**NICE Working Group**

**Meeting Minutes**

**Date: 5/23/2018 Time: 3:30 PM EST**

**Click here to** [view](https://www.nist.gov/itl/applied-cybersecurity/nice) **the NICE Website**

**SharePoint:** [https://nistgov.sharepoint.com/sites/NICEProgram/NICEWG](https://nistgov.sharepoint.com/sites/NICEProgram/NICEWG/Pages/home.aspx)

# Introduction and Ground Rules

* Danielle Santos, NICE Program Manager, welcomed members to the meeting. The NICE Working Group is setup to provide a mechanism for collaboration between academia, government and industry and to discuss strategies and actions to aid in workforce development.
* During this meeting the Adobe Connect chat box feature should be utilized to provide feedback and ask questions.
* Danielle noted that participation in the NICE Working Group (NICEWG) is not intended for advertising and promotional purposes and to keep this in mind when participating and using the chat feature. She urged all participants to collaborate and share information while working on projects.

# NICE Program Office Updates

* Rodney Petersen, NICE Program Director, presented the program office updates. He noted the summer season is beginning, and in honor of this Memorial Day, thanked any service members and veterans on the call.
* There are many conferences coming up:
	+ [National Cyber Summit](https://www.nationalcybersummit.com/) in Huntsville, AL, June 5-7, 2018.
	+ [CISSE Colloquium](https://cisse.info/) in New Orleans, LA, June 11-12, 2018.
	+ [3CS](https://www.my3cs.org/) in Gresham, OR, August 2-4, 2018.
	+ [NICE Conference and Expo](https://niceconference.org/) in Miami, FL, Nov.6-7, 2018. Call for proposals are open now with a submission deadline of July 1, 2018.
	+ [NICE K12 Conference](https://www.k12cybersecurityconference.org/) in San Antonio, TX, Dec. 3-4, 2018. Call for proposals are open now with a submission deadline of June 15, 2018.
* The NICE monthly webinar series continues. Next month the group will cover the Operational Technology (OT) portion of cybersecurity. Find out more [here](https://www.nist.gov/news-events/events/2018/06/nice-webinar-cybersecurity-education-and-training-operational-technology).
* The newest one pager has been published. [Cybersecurity Career and Technical Education Programs](https://www.nist.gov/sites/default/files/documents/2018/05/16/nice_cte_onepage_5.16.18.pdf) is the topic.

# Opening Remarks

* Academic Co-chair and President Kathi Hiyane-Brown noted the academic year is ending, graduations are approaching, and new graduates are hoping to have jobs as they transition out of school to begin a new phase. There is a continuous challenge in wanting to expand academic programs but there are not enough instructors. Thanks to those that are filling this role. President Kathi believes that because everyone is looking for these individual skills, and academia can’t compete with higher salaries, persons in business and industry are more plentiful. There are now partnerships between business and industry and academia that allow teaching capabilities that may not otherwise be possible.
* Industry Co-chair Jason Hite invited the membership to reach out to him at any time on LinkedIn, through email, etc. He is looking forward to the NICE conference and discussions on how human resources can be a better partner in the cybersecurity field. Jason Hite (@jhitehr) | Twitter.

# Standing Items

## **Report Roundup**

Jose Velasquez, from the Office of Apprenticeships at the Department of Labor, presented on the [Taskforce on Apprenticeship Expansion](https://www.dol.gov/apprenticeship/task-force.htm).

1. The task force originated with the Executive Order "Expanding Apprenticeships in America", signed in July 2017.
2. The executive order is intended to promote apprenticeship as a means to provide a pathway to jobs in all industries.
3. The task force worked to develop new industry-recognized apprenticeship programs.
4. It completed its work and submitted a report to the president in May 2018. The final report to the president is available [here](https://www.dol.gov/apprenticeship/docs/task-force-apprenticeship-expansion-report.pdf).

## **Metric Moment**

## Sarah Flores, from the National Science Foundation (NSF) [Scholarship for Service](https://www.sfs.opm.gov/) (SFS) program presented on Scholarship for Service metrics.

1. The NSF SFS is run jointly with the Department of Homeland Security (DHS) and the Office of Personnel Management (OPM).
2. The goal is to increase the number of cybersecurity professionals in government.
3. They provide tuition and stipend coverage, and in turn students agree to work in government for a period of time equal to their scholarship. Monitoring and systems are in place to analyze the outcomes of the program. They do follow up with student’s post-graduation.
4. Since 2001, 3,300 scholarships have been awarded. The program has a 94% job placement rate. To date, students have been placed in 140 government agencies and national labs.
5. There are 70 participating universities and multiple hiring agencies.
6. This year's job fair held in January 2018, had 2,200 students attending along with many agencies. There were 74 booths representing individual hiring entities. Some attendees received on the spot offers.
7. They also conduct focus groups with students. Seventy percent of graduates continue employment with the government beyond the required service period.
8. Internships also help students find employment while learning, and help interns to discover their individual fit with working in the government.
9. Scholarships are available to schools with strong cybersecurity programs. The CAE designation is one way to establish a "strong" program, but there are other ways to demonstrate excellence.
10. See attached presentation and find out more [here](https://www.sfs.opm.gov/).

# Subgroup Updates

## **Apprenticeship**

## Marian Merritt, Lead for Industry Engagement, provided the update.

## The first meeting was held last month and was very successful. The next meeting is this Friday, May 25th. It's never too late to join the subgroup.

## Some of the initial work this subgroup will discuss includes focusing on the apprenticeship charter, the president's expansion on apprenticeships and the website.

## Those who are interested in joining should send an email to nicewg.app@nist.gov, or find instructions on the [website](https://www.nist.gov/itl/applied-cybersecurity/nice/apprenticeship-sub-working-group) and email Marian.

## **Collegiate**

## Rodney Petersen, NICE Director, provided the update.

## The next subgroup meeting is on June 12th at 2:30 p.m., ET. New members are welcome. Please email Stephen Miller if interested.

## The focus will be on National Cybersecurity Awareness Week (NCCAW) and what is being done at the collegiate level. They will look at career pathways. The program office will have the new student researchers look at how we guide and direct students into these programs. We hope to discuss the topic on teacher shortages. Particularly at the collegiate level, there might be institutional policies or barriers keeping otherwise qualified people from teaching.

1. Visit the Collegiate website [here](https://www.nist.gov/itl/applied-cybersecurity/nice/about/working-group/collegiate-sub-working-group).

## **Competitions**

Laurin Buchanan, Secure Decisions, provided the update.

1. There was a presentation at the subgroup meeting last month on [Cyberquest](https://uscc.cyberquests.org/). This year's topic is cryptography. The top 100 finishers are invited to the U.S. Cyber Challenge camp to continue learning and working in cybersecurity. This year over a thousand people have registered for CyberQuest.
2. Competitions members are working on defining deliverable dates particularly for the how-to guides. They encourage middle and high school students as well as those in the workforce to participate in competitions.
3. They are looking for new approaches to competitions as a topic of discussion at the NICE conference.
4. The next meeting is May 24th, 2018. Membership is always open for new members. Visit the Competitions website [here](https://www.nist.gov/itl/applied-cybersecurity/nice/about/working-group/competitions-sub-working-group).

## **K-12**

## Davina Pruitt-Mentle, NICE Academic liaison, provided the update.

## There was a presentation from David Hernandez about workshops and engagements covering all components of computers, networking, and cybersecurity held in his community.

## Members are aligning standards between the NICE Framework and CSTA. There is discussion on how to convert the information to a one pager series.

## There was an overview of a one pager with CTE examples, and discussion on other potential one pagers.

## They briefed on the NICE K12 conference and NCCAW coming in November.

## Visit the K12 website [here](https://www.nist.gov/itl/applied-cybersecurity/nice/about/working-group/k-12-sub-working-group).

## **Training and Certifications**

## Linda Montgomery, Cyber World Institute, provided the update.

## Linda participated on a call with OPM Employee Services, along with Bill Newhouse, on the Training and Certification Subgroup mapping matrix and methodology. A report on career path and adoption of the Framework was published by OPM in Feb 2018. The group is working through the recommendations.

## Dialog will continue while working on the next version of the matrix.

## During the next meeting, Linda plans to share the OPM report and technical summary on career paths and the adoption of the NICE framework and go through their recommendations. OPM also shared their working document on career path and proficiency. New opportunities for collaborations may come up.

## The Cyber Range Project Team had its second meeting. They are discussing the development of a taxonomy for ranges. The group meets the second Tuesday of every month at 4 p.m. Eastern Time.

## Anyone interested in joining this subgroup can email Linda or NICE Associates.

## Visit the Training and Certifications website [here](https://www.nist.gov/itl/applied-cybersecurity/nice/about/working-group/training-and-certifications-sub-working-group).

## **Workforce Management**

## Susie Cone, IT Consultant, provided the update.

## The most recent meeting was last week with ten new members joining for the first time. Additional members are always welcome. The website has details on how to join.

## The current draft of the cyber secure workforce guidebook is ready for public review pending design completion and some editorial updates. The document is now at the final review period prior to publication.

## The document is color coded and sections can be torn out and used as tear sheets. They will be discussing the roll out with Marian Merritt and other from the program office.

## Many great suggestions on roll-out were received including associations that members have an in with for potential outreach, and suggestions about contests or other ways to engage external reviewers to get quick and effective feedback.

## The group started discussions on new projects such as a "guidebook lite", and foreign language versions. The next meeting is June 21 at 1 p.m. Eastern Time.

## The current draft of the guidebook is located on the SharePoint site [here](https://nistgov.sharepoint.com/%3Aw%3A/r/sites/NICEProgram/NICEWG/WorkforceManagement/_layouts/15/Doc.aspx?sourcedoc=%7B45B8AD43-00A2-4C42-870D-0BC6CCEDB0B0%7D&file=Cyber-SecureWorkforce_Master_05.17.2018.docx&action=default&mobileredirect=true).

## Visit the Workforce Management website [here](https://www.nist.gov/itl/applied-cybersecurity/nice/about/working-group/workforce-management-sub-working-group).

# Project Progress Reports

## **NICE K-12 Cybersecurity Education Conference**

## Davina Pruitt-Mentle, NICE Academic liaison. provided the update.

1. Davina reminded everyone the call for proposals for the conference is out and closes June 15.
2. There are five areas where proposals are sought:
	* + Increase Cybersecurity Career Awareness
		+ Infuse Cybersecurity Across the Educational Portfolio
		+ Integrate Innovative Cybersecurity Educational Approaches
		+ Design Cybersecurity Academic & Career Pathways
		+ Promote Cyber Awareness
3. They are seeking interactive presentations and audience engagement.
4. The next planning call is May 24 at 2:30 for those who may be interested.
5. Find out more [here](https://www.k12cybersecurityconference.org/).

## **NICE Annual Conference**

Randy Pestana, Florida International University, provided the update.

1. The call for proposals went out last week from Florida International University (FIU). Proposals are due July 1.
2. There are four tracks that incorporate ideas on innovation, diversity, and inter disciplinary studies. They include:
	* + Growing the Cybersecurity Workforce
		+ Expanding the Workforce Through Diversity and Inclusion
		+ Interdisciplinary and Cross-Domain Education and Training
		+ Talent Management and Workforce Development

### The conference is November 6-7 in Miami, FL. Find out more [here](https://niceconference.org/).

1. Please email thoughts and ideas to Randy.

## **NICE Challenge Project**

James Ashley, California State University, San Bernardino, provided the update.

1. Upcoming developments include upgrading and updating the web portal this the summer. The plan is to redesign the curators interface, update the challenge submissions process, and allow curators to see feedback directly in the portal to make it more interactive.
2. Find out more [here](https://nice-challenge.com/).

# New Business

* Topic: Camps Across the U.S.

Rob Honomichl, Dakota State University, presented on GenCyber.

1. Rob stated that GenCyber has about 149 camps, and Dakota State will host three this summer. One camp is for teachers to focus on 6-12 STEM related activities. Another camp will host 300 high school students and the third will host 120 middle school girls.
2. Rob, a former K12 teacher, states the camps allow people to notice what should be taught or what should be added. They do not have to provide stipends for teachers. There are a lot that are looking for professional development so they haven’t had to go out to recruit. Dakota State can offer three graduate credits.
3. When asked if these camps are virtually available, Rob replied they are not although it’s possible there are a few virtual student camps.
4. See attached presentation and find out more [here](https://www.gen-cyber.com/).

Carol Driggs, presented on Air Force Association (AFA) CyberPatriot.

1. AFA, in Colorado, sponsor day camps for 6th – 12th grade students. Camps are hosted in schools and end in a competition.
2. There is an introductory and advanced camp and for the first time this year.
3. In Aurora, the 6-12 grade camp goes a full day and includes speakers. Topics include STEM concepts.
4. They partner with universities and local schools to provide locations, labs, and instructors to make the camps successful.
5. There is a registration fee which goes towards equipment.
6. Teacher training will be offered in late July.
7. Randy mentioned the Northern CO camps can draw in heavily diverse areas and allows access to kids who may not normally have the availability to these camps. One of the best parts is the connection with CyberPatriot and competitions. Classes in schools and camps are very representative of the community. They also work with Project Lead the Way.
8. See attached presentation and find out more [here](https://www.uscyberpatriot.org/).

Susan Conrad presented on the FBI Infragard Camps.

1. Infragard is an organization and outreach program for the FBI. Infragaurd understands the need to promote careers in cybersecurity.
2. This is their third-year hosting camps which have evolved over the last three years. Camps include field trips to Cyber Command in the DC area.
3. Recruitment is done nationwide through high schools. They use a lab donated from Mantech. At the end of camp, there is a basic test to build infrastructure and defend attackers coming through that area.
4. Students who complete in camps go into internships to help other camps.
5. See attached presentation and find out more [here](http://www.infragardncr.org/cybercamp).

Member questions:

1. Members asked about outreach to those in rural areas and those underserved. Infraguard reached out to its members to advocate for those in need. They make use of the membership audience for suggestions who go out and ask people to join a camp.
2. Randy has worked with the Boys and Girls clubs and has reached out to the rural plains.
3. Rob stated they reach out to all the schools and have students fly in. They supply food, transportation and do outreach to girls and the Indian population. This is a first come first serve camp where attendees may not be the best students in their school.
4. When asked how students become aware of these camps, the presenters stated they reach out to high school teachers to share the information. Schools are excited to partner. It’s easy to get out to speak to the computer teachers in the classrooms. They also reach out through social media and through the parents.

# Strategy Stories

* Owen Pierce presented on AustCyber. This project aligns with the [NICE Strategic Plan](https://www.nist.gov/itl/applied-cybersecurity/nice/about/strategic-plan) objective 3.5: Collaborate internationally to share best practices in cybersecurity career development and workforce planning.
1. Owen is the Program Manager for the National AustCyber Program. During 2016 the Federal government issued a first-time cybersecurity strategy describing how Australia will take on the cybersecurity growth challenge. AustCyber is a federally funded not-for-profit company responsible for growing a skilled cybersecurity workforce.
2. This initiative is investing in people and the education system.
3. Over last 12-18 months they’ve been working to stimulate the education sector to respond to cybersecurity workforce challenges. Challenges include shortages in skills, teachers, trainers, and a misalignment of what skills and competencies are required for training.
4. There is a current focus on K-12, funding the apprenticeship pipeline, and a digital technology curriculum rolled out.
5. A missing initiative is the scaffolding needed such as the [NICE Cybersecurity Workforce Framework](https://www.nist.gov/itl/applied-cybersecurity/nice/resources/nice-cybersecurity-workforce-framework). Owen is enthused by the amount of different initiatives glued together by the NICE framework. AustCyber is looking at how to adopt the NICE framework; they do not want to reinvent the wheel and wish to use best practices. There is a big opportunity to start thinking about developing the cybersecurity workforce in a systematic way.
6. Owen was asked if AustCyber uses competitions to train their workforce? They are in the process of building challenges utilizing the CyberPatriot model. This is also in response to employer demand who want to have the means of differentiating those who have the skills and those who do not.
7. Find out more [here](https://www.austcyber.com/).

# Summary of Action Items

The NICE Associates will send the minutes and presentations to all members.

# Next Meeting Reminder

The next working group meeting is June 27th, 2018.