

John Boccacino:

Hello and welcome back to the 'Cuse Conversations Podcast. I'm John Boccacino, Senior Internal

that they want to do. Because research and creative activities are essential to the university's mission. For a lot of us, I wear a hat as a faculty member here, I've been a faculty member in physics since 2007, and I love teaching. I taught Astronomy 101 for many years, taught large enrollment classes. And one of the things you said, the part of my job that I really love is where that research meets the teaching and my ability to do cutting-edge research in the department and then walk downstairs into a lecture theater and tell our students about it and have them involved.

And then through programs like Source, our undergraduate research program, get them engaged in the research activities. So there's a lot that goes on within the Office of Research to make that happen, from very dedicated staff in the Office of Research who help faculty match their ideas to funding opportunities, right? Help faculty pursue the things they want to do, all the way through the nuts and bolts of compliance, a lot of government regulations. We get a lot of government funding. That comes with all kinds of compliance regulations and just to make it as seamless as possible for the university community to pursue those research and creative activities.

John Boccacino:

What made you ready? What made you want to take that leap from being a faculty member and a key researcher to heading up this department as the vice president?

Duncan Brown:

So my research career has been building things. I started in what is now called gravitational wave astronomy, but in those days was just called gravitational wave physics back in '99. And I came to the US, I did my undergraduate degree in England and moved to the US to do my PhD. And what lured me over here was the opportunity to get on the ground floor of a project called LIGO, the Laser Interferometer Gravitational-Wave Observatory. And when I started in LIGO, the concrete had been poured, the steel had

students and people. So in the VPR role, I can give back to the university community and help facilitate that for other faculty and students at Syracuse."

John Boccacino:

I love the analogy of you as a builder, both based on your research and now again in this new role here as VP for Research because as a builder, you have to go through and be a collaborator, you've got to be a planner, you've got to be a communicator, and you've got to bring on all these different factions. But when you took over this job and going through to now, what would you say has been your main vision for the research enterprise here at Syracuse University?

Duncan Brown:

I think the main vision is really to empower and amplify and tell the stories of the amazing research that's happening here and the amazing creative activities that our faculty are pursuing. Faculty really want to do research and creative activities, so they want to engage our students and our students want to be part of this. This is

don't you work together and maybe pursue a bigger project than you could pursue alone?" Or maybe this is an idea that's going to influence your research directions or maybe it's an idea of getting students from another college involved in this activity. And so that's one of the things I've focused a lot over the last year is building up this research development team to bring faculty together and de-silo the ideas.

John Boccacino:

Backing it up a little bit for the research

And so people maybe from the outside look at the university's research and creative enterprise and say, "Well, there are lab scientists over here, there are mathematicians over here, there are creative writing people over here, there are education focused people over here." But our similarities are greater than our differences at Syracuse. And one of the really exciting parts of being in that research and creative working group was to look at the whole university and look at these common threads of the things that bring us together and the areas of distinctive excellence in research and creative activities that bring us together and that together we can be world-class in these areas.

And so the opportunity to do that, to get to know the faculty, to get the input from the university community, to get input from students, get inputs from staff who critically support the entire research enterprise, to synthesize that together into these areas was a great opportunity to get to know that entire space, which sometimes you don't always see day to day as a faculty member or a student looking at your piece of it. But it was a fantastic opportunity to look at that and great experience, a lot of work, but it was work that I think was well spent to build the strategic plan out and to see these areas that bring us together.

John Boccacino:

Anytime you can play a critical role in mapping out where a university is heading, I think it's so exciting, not just to pay attention to the past, our great accomplishments, but to be setting goal0 T 4Storoup entire spac[keep.]TTV

John Boccacino:

And with your history here, having been at Syracuse since 2007, I know we've always prided ourselves on the research, but it took a little bit to get to that R1 designation. What do you think pushed us over the top as far as the key components, the key strengths of our research that really impressed Carnegie and have maintained that status for years to come?

Duncan Brown:

I think it's the growth in our research productivity. We've had sustained growth in our research







Duncan Brown:

I think I've always been interested in research from an early age. I think I was kind of a science-y kid when I was younger and I was fortunate my parents encouraged that. And I think every toy that I had for my birthday was disassembled within about three weeks of receiving it. And my parents were very patient and supportive of the fact that the toy they had just purchased for me is now in pieces on my bedroom floor and probably isn't going to be put back together again.

And so I've always had a curiosity and a series of excellent teachers, both at the high school level and at the university level, who've always encouraged me to pursue my research dreams, to dream big. I mean I remember when I started graduate school, my PhD advisor said, "You could be the student who discovers gravitational waves." And then 16 years later when we did it, he turned around and said, "I never said you would still be a student when it happened." But I've been fortunate to have that kind of encouragement. I think that's something that I and my colleagues in the Office of Research and many other Syracuse faculty members like to instill in our own students as we help them find their path and their excitement for their research and creative activities.

John Boccacino:

In this role, you've walked the walk and you've talked the talk so people know that if they come to you or if you give some advice, you know what you're talking about. How would you describe your approach to your own research efforts? Did you have a philosophy? Did you have a style that you tried to embody when it came to tackling a project?

Duncan Brown:

One of the things that I have been adamant about in this position, so I have an administration position now and I'm not a regular faculty member to the extent that I pursue those types of day-to-day activities, but I've really tried to keep my research activities going. And so I have two postdoctoral researchers in the physics department who I work with on neutron star astrophysics, so the physics of a star when it dies, certain class of stars form neutron stars, which are a city-size atomic nuclei, that if you can understand the way these neutron stars behave, it tells us about the structure of matter, the nature of nuclear matter and the fundamental physics that governs the nature of matter. So I am keeping that research program going. And in fact, tomorrow I'll be in the physics department all day meeting with colleagues and students and postdocs to work on exactly that.

You asked

Duncan Brown:

I think mentoring is very important to life and the lives of student researchers because it can be kind of scary when you first begin your research and creative journey, that learning in class is very structured. There are reading assignments, there are homework problems, there are essays you write, so there's a lot of structure. But as you transition to research and creative activities, they become much less structured. And that lack of structure can be scary because like, well, what do I do? What if I don't have an idea? What if I don't know what to do next? And so really, the role of a mentor is to scaffold that transition between the very structured learning of high school or the early undergrad experience to an experience that can be a little bit unnerving because you don't know.

One of the things that people often struggle with in my discipline, maybe they can be very strong students, very good at solving problems, but then they'll present you with a piece of research, say,

