Cybersecurity Advisory Board Meeting Tuesday, March 15, 2023

Attended: Michael Kelly, Kevin Crawford, Molly Magee, Patrick Colantonio, Frank Tweedie, Rob Dail **Absent:** Mike Steinmetz

The meeting began at 11:03.

Mike said he had a new board member, Rob Dail, who will jump into the meeting via Zoom when he gets a chance. He explained that he has taken a lot of our interns in the past 4 semesters so he wants his insight on the interns to see if they are prepared or not and what we may need to change or improve.

He had everyone introduce themselves. He updated everyone that we got the Program of Study (POS) phase of our 5-year designation approved on March 2, which was really good news for us. Mike said we're good now until 2028. They have changed the way they work their cycles. In our 5-year cycle, they have changed the process. Frank got approved for JWU's program. Mike said congratulations and that Frank definitely knows that which makes our connection work even better, because we're doing very similar cycle times. The NSA did our original designation in 2018 and it was just one big block of stuff that we did. They split it now to POS and CAE. The POS and National Centers of Academic (CAE) separate a program study which is the more content-based curriculum-based piece, and that's approved. The CAE piece is more institutional commitment to campus, infrastructure, professional development, and community outreach.

A virtual cyber center is really what's coming next and needs evidence. Mike said the draft of the President's letter that our Marketing and Communications person is working on was just finalized today. The VPAA needs to approve first. The NSA/CAE wants us to commit that we will attend national events. The Cyber Symposium is one, and we will have representation on national committees. You have to commit that you're going to take somebody's time and dedicate it to the CAE communities. Our mentor was the same person I had for the original and he reminded me all the time that a one-man band isn't the way to fly. We have to get other people involved. Mike said he thinks our application will open in April. They do it by cycles of schools, and in the meeting with Insight yesterday, they kind of explained it a little bit. They don't have enough reviewers to go around, so they had second-to-school populations. The application will be due 10 weeks later. It's a pretty quick turnaround. He will begin gathering as much of this stuff ahead of time. He has already started to do some of that but it was a little different this year in the annual report. Typically, if you were in a designation like Frank or us, and a re-designation cycle, the annual report was waived for you. Well, this year they didn't waive the annual report in its totality. We still need to submit Section 5, which sounded like it

was going to be why they were doing this, but when Mike looked into it, it really stood for demographics and statistics. They want to be able to look at that type of CAE group data. Mike asked Frank what first-time mixed meant and he said they put zero because it is really community colleges. They had a problem with our APRs so we resubmitted. Mike said he is now on two CAE Committees. The COP Steering Committee started in January. They've only met once so far, but the good thing about that is, he will know some things early. For example, a school in an area with a regional hub works with its own schools. They're trying to get away from regional hubs because they don't want to tie to schools. They want to tie to this community. He is the regional contact for this area. Essentially, I'm not the only one, but CCRI's name is getting out there more and more, which I think is a really good thing. He is also on the Community Outreach Competition Award Committee, which is an annual thing that started last year. As a matter of fact, we have our final meeting on Friday. Out of 406 schools only 28 submitted. Mike said one of the best things was getting to read all the applications. He has a spreadsheet of ideas for some things that we didn't realize that we were already doing and counted as this area. They're going to give out 10 awards at the Symposium in Seattle in June. Very few community colleges submitted mostly four-year colleges, as you would expect, because they have the ability with their students to be together more. There are student clubs and groups, they're more ingrained, a little more mature, and they do a lot of different things with the community. He said what happened is a lot of folks who got certifications during COVID shut down the process and they didn't do a lot of applications for re-designation. It's going to become more and more difficult, but being on those 2 committees needs to be an opportunity to do a lot, and give us a little bit of a voice.

Mike said we will get the CAE done, and submission will probably be finally submitted in June. We will probably know by summer. Our first designations are posted on the web somewhere. We have been talking with marketing to publicize it to some degree. Mike told them maybe use some of the stuff that Johnson and Wales University (JWU) used when they were publicized after their designation. It was pretty good. We'll probably do something like that when we have the full vote, so that will be coming down the road.

Mike gave an update on our cyber range. The cyber range was dead after Newport lost power in the fall semester 2 or 3 different times and he was able to bring it off life support once. He brought it back a second time, and he thought it was okay, and the next day it was down again, and the server died. We finally got everything approved, so out of 2 of the servers, they're going to replace them with one. That's the more occurring base for what it's supposed to be. Now it's just a matter of us organizing and figuring schedules out for them to come in. More than likely it won't be until May or June, because we don't want to disturb classes that are in there. He said BiLight is willing to re-load all the software on the server. So, when it gets here it is really just making it more of a training session. He will let people know like last time and told Frank that his faculty can sit in also. Mike said they now have an LMS out there with software that's available. Mike told Frank, that might be a way for us to collaborate. It's a way for us to do some training for folks out there. We can share, what's appropriate then it can always the customized. CCRI's Workforce department is willing to agree to pay someone to be available for outsiders to utilize the range for training. We're going to try to move on the range as quickly as we can.

We have made a change to our program. It will not be in effect until the fall. The NSA did not like the programming language course as an either/or, so we eliminated the course. However, we are still going to encourage students to take it. We added an Ethical Hacking course which is going to take its place in the program. Mike said this program change is better for JWU too.

Mike said we are now a partner with EC-Council. We've got that working so we're going to have that ethical hacking in place. That's going to allow us and allow our students to be prepared to take the CE exam as well. He will put something together to lay it all out so we can promote it. We are changing our computer forensics. We already teach digital forensics here. Now, we will have their essential series, which is kind of the Freebie side or through a partner. Coventry High School is starting to do it already. The materials and stuff are pretty much free. So, we kind of get the best of both worlds because they allow some materials better than publishing website stuff would. Also, when you're working with an adjunct they don't have the turnaround time to build their own path. In the long term, he hopes EC-Council has their sequence more certificate-based, or for us to be the credit-related type of stuff that leads to a pen tester type of course.

Frank Tweedie said probably not conducive to us in a two-year program, but on the 4-year side, it might well be right to make sure we get the pieces in place. He will keep us up to date on what they're doing right now. Also, he will look at the agreement we have on the degree completion and will make sure that it stays stable. Kevin said the program change has been signed, but it hasn't been built yet. We are going to have to rework learning outcomes in the fall. What we also did is changed our sequencing, and recommended sequencing a little bit because of prerequisites. It is more to make sure when they're taking ethical hacking they are prepared for it. For the programming course, as long as they had our introduction to programming it didn't matter when they took it. We had to be actually a little more prescriptive which is for students, and actually, the former student prescriptive is easier. The other thing is, we are looking to create our own scripting class with CS Net using python. Mike said he was going to be asking Frank also to see what they are looking for. I'll talk to Vic to see what they're looking for that way the split is starting to become a little more dramatic with CS. We're going to create a course more in tune with what we need to do.

Mike said we need full-time faculty and adjuncts. He said that if Frank has any contacts to please share and we will do the same for him.

Mike announced our Cybersecurity Night coming up on April 18th at 6 pm in Warwick in Board Room 4090. There will be a guest speaker and other college departments to help students.

Mike said Rhode Island has its own limitations, and we're the only community college so we go to other colleges to visit every year. We went to see Westchester last year. Pre-COVID we went to Adirondack Community College. We were also down in Austin one year and southern Maine. Kevin and I went down to Capital Technology University. Also, the guy who is my mentor, Michael Burt, a retired Master Chief in the navy came with us. He was faculty at Prince George's Community College down in Maryland. He set up the site visit for Kevin and me with Capital Tech. Mike told Frank, they are somebody you might want to reach out to. They do some nice stuff. It is between Baltimore and DC. They want to articulate with us. They had a grant person come in and sit with us. We met the President, the senior Vice President, Dean, and three department chairs. They invited our students to watch a virtual open house on March 25 and if they end up applying, they are getting a \$5,000 scholarship. Their students gave us websites to give to our students. They have cyber Saturdays they are sharing with us to help practice with the cyber club too for competitions and stuff, and they would be happy to work with them as far as Zoom Meetings and working to compete. They do an awful lot of competitions. They've got resident students and they have more time on their hands and the ability to build their own range and they manage it. Mike said they were so accommodating.

Last June, Mike did a presentation at that CAE meeting, getting to know your CAEs. He talked about how we're kind of a unique animal, and our directions are going to multiple places, so it kind of attracted some folks with our cyber range. Wilmington, sent an email to me after they had gotten the initial from the guy that I spoke about. I saw that I was listed on the steering committee, so I guess there are schools that go out there and look for names of schools that are somewhere in their location that are involved to kind of reach out to.

Mike said we are finally getting the ball rolling on competitions. For the NCAA Cyber Games, we had 2 participants in the first run, he said he thinks they finished 14 out of 22. They also participated at U-Conn two weeks later and were 19 out of 100.

We're super fortunate that Joe Bransfield is an adjunct for us and his daughter is the poster child of our P-Tech program. He's working in NWC. He is a coach for our National Cyber League team. We're going to do their joint competition, and it's Friday to Sunday in April on this campus.

At the next club meeting, Mike is going to try to get potential graduates, or even if they have graduated, to take ethical hacking and then they can stay in the club for another semester.

Frank Tweedie said they have a meeting coming up with Norwich University and connected with their cyber center down there. I'd like to do this once we have our initial meeting. I'd like to know if you don't want to get involved in that discussion as we can extend that partnership.

Mike said we have a plan right now to reach out to 5 CAE communities. Next year, we are going to be doing those site visits. Also, we're looking to do a competition in-house with a sponsor, maybe a co-sponsoring competition in-house with our hack teams, or whatever we can get together on that. We are also looking at a couple of speakers. One gentleman's out of Ohio State and the Ohio State University, he owned infrastructure and develops their trust infrastructure so that we can have them come in. It might be a virtual meeting more like a Zoom Meeting, so we can get a lot of people on that. I'll keep you in mind on a lot of the things we're planning here, and you're aware that we want that big grant for our community outreach and training, and we talked about possibly getting connected there too. ie: The State police and the local secondary school teachers and the awareness training, and one other thing is that we did file for a DOD Cyber Security scholarship program. They can get their last 2 years of education, plus their classes paid for by the Department of Defense. All they have to give back is equal time. That's just free education, and then a job, and it is basically kind of tagging that onto what you guys already do with the discount and the GPA. All that is in our agreement is to say, look, apply for this. The worst thing that can happen is you don't get it.

Kevin said that at last Saturday's open house one of the things he said to a lot of students and their parents about getting our degree and then go to Johnson & Wales with a scholarship after. He told them this is a great opportunity and that if they do well, depending on their GPA, will determine the amount of the scholarship. He told them to get the RI promise for free and then maybe take advantage of JWU's scholarship.

Mike said he is looking into a Workforce grant. He said maybe he can set up some time with Frank because he just did a grant and is working on updating the KWF platform. Mike said our new workforce director, Jenny Johnson with be there on Cyber Night, and maybe after he can introduce her to Frank to figure out if there is some money there. Frank Tweedie said it's available and partnering with us may be a better leverage point. They just can't get enough folks in the pipeline. I mean, that's all I hear at these meetings over and over and over again.

Mike said before we started, Molly and I were having a conversation that even for an internship and those kinds of things they just look for technical ability and to find out if they can be a good employee. They figured out they could train the rest of them. Those are things that we expanded what we allow essentially for our capstone, for our hours outside of the classroom, our internship piece, as long as the courses are within the cyber program and the job, or the internship is related to that. I've got a bunch of people doing more desktop stuff with the cyber influence.

Frank said the final thing is part of that grant and we're updating our infrastructure and building an AWS platform, a cloud platform. We may have the opportunity where can share that platform with you, to do some collaborative learning together between our students and your students. Mike thanked Frank for that and said our partnership makes a big difference. Molly said that they do have an internship program, so we get internships in and push them out if you've got a kid that you've placed with the state at least tell the state person to give us a call because we can put them in the program and pay the \$1,500 statement. She also said to Frank the same, if you've got students being placed in internships at least let the companies know that we potentially can offset some of that cost which we're more than happy to do. One other thing she said that we were talking about at the beginning is what I'm hearing from some of my small businesses they really want to see somebody that has IT and not just cyber. A lot of the students do have that, so it needs to be put in their resume. The right way on cyber is extremely important, but they all need to come with a solid background. Mike said he read they could use weekly journal entries in their portfolio and when he read them, students say they learned an awful lot and it was a great experience.

Mike said to Patrick, you probably suffer from the same thing and everybody wants to be a pentester. He said they want to be on the red team when mostly there are blue teams and some red teams, and we need administrative support around it. They want to do the sexy, you know, war games and all that stuff. The cyber challenges and the stuff that you're doing, just making sure, because there's been a lot of stuff that's been coming out of the White House in terms of executive orders and the Nations Security Executive Order last year and then subsequent, the enhancing the security of the software supply chain. That was a massive one that came out in response to the solo winds and other types of things. They need an understanding of the software element of things, but also you talk about the administration and setting up and maintenance of an environment. You can't hack it unless you know what's, what's there, or how it works. Mike said they did come out with the National Security Strategy for some of the key folks in the NSA. We get multiple emails a day, because once you become one of these CAE schools, you have to make sure that your core competencies match up and that's also on the CAE portion of the application. There's professional development and community. The good thing is EC-Council does work for us. Frank said his program is computer science first, cyber, second. Mike said we built ours initially with the best of what we had, Cisco networking and our CS, we made Linux the general operating system and now we're adding ethical hacking. However, it takes 12 to 18 months for things to get approved and begin. He offered courses on the workforce side so there's opportunity. We've done it in software development and data analytics, so that we can offer things on the workforce side quicker. He is looking at creating a couple more certificates too. We do have the cyber defense certificate and that's what we will hand out on the 18th.

Molly said one other quick thing, and we'll send it to both of you, is they established a Cyber Security Scholarship. We named it after Congressman Langevin and did the first one last year. It's \$1,500. You have to be in your second or third year.

Mike said, if you know of anyone looking to be an adjunct, please share with him and Frank.

Rob introduced himself and said they had some issues going on there with the network. Molly said if he needs help with offsetting the costs of internships they could help up to \$1,500. If they enroll in her program she can offset the cost that Rob is paying. It is \$1,500 for the first 80 hours of their internship. She said if he is interested to follow up with Mike and he can give you my contact information, and we can set up a call or email, she can let you know more about that. Mike said Rob has been fantastic with taking some of our interns and that has been really productive for them, and part of the conversation we had leading up to this kind of plays right into what you're doing with them and that cyber companies want to see people who have IT experience first. Mike said that's really why I wanted you to kind of listen in because it's more and more the skill set that they're getting from you, and just exposure to things that people are looking for prior to getting into the cyber field. It lines up pretty well.

Mike asked Rob if we are preparing them and he said it's really a hit or miss, and a lot of it is dependent upon whether someone grew up with computers or not. He said we have some people that have a knack for taking computers apart and putting them back together, building them, or just constantly working with computers. And then there are other people that might know what a keyboard and mouse are, but they don't know much else. So, we get a little bit of everything. If they're going through the cyber security program, I don't know how much desktop support training or courses, but sometimes it seems like it's not that much, but it was part of desktop support training.

Mike said in our cyber program unless they've done that on the way in, it's probably been through the Cisco networking program on that side, and then on the CS and then right into like a programming logic. There's a little gap in there, but that's kind of what we're looking for because we might be able to make some more of that in to make sure they're ready to do it. Kevin said when we were at Capital Tech, they had a section for students to help other students build their computers and stuff, so that might be something that we could do. Even though you're in cyber, you know something that you might want to do, it's really valuable. Thank you, because those are that are chasing the cyber bucket, and they don't have the raw skills underneath, and that's what you look forward to. So that's perfect. We can start to make sure they're a little better for that. Rob said in the State of Rhode Island, he has a technician that we've had here for many years, and he also went to school for cyber security. He's basically a technician now, a desktop support technician, but he wants to move in into a security field, but there is little opportunity to jump into a field like that, even though it's up and coming, and I'm sure a lot of companies are going to need employees with cyber security training. It's just there are limited openings for somebody that's coming out of college and they might need to go into another field temporarily until they get a job with cyber security. Desktop support, or even maybe a little programming or application support. That would be helpful. Mike said that's perfect because we have some certificate programs that are feeders to our side. Where they do that I think the more we hear that from folks like you. It helps us kind of guide students who

don't know where they really want to start and be kind of marketable. Also, the problem with our security jobs, especially in clearances and certifications, is a huge piece, plus certain background checks and those kinds of things. What you're doing is just an opportunity for them to kind of bridge that gap and you get to kick the tires and the portfolios that they send me in the feedback you give me at the end of the semester, you know you teach them what it's like to work in this environment every day to so they're ready to go. So, it works really well. I think it's just us putting the pieces together a little better.

Mike told everyone he appreciates their time and wanted to be pretty close to the hour timeframe. He said we will have minutes, so we'll send them out to you if you have an interest, because I know you mentioned you were really busy, not for publication, just for you. If you want to watch the recording, we can certainly do that for you if you think it's of any interest, just let me know. Rob said his role for the State is going to be changing within the next month. My role will probably be more of a technician as opposed to now as the tech support manager. They are supposed to be getting somebody else in this role in the next month, so I will still be in contact with Mike, but I might not be the person responsible for getting interns.

The meeting adjourned at 12:03 pm.