

## NPS, Research Showcased in Our Nation's Capital

By MC2 Kellie Arakawa

Students and faculty from the Naval Postgraduate School (NPS) showcased their unique research projects at a two-day event held in the Washington, D.C. area, Sept. 9-10.

Coinciding with the school's fall Board of Advisors meeting, the event served as a platform for NPS students, faculty and leaders to interact with representatives from the Office of Naval Research (ONR) and senior leadership from the Pentagon, intelligence community, Department of Homeland Security, and the White House.

Research projects and academic programs highlighted during the two-day event covered every corner of campus, ensuring all four schools were well represented. Senior officials across the D.C. landscape were introduced to everything from railguns to CubeSats, from arctic ice modeling to improvements in defense acquisition. According to NPS Provost Dr. Leonard Ferrari, the university was indeed well represented.

"Our students and faculty are some of the most talented researchers this country has to offer," said Ferrari. "And we want to ensure that leaders from the Department of Defense and other government agencies and institutions gain a better understanding of their extraordinary work, which is directly advancing the security and freedom of our country,



*Vice Chief of Naval Operations Admiral Jonathan Greenert with President Dan Oliver during the NPS Centennial Showcase reception at the Army Navy Country Club in Arlington, Va. on Thursday, September 10.*

our international allies, and friends from around the globe."

NPS President Dan Oliver said the showcase was designed to not only highlight the education and research programs at NPS, but to help defense leaders forge new partnerships with the school.

During the opening event on Sept.

9, NPS students and faculty presented several current projects at ONR headquarters.

Dr. Karl van Bibber, the NPS Dean of Research, said he was very pleased with the depth of engagement between the attendees and students. "Our students are really impressive; their operational expe-

rience is most often the inspiration for their thesis research here at the Naval Postgraduate School, and I think the attendees took away how vertically integrated NPS research is," he said. "It's the whole chain of innovation from basic and applied science through technology, prototyping and field experimentation."

On Sept. 10, the Chief of Naval Operations (CNO) Adm. Gary Roughead hosted the Centennial Showcase reception at the Army Navy Country Club in honor of the school's 100th year of academic excellence.

Vice CNO Adm. Jonathan Greenert spoke to attendees and lauded the quality education NPS provides, saying, "the best that I've worked with [in financial management] are graduates of this institution."

Greenert also emphasized the need for DoD to grow more "cyber warriors," and called NPS the Navy's "greatest resource" for developing the country's future cyber leaders.

"NPS is playing a leading role worldwide in establishing joint education training programs, research partnerships and international forums that bring leading experts and complex problem-solvers together to discuss and develop solutions to the most pressing and urgent global challenges," Oliver stated.

"In this era of the 21st Century Cooperative Maritime Strategy, I believe that the closer you look, the more you will realize that NPS is an extremely effective institution of soft power and support of this strategy," he continued.

For more information about NPS research programs visit [www.nps.edu/Research](http://www.nps.edu/Research).

## Marine General Congratulates Summer Grads

By Barbara Honegger

Commanding General of the 3rd Marine Aircraft Wing Maj. Gen. Thomas Conant encouraged 255 Naval Postgraduate School graduates to use their intellectual capital to the fullest as their careers continue during Summer Quarter commencement ceremonies held Sept. 25.

"I'm honored to be here on behalf of [Marine Corps Commandant] General Conway [who succeeded NPS Hall of Fame alumnus Michael Hagee]," said Conant, himself a graduate of the Aviation Safety School, then located at NPS. "Not only does the future reside in education, but the highest and best use of the present resides in education as well."

Conant called upon the graduates to "rise to the moral imperative to continue to find new and innovative ways to provide the resources needed by our fighting forces engaged in combat. Who among you will find the solution to lighten the load of our infantrymen, so they will no longer

have to rely on the standard, heavy battery pack? Who among you will find a counter to the IEDs [improvised explosive devices] that threaten their life and limb? Finding solutions to such simple but challenging questions is and remains all of our responsibility.

"May we continue to be blessed with the intellectual capital that you represent as you walk across the stage today," Conant concluded.

The Summer 2009 graduating class included 147 officers from the Navy, 29 from the Marine Corps, one from the Marine Corps Reserve, 38 from the Air Force, six from the Army, two from the Coast Guard, and 22 from allied and coalition partner nations, as well as 93 Department of Defense civilians. In total, 345 degrees were conferred, including eight Doctorates, 211 Masters of Science, 58 Masters of Arts, 65 Executive Masters of Business Administration, one Master of Business Administration, one Electrical Engineer, one Mechanical Engineer, and eight dual degrees. Eighty two students – a growing number in distance learning programs – received their degrees in absentia.

Following the ceremony, graduates and their family members gathered in the Barbara McNitt Ballroom for the traditional cutting of the class cake. Joining President Dan Oliver, Provost Leonard Ferrari and Conant for the honors was the recipient of four awards for highest academic achievement and excellence in engineering, Lt. Cmdr. Jon Letourneau. Congratulations to all of our recent graduates.

*Lt. Cmdr. Jon Letourneau (second from left), a rare recipient of four class awards for highest academic achievement, cuts the ceremonial cake at a reception in the Barbara McNitt Ballroom following graduation ceremonies. He was joined, left to right, by Provost Leonard Ferrari, keynote speaker Marine Corps Maj. Gen. Thomas Conant and President Dan Oliver.*



## IN BRIEF

- ♦ From the Dean of Students Office, Cmdr. Kevin Sudbeck has reported as the new Deputy Dean of Students, replacing Cmdr. Bob Chambers who retired earlier this summer. Cmdr. Mary Sims has reported as the new Director of Programs, replacing Cmdr. Mary Blankenship who is detaching upon a GSA assignment to Iraq. Ms. Rachel Davis has replaced Ms. Lina Ventura as the Student Services Assistant for the Student Services Office.
- ♦ The Monterey Bay Regional Navy Ball is scheduled for October 17, 2009. This year the ball is a cooperative event between the Naval Postgraduate School Associate Student Council and the Center for Information Dominance Detachment located at the Presidio of Monterey. The guest speaker will be Rear Admiral Edward Masso. For more information, contact Lt. Brad Thompson at [bgthomps@nps.edu](mailto:bgthomps@nps.edu).
- ♦ NSD Monterey Public Works hosted a town hall meeting for all base occupants to discuss the various construction projects scheduled throughout the next year, some of which include the Root/Spanagel Special Project, the Rooftop Photovoltaic projects (Halligan, Knox, Watkins), the Ingersoll Classroom Addition project, and the Quad Pathways/Spruance Plaza project. The meeting allowed participants to hear about the scope and schedule for the projects, and to discuss the projects' potential impacts and challenges. For further information, please contact the Director of Public Works, Lt. Cmdr. Matthew McCann at Ext. 3653.
- ♦ National Hispanic Heritage Month is observed from September 15 through October 15, and celebrates the culture and traditions of those who trace their roots to Spain, Mexico and the Spanish-speaking nations of Central and South America and the Caribbean. The theme for 2009 is "Embracing the Fierce Urgency of Now." For more information, click on Events at <http://www.donhq.navy.mil/aausn/Main.aspx>.



## Message From Dr. Christine M. Cermak Vice President for Information Resources/CIO



As we celebrate the Naval Postgraduate School's Centennial Year, we have many opportunities for reflection. While the information technology arena has only had 55 years of experience at NPS, the time has been significant and impactful. As we look forward, information technology plays significant roles in virtually all of our institutional aspirations for the future. One role that cuts across all others has to do with cybersecurity, which encompasses a number of topics and issues that relate to the integrity of cyberinfrastructure and associated services. While higher education is no more vulnerable than other sectors, higher education constituents and stakeholders must be able to trust their institutions in order to maintain the academic community's principles of openness and collegial discourse in building quality in both education and research programs.

National and global economic drivers depend on electronic transfer and storage capabilities. Increasingly, collaboration and partnership are requirements for commerce, education, government

and communications for all societal institutions. This dependence on cyberinfrastructure makes it a compelling target for criminal activity. The examples are many and increasing in sophistication. Some argue that the business models embraced by cyber criminals are not unlike those found in the most successful corporate strategies. What is undeniable is that "botnets as a service" is a chilling prospect of networking undermined computers to carry out specific directions to commit fraud. The Conficker worm demonstrated the ability to use old methods (e.g. exploiting operating system vulnerability) in inventive ways. In cooperation with Waledac malware, a scareware package was delivered and sold to unsuspected users. Domain Name System cache poisoning can direct consumers away from a legitimate Web site to another site which then asks for login credentials that may then be used for unauthorized fund transfers. While there are many issues that cause concern, none is more insidious than identify theft – the Federal Trade Commission reported more than nine million identities are stolen annually in the U.S. As a result, the entire portfolio of topics concerning cybersecurity shows many ways in which trust of our fundamental social institutions is being undermined.

October is designated as National Cybersecurity Month, and our Information Technology and Communication Services department would like to use this time to raise campus awareness about the importance of cybersecurity issues. We have a series of activities planned, including a guest lecture by Kevin Rowney, co-founder of Vontu (now part of Symantec) on October 8. We will also host brown bag seminars where individual faculty members will share their cybersecurity-related research. The following faculty members have

agreed to lead a brown bag seminar that permits an in-depth look at various dimensions of cybersecurity: Dr. Cynthia Irvine, Computer Science Professor and Director of the Center for Information Systems Security Studies and Research (CISR); Mr. Chris Eagle, Computer Science Senior Lecturer; Dr. Simson Garfinkel, Computer Science Associate Professor; Dr. John McEachen, Electrical and Computer Engineering Professor; and Col. Jon Czarnecki (USA, ret.), Naval War College Associate Professor. Each of these faculty members has national reputations in their respective areas and we appreciate their professional generosity in taking time to share that expertise with the campus community.

The Dean of the Graduate School of Operations and Information Sciences and the Vice President for Research will sponsor an all-day Cybersecurity Research Showcase on October 29, featuring many NPS faculty members doing research in this area. The all-day event is designed to provide an overview of NPS cybersecurity research, to encourage cross-campus collaboration and perhaps serve as a catalyst for a major umbrella funding proposal for the institution.

We also plan to add a bit of fun to an otherwise serious (and scary) subject. The Information Technology and Communication Services staff will be using EDUCAUSE (the higher education IT professional association) posters and communications materials which use a 1950s horror film theme to give heightened attention and visibility to cybersecurity issues. Since October is also the month for Halloween, this might be a different way to grab campus attention to an important area of national priority. Please join us in these activities – the full schedule is available online at <http://intranet.nps.edu/cybersecurity2009>.

## Announcements

**Associate Professor Thomas W. Lucas**, Department of Operations Research, Graduate School of Operational and Information Sciences, has been elected as the NPS Academic Year 2009 Richard W. Hamming Teaching Award winner in recognition of his exceptional teaching. Professor Lucas ranks among the highest rated professors in classroom teaching evaluations and has won other teaching awards, both at NPS and the National University of Singapore (NUS), where he regularly teaches as part of a joint NPS-NUS program. He

has supervised and continues to advise an impressive number of theses. His students routinely win or are finalists for thesis-related awards and he has co-authored papers with many of his students. Professor Lucas was honored at the September 15, 2009 Quarterly Awards Ceremony.

The Hamming Teaching Award Committee is comprised of Prof. Robert Dell, GSOIS, Committee Chair, Associate Profs. Keith Snider, GSBPP, and Jessica Piombo, SIGS, and Senior Lecturers John Fulp, GSOIS, and Bard Mansager, GSEAS.

## Welcome Chief of Staff Col. Andrew "Pete" Boerlage

In early August, NPS welcomed Air Force Colonel Andrew "Pete" Boerlage as its Chief of Staff, Navy Element Commander, Senior Military Assistant to the President and the Senior Military Officer in the Command.

"My wife, daughter and I are ecstatic



to be back in Monterey, where big city events occur in village settings," said Boerlage, "and I am thrilled to be back at NPS in this new role." The colonel's immediate goal is to focus on people, whether it is to support the "evolution of the warfighters" who come as students to NPS, the campus leadership, and the faculty and staff, "who deserve to be happy in their jobs and recognized for performing them well." Colonel Boerlage looks forward not only to his new responsibilities but also in supporting the school in, "accomplishing its mission, and in staying relevant so we can continue to thrive."

Colonel Boerlage's past experience will serve the university well. He is an NPS alumnus (meteorology), and former Associate Dean of the Graduate School of Operational and Information Sciences. Colonel Boerlage also served two years as the executive officer for the 14th Air

Force Commander, and commanded a flight and a squadron during his tour at Vandenberg AFB in Calif. In addition to these assignments, Colonel Boerlage has served as the Director of Operations Headquarters, Air Force Weather Agency, Offutt AFB, Neb., where he led a 303-member directorate; as the Deputy for National Intelligence, Air Force Director of Weather, Directorate of Operations and Training; Deputy Chief of Staff Air, Space and Information Operations, Plan and Requirements at the Pentagon; and as a commander of the 45th Weather Squadron at Patrick AFB in Fla.

Colonel Boerlage is also the recipient of the Meritorious Service Medal with six oak leaf clusters, the Air Force Commendation Medal with one oak leaf cluster, and the Air Force Outstanding Unit Award with four oak leaf clusters.

## CALENDAR

### October 8

Kevin Rowney, co-founder of Vontu (now Symantec)  
Cybersecurity Guest Lecture  
POC Chris Gaucher Ext. 3417

### October 12

Columbus Day Holiday

### October 12-15

Vice Adm. Jeff Wieringa, USN  
Global Center Consortium Directors Conference  
POC Warren Hoy Ext. 1110

### October 17

NPS Navy Ball  
POC Lt. Bradley Thompson  
NavyBallChairperson@nps.edu

### October 22

NPS Energy Fair  
POC Alison Kerr Ext. 3597

### October 26-27

Adm. Eric T. Olsen, USN  
Commander, U.S. Special Operations Command  
Defense Analysis Program Update  
POC Colonel Wilson Ext. 3799

### October 26-30

Rear Adm. David Titley, USN  
34th Annual Climate Diagnostics and Prediction Workshop  
Hyatt Regency Hotel  
POC Tom Murphree Ext. 2723

### October 27

Ambassador Ryan Crocker  
Former Ambassador to Iraq  
Secretary of the Navy Guest Lecture  
POC Protocol Ext. 2466

### October 28-30

Tropical Cyclone Structure  
POC Patrick Harris Ext. 3787

### October 29

NPS Cybersecurity Summit  
POC Chris Gaucher Ext. 3417

## HISTORICAL HIGHLIGHTS

### Share Our Legacy With Future Generations, Celebrate American Archives Month

The accomplishments of the Naval Postgraduate School over the past 100 years are astounding! October is designated as American Archives Month, and the Dudley Knox Library is honoring this designation by re-emphasizing its priority to the preservation of our cultural and institutional heritage.

Please consider what artifacts, images, programs, professional diaries/memorabilia you might have that will be of enduring value to future generations of NPS administrators, scholars and historians. John Sanders, NPS Special Collections and Archives Manager, is available to help you evaluate photographs, instruments, professional papers and other documents for inclusion in the Library Archives.



Historical Highlights are provided by the Dudley Knox Library.