we kindly ask that you introduce yourself, your name and your department before asking your question.

[LS 106] 14:38:16

All right. Who wants to get us started?

[LS 106] 14:38:32

DC department professor. So I like the vision that you share with us a lot

[LS 106] 14:38:47

of stuff

[LS 106] 14:38:47

is really ambitious. And from my point of view, a lot of stuff we really need human resource to help on that.

[LS 106] 14:38:48

So but as probably you already have that feeling is that the user assistant right now is really short staffing everywhere. So how are you going to, like, use your…

[LS 106] 14:39:03

position to…

[LS 106] 14:39:06

help us get more human resource to help all the ambitious goals.

[LS 106] 14:39:11

possible. So thank you very

[LS 106] 14:39:26

much for the question. So I I want to break it down into several parts. One is any Dean candidate, not just me should should negotiate with the provost and the chancellor if.

[LS 106] 14:39:27

Uh, if the chancellor and provost want the.

[LS 106] 14:39:32

the BCOE to.

[LS 106] 14:39:34

substantially arise. The commitments have to be compatible. That's 1 issue. The second issue is, I think I've said several times throughout the last 2 days that I'm a realist. So you deal with the challenges that are ahead of you, except them for what they are, not make them prettier than they are.

[LS 106] 14:39:52

And I think any dean should have an honest conversation with the faculty. But my own style, leadership style is that I want to make sure that everybody understands the situation.

[LS 106] 14:40:05

So, you know, I think there are probably many nuances and many complicated issues about how the dynamics work, but I think just like teaching, I want to at least make sure I convey a visual, get people to visualize the dynamics of the situation and understand.

[LS 106] 14:40:21

I believe that if people are involved and understand the constraints and issues, then they become better partners in figuring out how to best approach these things. So I understand many of the ideas I propose require resources. Some of it requires intention and requires signaling, but I understand a lot of it requires resources as well.

[LS 106] 14:40:39

So for any dean, if he or she is given the resources they have.

[LS 106] 14:40:46

you have to assume that they've done their best to fight for the resources available. Then the next question is to understand.

[LS 106] 14:40:53

Whereas this college, we want to prioritize things. And I think having the department chairs, having faculty members within departments to play a role in the conversations will matter a lot.

[LS 106] 14:41:14

Hi, my name is Sarah Salzgiver, and I help support the marketing and communications for the college, as

[LS 106] 14:41:30

well as I do work at C start. So part of, you know, campus leadership goals is really to, you know, we're working on rising up.

[LS 106] 14:41:31

and national rankings. So, what have been… what would be kind of, like, your vision to implement that here for the college? Maybe that's touching on, you know, maybe some relatable experience at UCSD, or what you've kind of learned, um, from us.

[LS 106] 14:41:46

That, maybe that… how you would lead that. Thank you. So, uh, so I

[LS 106] 14:42:04

think, um, uh, UC San Diego does a good job of projecting, not individual faculty strength, but I think broadly, we… I mean, I think 14 centers is one way to speak about it, but we do a good job of.

[LS 106] 14:42:05

Creating much, uh, very large mass, and projecting that large mass. And I understand that there are a number of these centers I have named already that are examples of this. I would love to learn more about what are.

[LS 106] 14:42:22

what else is possible, but a lot of it is to create a strength that's not just one plus one plus one equals to 10, but 1 plus 1 plus 1 equals 100, something that on a higher order of.

[LS 106] 14:42:37

polynomial. So I think that's one way. And it happens to align well with the federal funding landscape.

[LS 106] 14:42:46

Uh, and I understood the question about resources, so I can… I can speak all day long about support for center-scale proposals, but the resources have to be there. So as a group, we have to figure out the trade-off.

[LS 106] 14:43:02

and allocated resources. But on… to the extent that we can create more, sort of, bigger masses for projection, again, I would look for early adopters who are willing to go along with the journey, and I think that can achieve a lot. But again, I…

[LS 106] 14:43:18

If there's already many more centers than I'm aware of than I would suggest. I will make one more point, which is, I think, for any successful college, you can't just have.

[LS 106] 14:43:29

everybody going after Big Center efforts. Your future Nobel Prize winners are often just individual efforts, or one individual with another university somewhere else, right? And so, I recognize that, uh, even though the federal landscape have moved towards center-scale interdisciplinary research.

[LS 106] 14:43:48

Um, uh, you know, U.S. News ranking is entirely… 40% of functional research expenditure and all these things, but I recognize that for a college to be successful in the long term, you need to have the right mix of things.

[LS 106] 14:44:20

Hi, thank you so much for the talk. That was great. And my name is Michalis Faluchos. I'm a computer science department. Nice to meet you. Very nice to meet you.

[LS 106] 14:44:29

I was particularly intrigued

[LS 106] 14:44:47

by your entrepreneurial activities, and I've doubled with entrepreneurship myself. So I was wondering how do you see entrepreneurship within the college and things that you may want to do or how to avoid having all professors live at once and become entrepreneurs and all that stuff?

[LS 106] 14:44:47

Yeah, I don't know, um…

[LS 106] 14:44:52

It's hard to say. I think most people go into academia because they want to make. They want to do great science, and they want to make a lasting impact. So there's a certain DNA in many faculty or people that go into academia. And I think that DNA should be quite strong here as well.

[LS 106] 14:45:10

Uh, uh…

[LS 106] 14:45:12

Academic careers are very long. They span decades, and you know most people in outside of academia would have changed many companies. So I think it's important for faculty to have.

[LS 106] 14:45:23

Their careers evolved in, you know, doing multi-decade span, and translating research to entrepreneurship is one way to go. So I think it's a great thing. I personally think it's a great thing. I think this concern about.

[LS 106] 14:45:38

is a valid concern.

[LS 106] 14:45:40

Uh, and I'm not sure… let me state the concern, let me say that I don't know exactly how I feel about it. The concern is, you know, great faculty might join Meta.

[LS 106] 14:45:51

Right. And we had a faculty member who started a company, got bought up, and he's now returning back. But we also have people who worked at, took a sabbatical at Meta for one year and just now permanently at Meta, right?

[LS 106] 14:46:07

We have had faculty that have started a company, but fortunately, most… I think 90% of them have returned. I think most people have returned after doing start, because I think they're hoping to do another one afterwards, right? So…

[LS 106] 14:46:19

I feel like if you have very talented faculty that can do successful startups or be acquired at a very senior level at a very company of extraordinary compensation.

[LS 106] 14:46:30

It is what it is, and I'm actually quite proud that, you know, yeah, I would be quite proud to have faculty that can get such high compensation packages. So at that level, it was no longer like, oh, I'm going from university X to University Y. Those are career choices.

[LS 106] 14:46:46

Um, and my own personal feeling with.

[LS 106] 14:46:50

some data points is that I think it should be encouraged. Most of them come back and so I think it's generally a good thing.

[LS 106] 14:47:09

Other questions?

[LS 106] 14:47:18

Dr. Lynn, my name is Wallace Brithany, and my question is, we have something

[LS 106] 14:47:30

being built here

[LS 106] 14:47:30

in Riverside called the aim hub, advanced and integrated man.

[LS 106] 14:47:32

manufacturing hub. How do you see?

[LS 106] 14:47:35

That as an asset for the university, since it's new to the school. Do you see that as something that you can work with?

[LS 106] 14:47:46

Yes.

[LS 106] 14:48:05

So I will first say I'm very thankful for Dean Lynch for all the great things, including the advanced manufacturing initiative. They're just like I said, UCR has tremendous momentum across the board, right? How do I feel about it? I feel like it's an example of this sort of larger mass.

[LS 106] 14:48:06

that they bring together the different strengths of the different faculty, and do a much bigger projection in terms of the potential impact of the work being done here. So it's, uh, two thumbs up.

[LS 106] 14:48:19

Thank you.

[LS 106] 14:48:30

Sorry. Ask one more question. So.

[LS 106] 14:48:36

A lot of the plans, depending on the result of negotiation. So I I guess a question that I would like to follow up is that what's your risk management plan if things doesn't.

[LS 106] 14:48:52

happen as the way you wish. So, for example, like, you didn't get a human resource that you need, or you don't get a stuff that you want. Then, under that situation, how can you.

[LS 106] 14:49:04

Work out your plan or is there anything like else that you would like to do to still make BCOE better? Yeah, thank you for the

[LS 106] 14:49:18

question. So, I want to parse that question into two parts.

[LS 106] 14:49:19

I think your next Dean.

[LS 106] 14:49:24

You have to trust that that person will fight for all the resources that's possible.

[LS 106] 14:49:29

So I think it's a given that the team would fight for resources. I don't see things as zero-sum game. So a lot of times it's not just what more for BCOE must be less for somebody else. I think there could be rethinking of the finance budget model, because sometimes.

[LS 106] 14:49:48

These knobs are more important for school A, and these knobs are more important for school B. So there's some comparative advantage of sort. But I think an assumption has to be that the school will fight for the college. I mean, the dean will fight for the college in the resources, right?

[LS 106] 14:50:04

Many of the arguments that you're probably thinking about yourself, and many of the arguments that are probably self-evident. I think that's sort of one high-level point. The second high-level point is that I think, uh, you know, when I look back now, um, I was department chair for 2019, it was seven years ago.

[LS 106] 14:50:21

Things look very different when you look back in time versus when you're in the middle of it. And so it's hard to say entirely. So you have to assume that your next dean will fight for the resources. You have to assume, well, you don't have first part you should assume that's the reasonable. The second thing is the way I think about things is that.

[LS 106] 14:50:38

Within the reality we live in, we should figure out what is the best way to use the resources.

[LS 106] 14:50:47

Right? And I think I've mentioned many times that I want to involve people. So consultation doesn't meet consensus. It just means that people are part of the process, and decision makers are better informed with the… with the information to make decisions.

[LS 106] 14:51:02

But having said that, if you look at a much — and I suspect Dean Lynch would probably agree when you look at over 8 years or over some long time horizon.

[LS 106] 14:51:14

Things down the road will look very differently if you look backwards than when they're happening now. So I guess my point is that you have to trust your next dean to work with you to fight for the most resources, but as well as to allocate resources in the most effective way.

[LS 106] 14:51:30

But in a longer game, I think you have to assume that the conditions will not always be the same for the next decade, right? And so you can think longer term in terms of how you might position the school, not just in the immediate period, but on the longer term.

[LS 106] 14:52:04

Hello, I'm Robert Junkerson, Chemical Engineering. I think you laid out a really nice vision for AI in the near

[LS 106] 14:52:14

term of thinking

[LS 106] 14:52:14

about two different approaches, but could you tell me what your personal.

[LS 106] 14:52:16

opinion is, or what do you think universities will look like in 10 years with 10 X AI every 6 months or 12 months? And what's the value proposition that students are actually going to get.

[LS 106] 14:52:27

from coming to the university? And what's kind of your vision? And then, how do we go from here to there? Like, is the university even going to be relevant anymore?

[LS 106] 14:52:36

Thank

[LS 106] 14:52:53

you very much for the question. The way I see it, I think I don't really have a… I mean, I don't have a crystal ball. I have one that's imaginary in my head, but I don't have a real crystal ball. But I think the most important thing is to be aware of what… I think it's…

[LS 106] 14:52:54

a very bad situation is to not be aware of all the rapid changes and be asleep at it, because profound changes will occur. The world will change five years from now in ways that if you are not in the middle of… if you're not fully aware of it, it just passes you by. So I think.

[LS 106] 14:53:10

having leadership that recognizes these rapid change is already, uh, should be a very significant thing. And I really do think the combinations of the four headwinds, including the AI, really creates the opportunity to reshape the leadership board.

[LS 106] 14:53:25

All right, in ranking, so to speak, right? And so I think people… I think organizations that embrace these challenges and see these changes as in reality, right? I think is important. Now, I don't have an answer to how things will change.

[LS 106] 14:53:44

10 years from now on education and all these things. One thing I will say is, on a research perspective, I would ask all faculty members to elevate their research ambition significantly, right? I think there's and I think we see that among our junior faculty.

[LS 106] 14:54:02

Their natural tendency is to work on the next thing after their dissertation, right? But staying within their field, I think there's an opportunity to be much more ambitious in terms of the research agenda. So I think one of the consequences is for people to elevate.

[LS 106] 14:54:18

their research ambition, and I think on the issue of graduate students, maybe graduate students can do much more than you would expect out of them before. But I think maybe the more important point for me.

[LS 106] 14:54:32

is to embrace all these changes and navigate at as we go forward rather than just saying, you know, the last thing you want to do is that, oh, man, these are big problems. Let's just surrender, right? That sort of thing, yeah.

[LS 106] 14:54:50

Yes. Philip Brisk, computer science.

[LS 106] 14:54:55

On the

[LS 106] 14:54:57

AI front.

[LS 106] 14:54:58

What do you think about the possible scenario? You come in as

[LS 106] 14:55:14

dean, we make large investments in AI, we, you know, have contracts with OpenAI or Anthropic and Google. Those contracts come up for renewal, and all of a sudden.

[LS 106] 14:55:15

Um, they're pulling the same game. We've seen them pull with Cloud in recent years, you know, it's gonna be orders of magnitude more expensive for the renewed contract, and we're probably going to get degraded model quality, because that's the only way they can actually turn a profit. So, um, how do you address that as Dean?

[LS 106] 14:55:36

So

[LS 106] 14:55:49

I want to repeat a point I made earlier, just to clarify. So when I talk about AI assisted engineering, I don't mean researching AI, although for CSE, that's very important. I mean how we can rethink the scientific discovery loop.

[LS 106] 14:55:51

With the support of new capabilities. To your point about making financial commitments, I think there…

[LS 106] 14:56:00

There are sort of two issues. One is that.

[LS 106] 14:56:05

Google has already made the pro version of Gemini, I think, available to all UCs right. So so there's already the $20 a month version for free. I don't know.

[LS 106] 14:56:18

why OpenAI or Claude or Anthropic may not be open to those conversations, because ultimately, they should worry about, you know, students being trained under certain AI models, right? Which is the reason why software companies give away free tools to universities, because they want them to be trained on that.

[LS 106] 14:56:35

There's a separate discussion about what OpenAI and Tropic are willing to do for free, right?

[LS 106] 14:56:42

I would be very reluctant. So, when I say that I worry about inequitable AI access, I don't think the way to solve it is to basically pay for everybody who couldn't afford it, because that doesn't work. First of all, you don't have the financial resources to do it.

[LS 106] 14:56:57

So I think a more fair question for you to ask is that it's fine for you to say that you want equitable access, but if you don't want to pay for it, where's the magic? And I think I don't know what the magic is, but I think, going back to what I said earlier, I think being aware of this.

[LS 106] 14:57:13

Inequity is an important recognition on his own. And I think OpenAI and Anthropic should be motivated to provide their models at least at the scale that Google has done with Gemini.

[LS 106] 14:57:30

Um, and, uh, quite personally, I think the $20 version is quite good, or, I mean, the free version that we get is already very good. So we'll have to see.

[LS 106] 14:57:42

Oh, I think we have time for one more question. We

[LS 106] 14:57:47

can do two more. I'm happy to stay. There's five minutes left. Okay.

[LS 106] 14:57:49

Oh, we have

[LS 106] 14:58:03

three more then. Hi, guys. I'll speak fast. My

[LS 106] 14:58:03

question was more towards kind of like culture, community. So if you were to come in and kind of, you know, take a look at, you know, in large colleges, you have a lot of different people, a lot of different teams.

[LS 106] 14:58:05

How would you kind of bring together, you know, departments or groups to make sure people are working, you know, together? Maybe even yeah, just working together better.

[LS 106] 14:58:16

I guess that's my question, and then that would kind of touch on, you know, the community, what do you kind of value in making a good culture out of

[LS 106] 14:58:39

college? So I'll leave that there. So I feel like the DNA of many universities, and I hope is the DNA here as well, I think faculty have a DNA that they naturally want to collaborate with other people in other departments.

[LS 106] 14:58:40

Right? Because people should care more about what are the research ideas, and if partner with another department is the right way. I think there's a natural DNA for wanting to collaborate with people outside the department. I think staff has this natural DNA that want to help.

[LS 106] 14:58:57

people, and I think department staff from different departments, there should be a natural inclination to work together, and so I think the role of the dean is is, you know.

[LS 106] 14:59:10

If I believe that this is the natural bias DNA, then I would look for where are sort of unnecessary friction right? And see if we can, you know, sort of remove those barriers or or make connection, whatever it is. But I I I I think I'm going to start with the.

[LS 106] 14:59:27

assumption that faculty want to work with other great faculty, regardless whether they're in the same department, and staff would love to work with other staff, especially if working with other staff, can.

[LS 106] 14:59:38

For example, can surface best practices that will be better for their own constituents. I think so I would look for ways to promote those kind of interactions to tap into these natural instincts already.

[LS 106] 14:59:54

All

[LS 106] 15:00:07

right. I think this will be our last

[LS 106] 15:00:07

question. I will take

[LS 106] 15:00:07

2 more. We have just

[LS 106] 15:00:07

3 min

[LS 106] 15:00:07

left. I'll talk fast. Venkatram from Mechanical Engineering. I was

[LS 106] 15:00:07

one of the founding chairs of the department.

[LS 106] 15:00:09

of the mechanical engineering department. I'm on

[LS 106] 15:00:24

my way out. So if I want

[LS 106] 15:00:24

to see the the college in good hands. So my question is, you said that we should maybe I'm paraphrasing something you said is to build upon our strengths. What do you see the college's strengths as?

[LS 106] 15:00:25

Because we are not going to reach national prominence if you don't build upon our strengths and create a niche for ourselves.

[LS 106] 15:00:32

Yeah.

[LS 106] 15:00:41

So I think I looked at all five departments, and I think all 5 departments have faculty that are.

[LS 106] 15:00:42

that an extraordinary number of citations, right? So I think in certain specialty areas, if I look outside us news ranking is a little bit of a strange ranking, because the engineering school ranking is entirely a function of it's 40% a function of research expenditure.

[LS 106] 15:00:57

And it's not a measure of individual faculty strength. But I think there are other rankings that rank certain areas within every one of the departments as strength. So I think the strength is there.

[LS 106] 15:01:14

Members of National Academy of Engineering. You have people with probably the highest citation records in their field, right? So I can name a few of those people. So I think they exist there. I don't want to say that I know the full landscape.

[LS 106] 15:01:30

But to your particular question, I see the… I see the strength in all departments.

[LS 106] 15:01:43

Hey, I'm It Ray Chaudhary. You mentioned about the computational research infrastructure, and that's important. What are your thoughts on

[LS 106] 15:01:51

how to build this up?

[LS 106] 15:01:52

Because resources are limited. You obviously cannot, and

[LS 106] 15:02:07

these are expensive. Yes. So I

[LS 106] 15:02:08

think there are several of them. I believe Ucl already has some campus-wide infrastructure initiatives that that are on on the horizon.

[LS 106] 15:02:08

I think there are several national platforms that are funded by the federal government that are accessible to UCR researchers. So the first thing is to make sure everybody's aware of all the infrastructures that they potentially have access to. That's sort of one issue. The other issue is, um.

[LS 106] 15:02:26

I think part of — so I want to be careful, because I think it's easier to say than than getting it done. But I think in a number of areas, the Foundation Labs frontier labs have motivation to collaborate with universities.

[LS 106] 15:02:44

So, uh, UC Senegal has a lot of in-kind contributions for free, and there are a lot of motivations for doing… for doing those in-kind contributions.

[LS 106] 15:02:54

Uh, and I don't know without actually engaging in specific negotiations. But Anthropic and OpenAI and Google, they have motivation. So if, as a hypothetical, and I'll actually give a very specific example, if the advanced manufacturing initiative.

[LS 106] 15:03:14

is an area where, um, uh…

[LS 106] 15:03:17

They can work with one of the frontier labs to instrument the advanced manufacturing to get a lot of data, right? And so I don't… it's not a hypothetical example. Our nanofabrication, we have a half million dollar grant specifically to instrument our nano 3 fab.

[LS 106] 15:03:31

to collect data so that can train AI models for one of the frontier. So so they're actually paying us to instrument things. So there could be a lot of research that may not seem obvious at first, but the frontier AI companies, especially in engineering, they have.

[LS 106] 15:03:49

Obviously, the entire world wide web and all the YouTube videos in the world and all the Instagram feed to do language-based model, right? So the training, the data is there. But for all of these other problems, the data sets don't exist.

[LS 106] 15:04:02

And I think all these frontier labs are in a race right now to see who can get the data.

[LS 106] 15:04:09

And universities is one natural partner in which the data could be collected in some controlled manner. So I don't mean to say that these things will all pan out, but I'm just thinking out loud that they're motivations for Frontier Labs to partner with universities on engineering research, because particularly.

[LS 106] 15:04:25

there's a mutual benefit to that partnership.

[LS 106] 15:04:31

All right. I know we're having a really good conversation. Apologies for cutting it off, but any final thoughts that you have, Dr. Lin, for this group?

[LS 106] 15:04:39

Thank you all for coming. I really appreciate the warmth and hospitality of everyone in the last couple of days, and I'm going to be… I'll stay around as long as you guys don't kick me out of the room, I'd be happy to talk with all of you. So thank you very much.

[LS 106] 15:04:54

Thank you so much, Dr. Lynn.

[LS 106] 15:04:58

And thank you everyone for attending. As a reminder, you can provide your feedback via the candidate feedback survey. Thanks, everyone.