

# LOOKING AHEAD



Northern Marianas College  
*FY2015 Accomplishment Report*





JUAN T. LIZAMA



SHARON Y. HART, Ph.D.

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## MESSAGE FROM THE CHAIRPERSON AND THE PRESIDENT

Hafa A dai, Tiroow Woomi, and Greetings,

The following annual report could have been a story of despair and devastation. After all, it was difficult not to wallow in shock and discouragement after Super Typhoon Soudelor ripped through Northern Marianas College’s As Terlaje campus, causing millions of dollars’ worth of damage to buildings and equipment and throwing off course the College’s summer and fall semesters.

But that’s not the PROA spirit.

Instead, this report tells of perseverance, hard work, and NMC employees’ and students’ unwavering resolve to overcome any challenge handed to them. In the days after Soudelor slammed Saipan and President Barack Obama declared the Northern Mariana Islands a disaster area, employees and students were joined by the community to begin the process of rebuilding, making certain that 2015 would be a story of triumph over tragedy.

In the next few pages you will read of important milestones reached, enhanced student success, international recognition, and heightened workforce development efforts. You will learn about the innovative ways we are helping farmers and ranchers in the areas of research and extension. You will also read of growing enrollment, increasing numbers of degrees conferred, and many more accomplishment we achieved as a campus community in 2015.

We will build on these accomplishments and continue to work toward completing the goals identified in the “*Full Speed Ahead – 5 Year Strategic Plan*,” which focuses institutional effort on labor force initiatives, increasing college completion rates, and modernizing NMC’s facilities.

As always, your support is vital to our success, and we look forward to strengthening our collaboration even further with our government leaders and private sector to advance student success in 2016.

Juan T. Lizama  
BOR Chairperson

Sharon Y. Hart, Ph.D.  
NMC President

# HISTORY OF NORTHERN MARIANAS COLLEGE

Northern Marianas College was established in May 1981 when Governor Carlos S. Camacho created the College as an official governmental entity through Executive Order #25. The Executive Order established the College as one of the divisions within the Commonwealth Department of Education. By mid-summer of 1981 the College was offering training programs for government employees and teachers of the public school system.

On January 1983 Public law 3-43 established NMC as a public, nonprofit corporation having the Board of Education as its governing board. In March of 1985 the passage of CNMI Public Law 4-34 made NMC a public corporation under the general governance of its own Board of Regents, and granted it autonomy in both fiscal and personnel matters. This law stipulated the mission of the college and designated NMC to serve as the land-grant College for the Commonwealth.

In November of 1985 the Second Constitutional Convention in the CNMI adopted a series of proposed amendments to the CNMI Constitution. Among them was Amendment 38 concerning education in the Commonwealth. Article 15, Section 2 of that proposed amendment provided for the establishment of Northern Marianas College, and stipulated that the College's Board of Regents should have autonomy in conducting its affairs. This amendment restated the mission of the College and guaranteed annual funding. Amendment 38, among others, was adopted by the people of the Commonwealth in a special election held in January of 1986.

In June 1985 the College received its initial accreditation from the Accrediting Commission for Community and Junior Colleges (ACCJC) of the Western Association of Schools and Colleges (WASC). The accreditation was reaffirmed in 1990, 1996, 2001, and 2009. In March 2001, the Accrediting Commission for Senior Colleges & Universities of WASC (WSCUC) granted NMC initial accreditation for offering a Bachelor of Science degree in Education. This marked the first time in the history of WASC that a two-year community college offered a four-year degree.

Northern Marianas College's accreditation was evaluated again in 2006 – 2007 and reaffirmed by the Accrediting Commission for Colleges and Junior Colleges. The institution underwent a six year comprehensive evaluation in 2012 by ACCJC and WSCUC. The College was placed on Show Cause status in February 2013 and a visit was scheduled for October 2013. Accreditation was Reaffirmed in the February 7th, 2014 Action Letter. Immediately afterwards NMC applied for accreditation fully under WSCUC and was granted Initial Accreditation on July 7th, 2014. In the spring of 2014 NMC also completed Substantive Change to offer a Bachelor of Science in Business Management. This was approved in the summer of 2014. NMC now offers a Bachelor of Science degree in Education and Business Management.

Since its beginning, NMC has focused on meeting the higher education and vocational training needs of the CNMI. From the times of its first program in teacher education, NMC has developed a comprehensive set of academic programs and services to meet the social, cultural, occupational and economic development needs of its island communities. Today, students are enrolled in various educational programs of study leading to Associate and Bachelor Degrees. In addition, there are hundreds of students enrolled in credit and non-credit, continuing adult education courses.

Throughout the years, more than 20,000 people have enrolled in regular NMC degree and certificate courses, over 3000 persons have been awarded certificates and/or degrees in programs offered or coordinated by NMC; and more than 12,000 individuals have been served in our community through such programs as the Adult Basic Education, Continuing Education, and the Cooperative, Research, Extensions, and Education Service.

# IMPERATIVES AND KEY GOALS FOR FY2015

## **Imperative One – Increase Relevance to CNMI Workforce and Community Needs**

- 1.A.1 Strengthen the link of the Public School Systems' (PSS) Curriculum to Northern Marianas curriculum by aligning the English and Math curricula and utilizing assessment tools so students can easily transition to NMC while reducing the needs for developmental courses.
- 1.C.1 Ensure the relevance of NMC's remediation program curricula to the College's credit curriculum by improving the rigor of remedial program offerings to align with college level offerings.
- 1.D.4 Ensure program offerings match the employment needs of the CNMI by aligning program curricula with the needs of CNMI employers in key industries leading to economic growth and economic value to graduates.
- 1.D.5 Ensure program offerings match the employment needs of the CNMI by integrating entrepreneurship, work ethic, and life skills across all curricula.
- 1.D.6 Ensure program offerings match the employment needs of the CNMI by creating stronger relationships with local employers to improve curriculum, engage students in internships or related work experiences, and enhance job placement upon graduation

## **Imperative Two -- Ensure Continued Accreditation**

- 2.A Define clear institutional purposes and ensure educational objectives.
- 2.B Achieve educational objectives through core functions.
- 2.C Develop and apply resources and organizational structures to ensure quality and sustainability.
- 2.D Create an organization committed to quality, assurance, institutional learning and improvement.
- 2.E Maintain ongoing institutional accreditation practices that include program level accreditation.

## **Imperative Three -- Accelerate Time to Completion**

- 3.A.1 Reduce the time between a student's entry into NMC and his/her enrollment in a program of study by improving advising support to get students on a planned pathway of success.
- 3.B.1 Reduce time-to-degree and increase the number of students completing a two-year or a four-year degree on time by exploring strategic scheduling and other pathways to reduce drop/stop-outs.
- 3.B.2 Reduce time-to-degree and increase the number of students completing a two-year or a four-year degree on time by aligning credits required to graduate with national standards.
- 3.B.4 Reduce time-to-degree and increase the number of students completing a two-year or a four-year degree on time by establishing 15 credits as full time.
- 3.C.1 Reduce time and accelerate success for a student to complete remediation for transition into college credit by ensuring a complete set of gateway courses for a program of study.

## **Imperative Four -- Improve Student Success and Support**

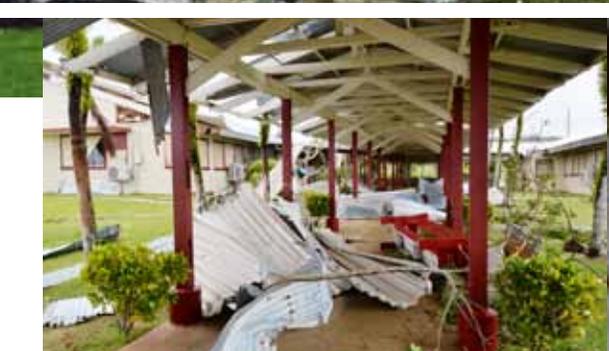
- 4.A.2 Implement strategies to enhance recruitment and retention rates by developing and expanding programs and services that are geared toward adult learners, including veterans and other military personnel.
- 4.A.3 Implement strategies to enhance recruitment and retention rates by launching a sustainable prior learning assessment program that recognizes knowledge and competency acquired through informal lifelong learning.
- 4.C.1 Provide data in a format that will improve and lead the institution to student success by expanding access to important data for all faculty and front-line staff.
- 4.D Understand students by obtaining more information about them and their educational goals.
- 4.E Provide innovative and high quality support services that enable students to successfully navigate their pathway to achieving their educational goals.

## **Imperative Five -- Strengthen Operations and Resource Development**

- 5.A Implement NMC's facility master plan to support the student learning environment.
- 5.B Enhance NMC's institutional image.
- 5.D Maximize funding opportunities through appropriations, grants, the NMC Foundation, and other sources to align with institutional priorities.
- 5.E.2 Improve information data systems and other technology resources to support student learning by improving inter-island communications through appropriate technologies.
- 5.E.3 Improve information data systems and other technology resources to support student learning by implementing online registration.



# **FY2015 ACCOMPLISHMENTS**





# FROM DISASTER...

## *Typhoon Soudelor Slams Saipan*

In the first week of August of 2015, the College's summer semester was coming to an end and employees had already begun shifting to high gear in preparation for the Fall 2015 semester, which many had anticipated would draw an increasing number of students given the record setting student enrollment in the last few semesters.

It had been a busy summer, as well: The College had conferred its highest number of degrees ever. The recipients of the newly established scholarship by Coldwell Solar had just been announced. An articulation agreement with the University of Maine was just launched. The College earned its eighth consecutive year of clean audits. Hundreds of students had attended the College's annual Cash for College Workshop, which helps attendees find funds to pay for tuition, books, and other educational expenses.

On the evening of August 2, 2015, however, all of the preparation for the upcoming semester came to a screeching halt.

That Sunday evening, Mother Nature had unleashed one of the most powerful typhoons to ever hit Saipan in recent memory. With wind gusts of up to 200mph, Typhoon Soudelor devastated the island of Saipan. Hundreds of homes were damaged, power lines were toppled, and storm debris and uprooted trees blocked main thoroughfares. The supertyphoon, labeled the strongest storm of 2015 by meteorologists, also damaged gas stations and gas lines, causing a shortage of gasoline.

The destruction to NMC's Saipan campus was overwhelming, unprecedented, and heartbreaking.

Typhoon Soudelor ripped roofs off buildings and destroyed computers and other electrical equipment, flooded classrooms, and uprooted trees. Storm debris was strewn all over the campus. Powerful winds had also pierced the NMC gymnasium's roof, and the resulting water damage to the specialized flooring left the gym unusable. All in all, the storm impacted 19 of 25 buildings on campus, and the damage to some of the buildings were so severe that staff had to be relocated to offices off campus.





# ...TO RECOVERY

## *Employees, Students Pull Together to Rebuild*

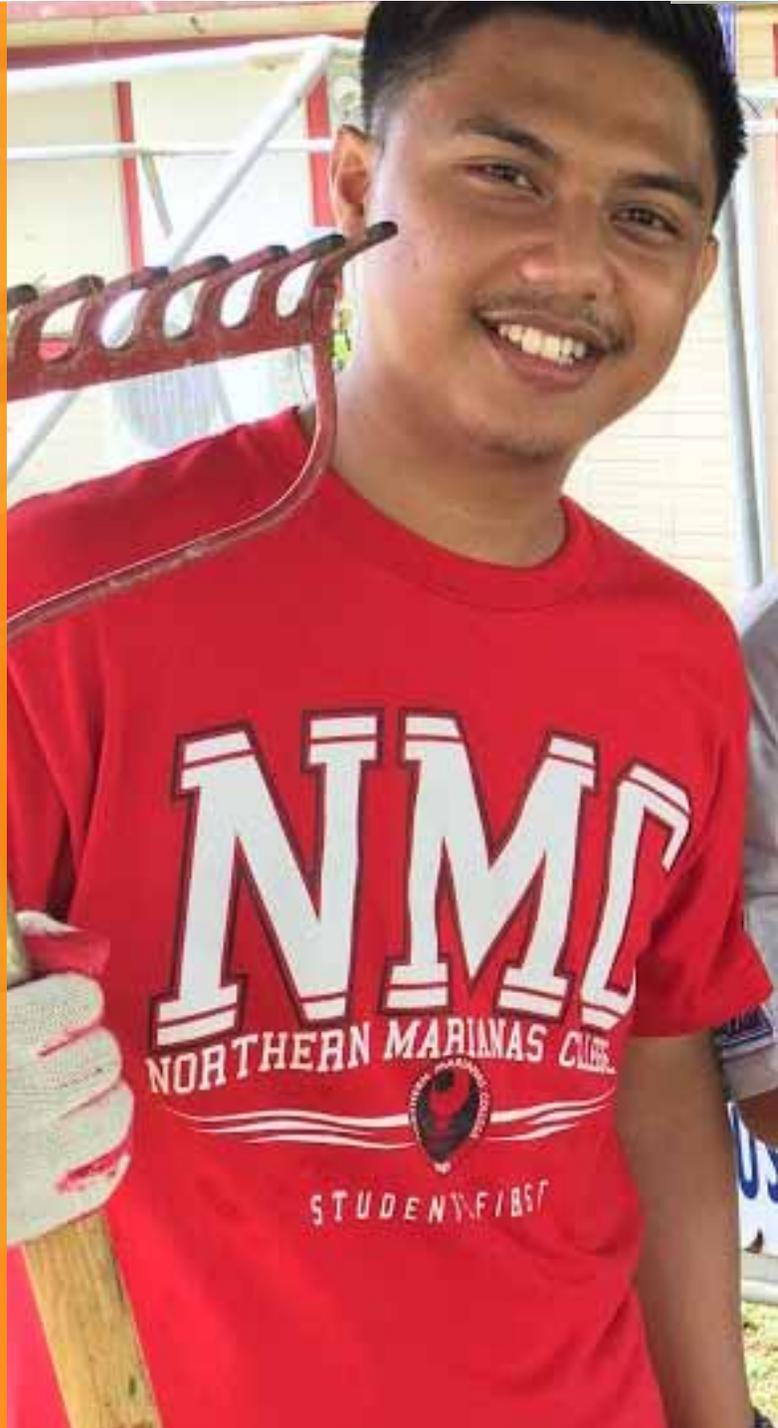
The destruction that pervaded the entire campus did not dampen school spirit. The day after the storm, Northern Marianas College employees, with the help of many students, rolled up their sleeves and went to work.

Employees and students shifted to full recovery mode and all efforts were focused on making sure that the campus was safe and prepared for the return of students. Although power, water, and fuel were in severely short supply, employees' capacity to help was anything but. Damage assessments were conducted, debris was removed, emergency equipment and supplies were procured, damaged buildings that could be repaired were done so, and inoperable equipment were disposed.

Recovery work was not limited to the damage on campus. College employees also reached out to the community and volunteered in droves by handing out food coupons, performing clean up work, and helping to rebuild fallen homes.

Northern Marianas College's leadership team also moved swiftly to ensure that the requisite damage assessments were conducted to help secure recovery funds from the Federal Emergency Management Agency and sources.

Much remains to be done, as Typhoon Soudelor's wrath is still very much apparent even months after the typhoon. The Fall 2015 semester was eventually postponed a few weeks to accommodate ongoing recovery efforts, and the campus was ready to reopen for the first day by September 28, 2015 and NMC welcomed one of its largest student body populations ever.







# LINKING MORE STUDENTS WITH THEIR EDUCATIONAL GOALS

## *Student Enrollment Remains Strong Despite Soudelor's Devastation*

Northern Marianas College continues to see strong, healthy enrollment numbers for the past few years, and enrollment for the Fall 2015 was no different despite the destructive impact from Typhoon Soudelor that devastated Saipan and the NMC campus just a few weeks before the semester began. The number of full time equivalent (FTE) students who had registered for the Fall 2015 semester was at 1,237.

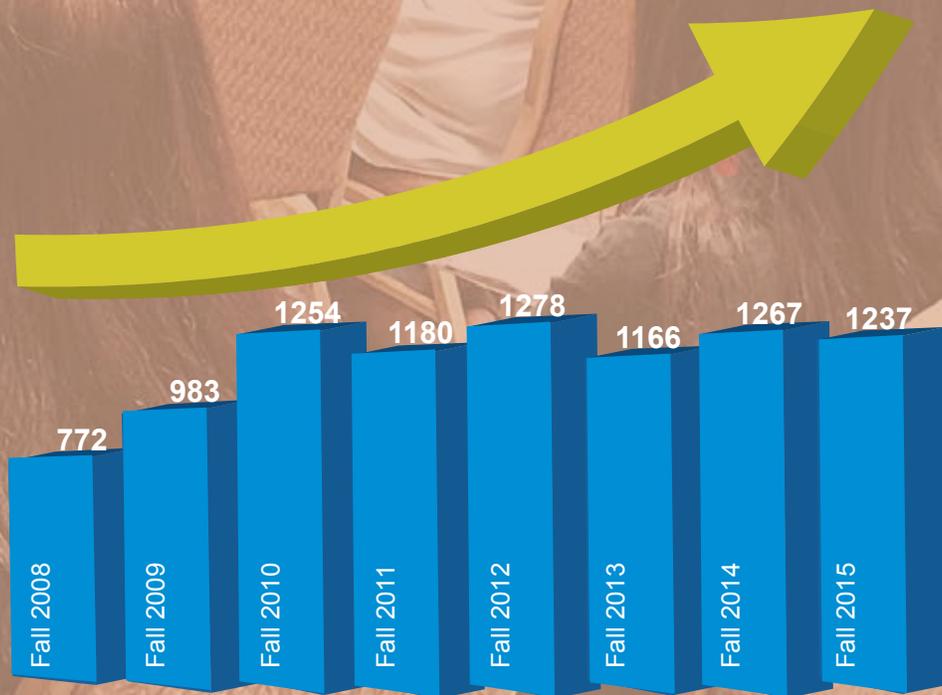
“Although this is a slight decrease of about 2% from last year Fall 2014, it still is one of the highest enrollments at the Northern Marianas College ever,” according to Leo Pangelinan, Dean of Student Services.

Full Time Equivalency (FTE) is calculated by taking the total number credits students have registered for and dividing that figure

by 12 (minimum number needed to be a full time student).

In addition to the students enrolled in credit programs, the College also has numerous noncredit and extension programs that serve thousands of individuals every year. These programs include NMC Cooperative Research Extension and Education Services (CREES), the Community Development Institute, the Adult Basic Education Program, and other programs.

The College credits various factors for the increased numbers in enrollment, including the student engagement programs organized by the College Access Challenge Grant program, refocused recruitment efforts, and heightened marketing activities.



FULL TIME EQUIVALENT ENROLLMENT



# GRADUATING OUTSTANDING CITIZENS

*NMC Increases Number of Degrees Awarded*

A record number of degrees were conferred from Northern Marianas College in 2015. In May 2015, the College conferred 163 associate and bachelor degrees – the highest number of degrees awarded in the College’s history.

During the commencement ceremony, the College also handed out academic achievement awards and student leadership awards:

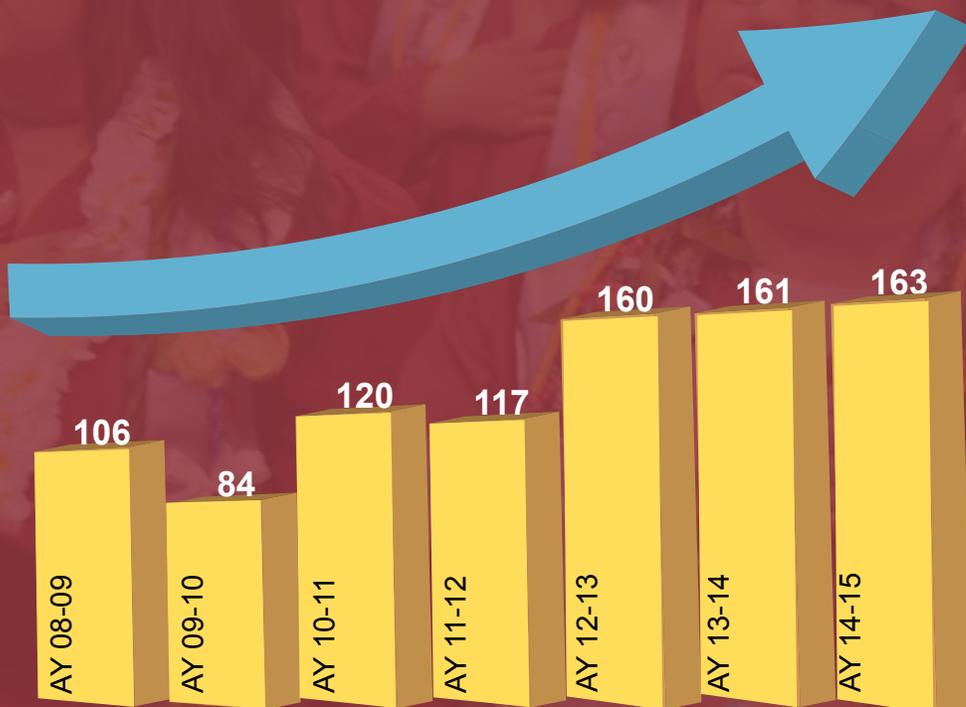
## **Class of 2015 Academic Excellence Awardees:**

- Jim Cheon, A.A. in Liberal Arts
- Hyemin Lee, A.A.S. in Hospitality Management

## **Class of 2015 Student Leadership Awardees:**

- Guadalupe Adelbai Camacho, A.A. in Liberal Arts, Emphasis in Education
- Jolly Ann Cruz, B.S. in Education, Emphasis in Elementary Education & A.S. in Natural Resource Management

In a joint statement, Governor Eloy Inos and Lt. Governor Ralph Torres also congratulated the NMC graduates: “Today, you have reached another milestone towards realizing your lifelong dreams, goals, and ambitions. Moreover, you have become living testimonies to the virtues of commitment, determination, and perseverance in shaping your education and your future.”



NUMBER OF DEGREES CONFERRED



**PATRICIA MATAGOLAI**  
Hyatt Regency-Kili Team Leader  
*NMC Alumna (2013)*

# MEETING WORKFORCE NEEDS HEAD ON

## *NMC Continues its Work on Boosting Job Placement Rates*

Northern Marianas College continues to provide relevant learning opportunities for CNMI residents through its credit and noncredit educational programs that are all precisely aimed at meeting local workforce needs. In 2015, the College focused the use of the funds it received through the Commonwealth Worker program to sustain and grow the Business and Nursing Departments, the Community Development Institute (CDI), and other areas at the College that deliver vocational training (A full report on NMC's use of the Commonwealth Worker Fee Fund is attached to this Annual Report as an appendix).

The Business Department's bachelor's degree program in business management, which was launched in response to calls by the private sector, continues to draw students and is expected to graduate its first cohort next year. The graduates from the bachelor's degree program and the associate degree programs will be filling positions in the areas of accounting, financial operations, management, office work, administrative support, marketing, sales, and others that are currently being occupied foreign workers.

Already, the Business Department has demonstrated its effectiveness in ensuring its graduates in the A.A. programs land meaningful jobs after they graduate. For instance, for the past two years 100% of graduates tracked in the A.A.S. in Business Administration: Accounting Emphasis program have placed into jobs, an increase from 75% in 2012-2013 and 40% in 2011-2012. Furthermore, 59% of graduates tracked in the A.A.S. in Hospitality program placed into jobs as compared with 40% from 2013-2014, 50% in 2012-2013, and 50% in 2011-2012.

Other areas of the College have also been hard at work to improve job placement rates. The School of Education, for instance, has seen a steady increase in its B.S. in Education graduates' job placement rates within the last three years. NMC's graduate data shows that 80% of graduates tracked in the B.S. in Education with an Elementary Education concentration have placed into jobs at PSS and NMC, while 17% are pursuing graduate level degrees. SOE's job placement rate of 80% is an increase from the previous year's rate of 75% in 2013-2014 and 67% in 2012-2013. Furthermore, 83% of students who completed ED 492 - Student Teaching in the last Fall 2015 semester are employed.

# REDUCING BARRIERS TO GRADUATION

## *NMC Advances Complete College America Agenda*

As reported in the previous year's annual report, the Northern Mariana Islands was the first U.S. territory in the Pacific Region to join 33 other states in the Complete College America (CCA) Alliance of States, which works toward significantly increasing the number of Americans with quality career certificates or college degrees and closes attainment gaps for traditionally underrepresented populations. This includes looking at "game-changing" strategies like offering co-requisite remediation, and providing incentives for students to enroll in 15 credits per semester.

In line with this effort, the College in 2015 has provided accelerated course sections in remedial English and math, revised the awarding of Advanced Placement (AP) credits, partnered with the Public School System (PSS) through a Memorandum of Understanding on Dual Enrollment, administered early placement testing to high school juniors and seniors, aligned WritePlacer placement results with NMC's Languages and Humanities curriculum through a comprehensive norming process involving the development of a proprietary rubric, and capped degree credit requirements to ensure students do not exceed 120 units in a bachelor degree program or 60 units in an associate degree program.

Furthermore, in keeping with the nationally recommended game changing strategies, the NMC Board of Regents (BOR) took action in 2015 to adopt a banded tuition rate that allows students who are enrolled for 12 credits to enroll in another 1 – 3 credits at no additional cost thus incentivizing them to take on additional credits and thereby reducing time to graduation.





# INCREASING THE COLLEGE READINESS OF NMI STUDENTS

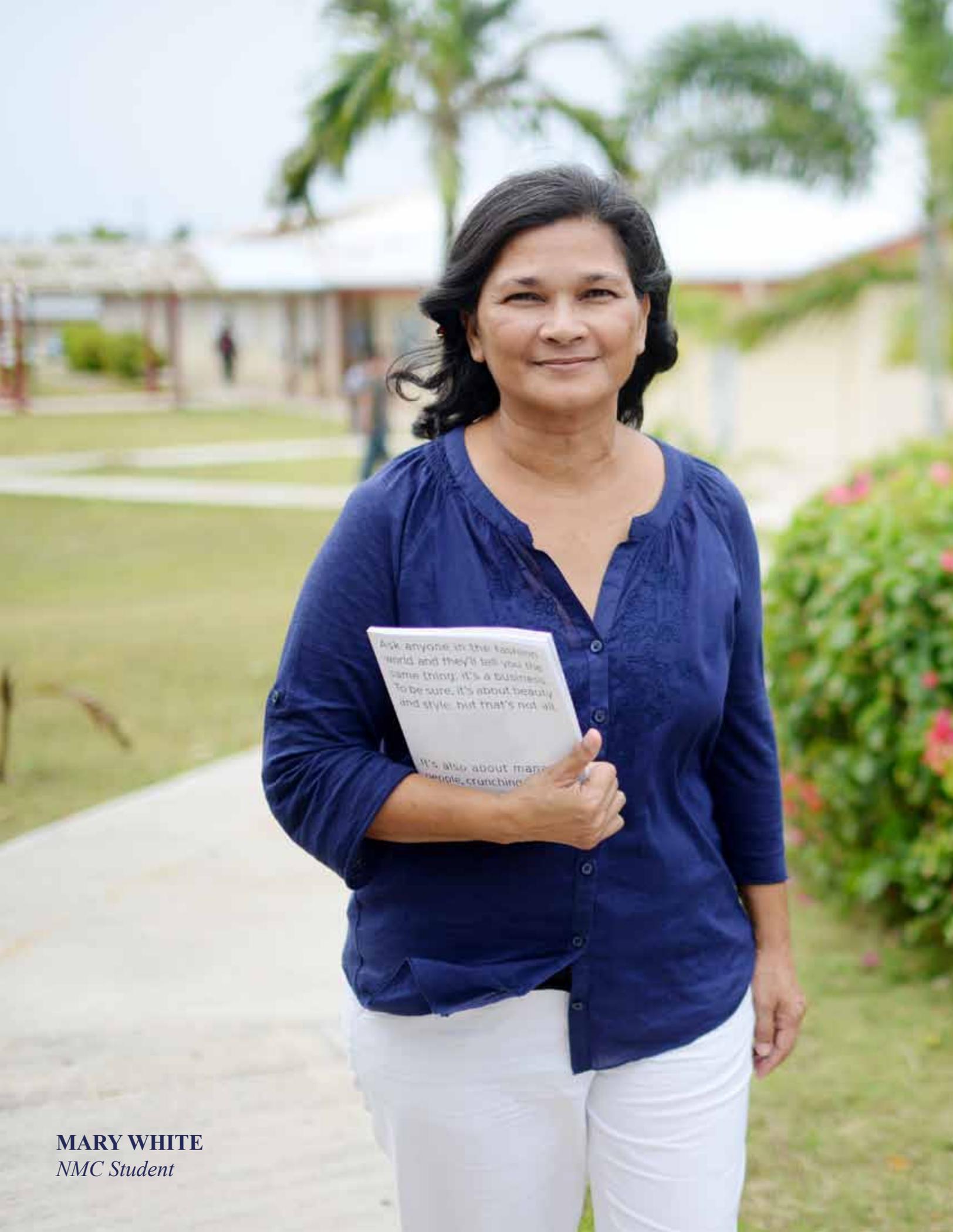
*NMC Strengthens Partnership with PSS to Help Students Transition to College*

To help ensure that high school graduates have the knowledge and skills necessary to enter and succeed in credit-bearing college courses, Northern Marianas College has been stepping up its partnership efforts with the CNMI Public School System to look at ways to improve students' transition to college after they earn their diplomas.

The CNMI Research Alliance for College and Career Readiness, a collaboration between the College, PSS, Department of Labor, and REL Pacific, have continued its work to better align the education systems to improve the college readiness of students in the CNMI. The collaboration has already produced greater cooperation and coordination between organizations and among English and math faculty.

As part of this collaboration, between March 9, 2015 - April 24, 2015, the College administered English and math placement tests to PSS high school juniors on site at each public high school. More than 400 students completed the English placement test and 363 students completed the math placement test. Results were used to establish benchmark data and to identify meaningful interventions to improve college readiness among students who place in developmental/remedial course levels.

In mid-June 2015, PSS teachers and NMC faculty joined together with REL Pacific to collaborate on our mutual interest in ensuring that our students are college and career ready.



Ask anyone in the fashion world and they'll tell you the same thing: it's a business. To be sure, it's about beauty and style, but that's not all. It's also about managing people, crunching

**MARY WHITE**  
*NMC Student*

# HARD WORK DESERVES CREDIT

## *Validating Learning that Takes Place Outside the Classroom*

Having been launched the previous year, the College's Credit for Prior Learning program has begun awarding college credits to students who have demonstrated knowledge gained through training, employment, and life-experiences, as self-assessed and documented in a portfolio.

The portfolios were developed in the Prior Learning Assessment (PLA) Portfolio Development course (BE200), which is a 3-credit course being offered as part of the program. The course helps students develop a portfolio that includes a written analysis of what they learned and how they applied this knowledge in the workplace at a level that merits college credit consideration.

Students who are enrolled in the program may receive up to 30 credit hours toward degree requirements. The typical student enrolling in this program is generally 25 years or older, with at least five years of work experience and meets the general admission requirement of the College.

Furthermore, students who enter the program are expected to follow college requirements as outlined in policy and admission guidelines of the PLA, must be able to understand and use the conventions of standard written English, must be able to access and navigate information online, and submit the portfolio for assessment and evaluation that will demonstrate, explain, and verify that there is undergraduate or graduate level learning that could be awarded credit.



# EMPOWERING THOUSANDS OF STUDENTS TO ENROLL & SUCCEED IN COLLEGE

## *NMC Enters Final Year of the College Access Challenge Grant (CACG) Program*

The College Access Challenge Grant (CACG), in its last year of funding through the U.S. Department of Education, continued the course in promoting participation and success in higher education among low-income, high school juniors, seniors, and first-year college students.

The CACG's signature Start Smart Seminars for high school seniors, Cash for College, Parent Summits, Summer Academy, and Counselors' Conference events drew larger attendees totaling in the thousands this past year to top off the 5-year grant cycle. In partnership with the Office of the Governor and Lt. Governor, CACG promoted CNMI College Month and a series of activities, including Movie Nights on Saipan, Tinian, and Rota to engage the community with information about college, financial aid, and support made possible by the grant.

The grant program was also tapped as a vehicle for promoting higher education and training opportunities made available through CNMI's membership in the Western Interstate Commission on Higher Education (WICHE) and to certify CNMI residents for eligibility to receive reduced tuition rates while enrolled at schools that participate in the Western Undergraduate Exchange (WUE) program.

To assist with the cost of education, CACG distributed \$589,588 in need-based aid to 654 students during the 2014-2015 academic year. The College attributes the 39% increase in first-year student enrollment this past year at Northern Marianas College to the efforts, activities, and scholarship sponsored by CACG.





# EXPANDING ACCESS TO TECHNOLOGY

## *Online Registration Now in Full Swing*

Last year, Northern Marianas College began the implementation of a comprehensive online registration system on a limited basis. Prior to the launch of this system, students had to manually register for classes in person – a process that took hours to complete. 2015 saw the full implementation of the online registration system – new and ongoing students can now register through a web-based platform, Proa Portal, with the support of academic advisors via email. The Proa Portal provides students with real-time, web-based access to register for courses and view unofficial academic transcripts, financial aid awards, and account balances.

## *Wi-Fi Now Available Campus Wide*

The NMC campus-wide wireless system provides the institution access to the Internet and other network resources. Since its inception in March of 2014, the NMC campus-wide wireless system continues to expand and deliver Wi-Fi services to employees and students. The wireless system now covers most of the buildings on the Saipan campus and the College has plans to extend coverage to smaller structures on campus not covered by the initial deployment. Wireless access is also provided on the Rota and Tinian satellite campuses. The system features advanced authentication and integration to the NMC enterprise system.

## *Virtual Desktop Infrastructure*

The Information Technology department's initiative to keep up-to-date with current computer technology has adopted the Virtual Desktop Infrastructure for computer labs and classrooms. The new technology is cost-effective and reduces maintenance cost. A phase-by-phase deployment plan was adopted for the computer upgrades. In 2014, a computer classroom with 21 computers was installed in Building W. Since then, two other computer areas have been updated. In June 2015, the open lab in Building V was upgraded with 30 computer units and in May 2015, the English lab in Building M was also updated with 24 units.

# UNPRECEDENTED ACCESS TO INFORMATION RESOURCES

The Olympio T. Borja Library implemented Koha, an open-source integrated library system. Not only does the new system save the college nearly \$20,000 in annual service fees, but it also makes over 10,249 books in the Curriculum Resource Center as well as books housed at the NMC Tinian Library searchable at <http://library.marianas.edu>. ISLANDORA, a free, open-source digital asset management program was also implemented to facilitate virtual access to nearly 1,000 historical images of the CNMI to researchers online.

These changes simplify the research process and allow NMC students to interact with library resources from off campus. As the library's digital collection expands, [library.marianas.edu](http://library.marianas.edu) will increasingly become a hub for academic research. Students on Saipan and Tinian have unprecedented access to online library materials.



# NMC RECEIVES CLEAN AUDIT REPORT FOR 8TH CONSECUTIVE YEAR

As a testament to the College's commitment to financial accountability, the institution received—for the 8th consecutive year – an unqualified opinion on its financial statements for fiscal year 2014. The College has also received for the second time an unqualified auditor's opinion on its internal control and compliance report.

An unqualified opinion means that the financial statements present fairly, in all material aspects, the financial position of the Northern Marianas College as of September 30, 2014, and conform with accounting principles generally accepted in the United States of America.

Furthermore, the College's independently-prepared audit identified no material weaknesses, significant deficiencies, or material noncompliance with the College's financial statements.

“That the institution received its eighth consecutive, clean bill of fiscal health demonstrates the College's continued commitment to the efficient and prudent management of its resources,” said NMC President Dr. Sharon Y. Hart.

President Hart commended the diligent staff at the Finance Department, as well as other employees at the College, for working hard to ensure that NMC's finances are well-managed.

# NMC COMMITS TO BATTLING CLIMATE CHANGE

Recognizing the need for the College to play a leadership role locally in addressing global warming, the College signed on to the the “American College and University Presidents’ Climate Commitment” in 2015.

“Climate change poses a serious threat to us here in the CNMI,” said President Sharon Hart when signing the commitment. “As such, we have a critical role we need to play in preparing others to best address these changes through the provision of research, education, and adaptation strategies.”

College presidents and other educational leaders who sign the Climate Commitment are pledging to eliminate their campuses’ net greenhouse gas emissions in a reasonable period of time. As part of the Commitment, the College has agreed to initiate the development of a comprehensive plan to achieve climate neutrality as soon as possible and to implement tangible actions to reduce greenhouse gases, which actions include adopting energy-efficient appliance purchasing policies.

Lieutenant Governor Ralph Torres, who had attended the U.S. Insular Areas Climate Change Stakeholder Meeting in Guam along with President Hart and other CNMI government leaders, said, “NMC’s commitment to taking a proactive approach to climate change adaptation is key. I look forward to the College’s efforts in engaging leaders across our islands in providing education, research, and other projects that will help to improve the resiliency of this region’s infrastructure, energy systems, water system, and food systems.”

Northern Marianas College joined about 700 other colleges and universities across the nation who have signed the Climate Commitment.





## CULTIVATING RESEARCHERS AND SCIENTISTS

Portland State University (PSU) partnered with Northern Marianas College in 2015 to help advance science and research capacity in the CNMI.

Portland State University had earlier secured a \$24 million research and training grant from the National Institutes of Health (NIH) to work with the NMC and other institutions to help underrepresented and diverse students pursue careers in biomedical, behavioral, social, or clinical research and other health sciences.

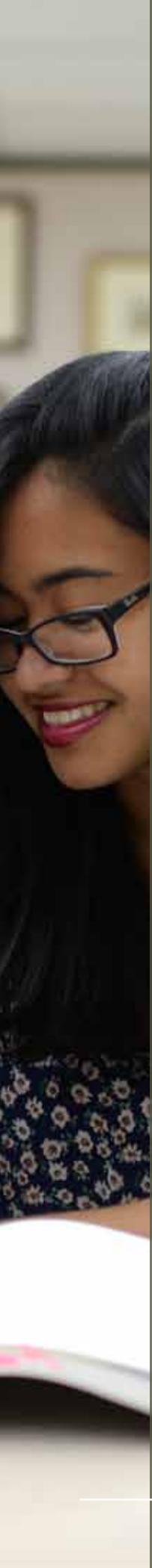
The grant was used in part to fund the Enhancing Cross-disciplinary Infrastructure Training at Oregon (EXITO) program. Students from the Northern Marianas College and other institutions who had been accepted to the program received scholarships, stipends, mentoring,

summer seminars, paid job experiences, and dedicated academic and financial aid advising—essentially, everything a student would need to be successful.

The recipients of the Build EXITO scholarship at NMC are Beda Mundo, Marjoen Martin, Daime Rivera, and Elphidia Sablan.

“This project will open doors to additional student scholarships, provide paid internship experiences for our student to work with professors and scientists from PSU, increase opportunities for our learners to transfer into other colleges, better prepare those interested in seeking STEM related degrees, and provide training for NMC mentors,” said Charlotte Cepeda, Director of NMC’s School of Education.





## NMC AWARDED \$269K GRANT TO ENHANCE ACADEMIC SUPPORT SERVICES

To boost its academic support services and to help students in the Commonwealth to prepare for and succeed in college, Northern Marianas College announced in 2015 that it received a \$1.4 million grant under the Asian American and Native American Pacific Islander-serving Institutions (AANAPISI) Program.

Northern Marianas College President Dr. Sharon Hart had called the achievement a significant and important milestone, as it “substantially boosts the depth and variety of academic services the College provides to students and will go a long way in helping them through their educational journey.”

The AANAPISI program provides grants and related assistance to Asian American and Native American Pacific Islander-serving institutions to enable such institutions to improve and expand their capacity to serve Asian Americans and

Native American Pacific Islanders and low-income individuals.

Among other benefits, the grant will fund a number of activities that are part of the “Project PROA” program that includes support for academic tutors, counseling programs, and student support services. It will also help the College maximize technology through the implementation of high quality, accessible digital tools, assessments, and materials that are aligned with rigorous college and career-ready standards. The grant will also help establish the PROA Center, which will be the focal point on campus where many of the grant’s activities will be centered.

The grant provides \$269,023 for the first budget period, which begins fiscal year 2016. It is anticipated that the grant will continue for five years.



## CREES: BUILDING AGRICULTURAL CAPACITY ON SAIPAN, ROTA, AND TINIAN

*Technical Assistance, New Equipment Enhance Farming Projects*

Typhoon Soudelor's ferocious winds that brought havoc to the Northern Marianas College's Saipan campus was especially hard on facilities that housed the NMC Cooperative Research, Extension and Education Service (CREES). The typhoon had torn off the roof of the CREES's main office thereby exposing everything in the building to the storm's wrath. Hardly anything was spared: equipment, computers, files, and furniture were all ruined. Because of the extensive damage, staff members were eventually relocated to other offices – some off campus.

In spite of the typhoon and other challenges, NMC CREES still made significant progress in 2015 to advance its mission. As part of its efforts to expand agricultural capacity NMC CREES completed the purchase of tractors and other agricultural research equipment that are now being actively used on Saipan, Tinian and Rota. Agricultural activities in Rota were stepped up when NMC-CREES hired a new extension agent to conduct educational programming in Rota.

Additionally, seed trials were conducted at the Saipan, Tinian, and Rota research centers. The seed trials consist of a variety of vegetable crops (tomato, okra, peppers, corn, cucumbers, eggplant, etc), as a means to show new vegetable

varieties and planting techniques to local producers.

Further, several clientele continued to receive ongoing technical assistance from CREES faculty and staff in establishing dragon fruit plantations, some pest control strategies using bait traps, and some methods of propagation (air-layering, seed transplants, etc).

The final year of the five-year Livestock Improvement program wrapped up in 2015. The program was designed to enhance the genetic base of the local cattle in the CNMI through an artificial insemination cross-breeding program of Senepol genetics. Seven Tinian ranchers participated in the program and 34 cows were impregnated with Senepol semen. Of those 34 cows, 11 cows gave birth, producing 11 live calves. Of those calves nine were bull calves and two were heifers, thus allowing cattle ranchers to continue the Senepol genetic base.

NMC-CREES faculty and staff also provided technical assistance to almost 50 farmers in a variety of topics, including fruit trees, vegetable crops, composting, livestock production/health, and Integrated Pest Management.





# CREES: PUTTING RESEARCH TO WORK

## *Advancing Innovative Methods in Aquaculture*

Over the years, the aquaculture program at NMC CREES has had a proven track record of turning research into successful – and profitable – projects for its clients. In 2015, the program showed no signs of slowing down as evidenced by the significant progress achieved in the following areas:

### **Mariculture:**

The Aquaculture & Fisheries Development Program (A&FDP) wrote, submitted, and was awarded a USDA-NIFA grant in the amount of \$563,000.00 to continue research work on Rabbitfish hatchery and grow out that was started in 2013 with another grant from NOAA/MCP/DLNR. This USDA-NIFA funded project will start where NMC CREES left off with the NOAA/MCP/DLNR by focusing on larval rearing and grow out.

### **Tilapia Production:**

Faculty from the A&FDP also worked with a Saipan producer to adopt technology that reduced production costs. The system used a Venturi aeration system that circulates and aerates water in the tanks and increasing oxygen in the water. This system reduces operation costs through the use of a one-pump system. NMC-CREES also worked with a local producer to pilot-test a feeding system that would reduce feed costs by growing aquatic fern *Azolla spp* that is high in nitrogen. As a result, the producer cut feed costs by 50 percent.

### **Aquaponics:**

A small-scale backyard aquaponics vegetable production system was created and pilot tested in Saipan; the system was designed to produce fish and vegetables for home consumption. This system was modeled after a proven production method and system developed in Olomana Gardens in Hawaii that utilizes a modified, energy saving airlift system.

### **Hydroponics:**

A backyard hydroponics non-circulating system was designed and pilot-tested by a local farmer in Saipan, this system was designed to be energy free and used materials from local hardware stores, thus making it a practical and affordable system for local families to be able to produce vegetables in their backyard.

Additionally, the program, along with the Division of Agriculture under the CNMI Department of Lands & Natural Resources (DLNR), collaborated on a USDA Specialty Crop Grant to promote healthy lifestyles through gardening and consumption of vegetable as a result of workshops conducted and hydroponics systems installed in schools on Saipan, Tinian, and Rota.

The total number of client reached in 2015 – both directly and indirectly – reached 2,000.









# CREES: NUTRITION AND HEALTH PROGRAMS

## *World Health Organization Award Brings International Recognition*

The Children's Healthy Living Program is a USDA-funded integrated grant that focuses on research, extension, and training

In April 2015, Northern Marianas College's CREES Children's Healthy Living Program aimed to help curb childhood obesity was selected by the World Health Organization – Western Pacific Region to receive the Healthy Islands Best Practice Award for exemplifying Health in All policies, Community-based efforts, and facilitation of partnerships. NMC competed against numerous entries from 22 Pacific Island countries and territories.

The award submission highlighted the volunteer group Tanapag, Achugao, San Roque, and As Matuis (TASA) and NMC-CREES' accomplishing the following 1) In partnership with the CNMI Public School System and Gregorio T. Camacho Elementary School (GTC), implementation of a School Wellness Policy 2) Enhancing the built environment through public playground rebuilding and painting physical activity prompts at GTC, Tanapag Head Start, and other public places 3) Encouraging physical activity through equipment loaner program (balls, cones, jump ropes) for families 4) Comprehensive social marketing campaign led by the NMC External Relations Office which included working with I-Mart to add a fruit and vegetable section in the store as well as a section for healthy "school approved" snacks in addition to several other evidence-based enhancements. The social marketing campaign also focused on sign boards and dissemination of tip sheets to children and their families.

NMC-CREES also worked with the Kagman Community Role Models, including teachers and administrators from Kagman Elementary School and Kagman Head Start. Through this

partnership, NMC-CREES was able to accomplish 1) Physical activity prompts were painted at the Kagman Head Start, 2) Joeten Kagman joined the Healthy Village Store program (increasing healthy offerings and improving displays and store layouts to encourage healthier food and drink purchases) 3) Training Kagman Head Start and Kagman Head Start teachers in integrating physical activity into academics 4) Comprehensive social marketing campaign 5) STEM gardening education for Kagman Head Start and two Kagman Elementary School classes.

NMC-CREES is currently analyzing the results of these efforts based on baseline and 24-month data collected from young children and their caregivers who reside in these villages. The results showing the effect of these activities on young children's health will be presented to the CHL Local Advisory Committee, TASA and Kagman role models, and other stakeholders in April 2016.

In 2015, the Expanded Food Nutrition Education Program (EFNEP) enrolled 252 participants and graduated 140 adults benefiting over 500 family members. Approximately, 88% of the families served were at or below the federal poverty level and 44% were Pacific Islanders. School-based youth development programs reached 384 youth directly and 300 indirectly, while the 4-H summer camp had 45 participants in Summer 2015.

Most EFNEP classes were held during Nutrition Assistance Program classes and at Head Start centers in order to accommodate transportation issues often experienced by EFNEP participants. As a result of participation in EFNEP, 50% of participants increased their vegetable consumption, while 94.6% of EFNEP participants improved their diet in at least one food group area.



# NOTES





## *Mission*

Northern Marianas College, through its commitment to student learning, provides high quality, affordable and accessible educational programs and services for the individual and people of the Commonwealth.

## *Vision*

Northern Marianas College will serve as the engine to drive the economic growth and the social and cultural vitality of the Commonwealth.

