



GET YOUR FLU SHOT today and earn a wellness activity credit for the QHS 2017 Work on Wellness (WOW) program. The flu shot counts as one of the two required health activities. The other is the online health risk assessment. Don't miss out on this opportunity to earn a wellness activity credit while protecting your health and our patients. Flu shots must have been taken between September 1, 2016 and March 31, 2017 for the credit. Note that the WOW program has a delayed start this year—May 3, 2017—due to changes from Healthways' recent acquisition by Sharecare.

THE HEAT IS ON! Queen's has seven teams walking in this weekend's 2017 American Diabetes Association Step Out Walk. It's not too late to donate or join a team for a good time and a great cause. Held Saturday, March 18 at Kapi'olani Park, registration starts at 7:00 am followed by a group warm-up and then the walk itself at 8:00 am. Log on to www.diabetes.org/stepouthawaii and under "Register" or "Donate," choose Queen's for the full list of teams. All donations and fundraising efforts support Hawai'i's chapter of the ADA in ongoing education, prevention, and research. For more information or to become a team captain, email Alana at abusekrus@queens.org.

"PUT YOUR BEST FORK FORWARD" is the 2017 theme for March's National Nutrition Month. A booth will be set up outside of Harkness Dining Room on Tuesday, March 14, from 11:00 am to 1:00 pm with an interactive display and a raffle for participants. Dietitians, nutritionists, and dietary workers assist inpatients and outpatients daily at all four QHS hospitals to meet their optimal nutritional needs.

THE QUEEN'S HEALTH SYSTEMS is holding a Hiring Event at Queen's - West O'ahu on Saturday, March 11, from 2:00 - 5:00 pm at the Sullivan Care Center. The event is for jobs systemwide. The link to

available jobs may be found at <http://qhs.referrals.selectminds.com/page/spring-hiring-event-48>.

NURSING EXCELLENCE AWARDS 2017 nominations are now being accepted for presentation during Nurses' Week, May 8 - 12. Categories for recognition are Clinical, Education, Leadership, Performance Improvement, and Research. Nomination forms were sent out in an Exchange Admin email and should be emailed to bahsing@queens.org, by fax to 691-4032, or via interoffice mail to Beth Ahsing, Queen's Heart, Pauahi 3. The nomination deadline is Monday, March 27.

LIANA HONDA is the new manager of the QHS Native Hawaiian Health Program at North Hawai'i Community Hospital. She will implement NHCH Native Hawaiian Health programs into the QHS Hawai'i Island strategy, focusing on health care training and educational opportunities for Hawaiian students, as well as supporting students to become health care providers in the community. Originally from O'ahu, Liana has lived on Hawai'i Island for the past 25 years.


"LOSE WEIGHT FOR LIFE," a free Speaking of Health community lecture, will be held on Thursday, March 16, from 6:00 - 7:00 pm at The Queen's Medical Center - West O'ahu. Join Racquel S. Bueno, MD, FACS, metabolic surgeon and bariatric endoscopist at the Queen's Comprehensive Weight Management Program and Assistant Professor of Surgery, John A. Burns School of Medicine, as she discusses: health problems that can be improved with gastric bypass surgery; why it can be so difficult to lose excess pounds for good; diets and lifestyle changes that work best to help lose weight; weight loss programs available at Queen's; when to consider minimally invasive bariatric surgery; and when to consider the ORBERA™ intra-gastric balloon. Register online at www.queenswestoahu.org/classes-and-events or by phone at 691-7117. Seating is limited.

"OVERVIEW OF RETIREE BENEFITS" will be presented in two sessions. The first, for Teamsters and non-bargaining employees only, will be held on Wednesday, March 15. The second, for Hawai'i Nurs-

es Association members only, will be held on Wednesday, March 29. Both sessions will be held in the Queen's Conference Center room 200 from 12:00 - 1:00 pm. Register online at <http://eww.queens.org/hr/registration/retirement.asp>

"MANAGING YOUR 401K" will be presented by Fidelity Investments on Wednesday, March 22, from 12:00 - 1:00 pm in the Queen's Conference Center room 200. All are welcome to bring lunch and attend. Seating is limited and registration is strongly suggested at <http://eww.queens.org/hr/registration/retirement.asp>.


A DRIVER SAFETY PROGRAM for seniors, co-sponsored by the American Association for Retired Persons (AARP), will be held on Sunday, March 19, from 9:00 am - 1:00 pm at Queen's - Punchbowl. The fee is \$20 per person (\$15 for AARP members), and will be held in the Queen Emma 8th floor Ewa conference room. Call the Queen's Referral Line to register or for more information at 691-7117, Monday - Friday from 7:30 am - 4:00 pm.



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The Queen's Medical Center • The Queen's Medical Center – West O'ahu • Moloka'i General Hospital • North Hawai'i Community Hospital

QCBR Discoveries Point to Treatment of Major Diseases



Reinhold Penner, MD, PhD, and Andrea Fleig, PhD, MBA, of the Queen's Center for Biomedical Research with a poster showing how ion channels, corals, and cancer treatment are linked.

LIKE THOMAS EDISON testing thousands of materials as possible filaments for his first light bulb, the Queen's Center for Biomedical Research has tested some 20,000 compounds to find ones that will block a tiny pore in cells called TRPM7 in hopes of finding therapeutic drugs that can treat major diseases. Since they discovered TRPM7 in 2001—the first magnesium ion channel ever found—the Queen's Center for Biomedical Research (QCBR) has been doing research to uncover what the ion channel is responsible for and if it has implications for any disease processes. They found it has—for stroke, heart disease, and cancer. New research now suggests that a compound discovered by the QCBR may prevent the malaria parasite from infecting red blood cells if TRPM7 is blocked.

The journey to get to this point has been a long but productive one. After TRPM7 (Transient receptor potential melastatin 7) was discovered by QCBR researchers Re-

inhold Penner, MD, PhD, and Andrea Fleig, PhD, MBA, along with others in 2001, further research showed that the magnesium ion channel is fundamental to the way cells function, and therefore could have implications for understanding disease processes. In fact, the proper functioning of TRPM7 is essential for cell survival and growth. Research also uncovered that TRPM7 is implicated in cell death following a stroke. Furthermore, it was found that TRPM7 controls survival, growth, and migration in a variety of human cancer cells, which sparked interest in the ion channel as a target for cancer drugs.

The major goal then, was to find drugs, or compounds, that block TRPM7 while having little or no effect on other ion channels. In 2010, the QCBR developed a patented drug bioscreening technique that could mass screen scores and even hundreds of compounds at once. Out of thousands, 14 compounds had sufficient power

Queen's Center for Biomedical Research



Since its discovery of TRPM7, the QCBR has had 22 publications on TRPM7 alone. Below are a few highlights of published research.

2001: QCBR discovery of first magnesium ion channel TRPM7 published in *Nature*

2010: QCBR's TRPM7 Bioscreen published

2011: Discovery of 1st TRPM7 inhibitor waixenicin A published (see photo of coral on cover of the *Journal of Biological Chemistry* above.)

2013: Use of waixenicin A against metastasis formation of neuroblastoma published

2016: Use of waixenicin A in neuronal maturation of the hippocampus

2016: Use of waixenicin A against malaria

to inhibit TRPM7. However, while being a potent blocker of TRPM7, waixenicin A was the first compound discovered that does not significantly affect other ion channels. Discovered in a chemical library of 1,100 extracts derived from marine organisms, waixenicin A comes from the soft coral *Sarcothelia edmondsoni*, which can be found off of Lanikai beach. The waixenicin A discovery was published in the *Journal of Biological Chemistry* in 2011, showing that the compound prevents tumor cell growth by inhibiting TRPM7. The research was a collaboration between the QCBR and Hawai'i Pacific University researchers.

Research by the QCBR and other research centers around the world showed that TRPM7 is overexpressed in neuroblastoma, a childhood cancer. Waixenicin A prevents tumor invasion and metastasis by inhibiting TRPM7. The research was published in the journal *Cell Calcium* in 2013. Further work by the QCBR published

(Continued on page 2.)

Manny Smith Top 2016 MGH Employee



Molokai General Hospital
Employee of the Year

Manuel “Manny” Smith, RN

Department: Nursing

Years at Queen’s: 6

Free time: Spending time with family and friends. Especially enjoys taking his nephew to the movies, surfing, or fishing.

MANUEL “MANNY” SMITH, RN, has been named the Molokai General Hospital Employee of the Year for 2016. He was previously honored as the MGH Employee of the Quarter in early 2016.

Manny moved to Molokai in 2012. He has been a member of the Queen’s ‘ohana since 2011 when he was first hired at QMC – Punchbowl as a nursing assistant. Manny is the most senior and experienced nurse at MGH, and generously precepts new hires. Manny is noted for his demonstration of C.A.R.E. values (Compassion, Aloha, Respect, Excellence), leadership initiative, mentoring

abilities, as well as his commitment to the Molokai community. He is beloved by patients and families, who always hope Manny is on shift when they arrive.

A true team player who always keeps the patient in mind, Manny never hesitates to seize an opportunity to improve nursing practice. He is recognized for his efficiency in reporting findings to the director of nursing and always offers solutions or suggestions to improve a situation.

In his free time, Manny likes to spend time with family and friends. He especially enjoys taking his nephew to the movies, surfing, and fishing.

Social Workers’ Stand



“SOCIAL WORKERS STAND UP” is the 2017 theme for the annual Social Work month celebration. National Professional Social Work Month was first organized in March of 1963. In 1984, Ronald Reagan gave it the official Presidential Proclamation. Social workers across the nation and throughout The Queen’s Health Systems stand up for millions of people every day. They are available to all patients, but the most needy include those experiencing devastating illnesses or losses, mental

health crises, veterans, and children.

Chosen to highlight the way social workers stand up for those in need, the “Stand Up” theme also urges all to support social workers and question the inaccuracies of the profession that are sometimes presented in popular media (such as in movies, novels and even in news reports). The title social worker is often erroneously given to volunteers or other outreach coordinators who, though well meaning, have not had the years of training of a licensed social worker.

ciety for the Development of Research on Magnesium located in France. With funding for TRPM7 research from the National Institutes of Health (\$3,113,982) and the Hawai’i Community Foundation (\$50,000), and the Weinman Innovator Award for Translational Research (\$50,000), the QCBR continues to make major discoveries and inroads that may result in the successful treatment of humankind’s most devastating diseases.

Social workers cope daily with some of the most challenging issues faced by patients and their families, and work diligently to find solutions to help them and thereby to help all of us as a community. They are highly trained professionals who seek holistic solutions to sometimes extremely complicated issues. Social workers bring people and resources together to access the best possible care and help them achieve successful recovery.

QCBR Discoveries

(Continued from page 1.)

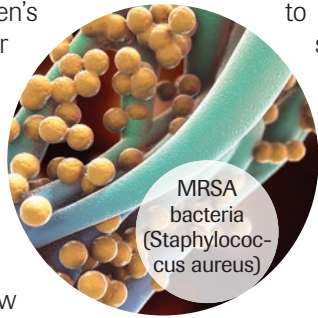
last year showed that the use of waixenicin A promoted the maturation of neurons in the hippocampus, which suggests that the compound may have a therapeutic benefit in neurodegenerative disorders. Although waixenicin A has not yet been tested for heart disease, it is predicted that the compound may be therapeutic because blocking TRPM7 with non-pharmacological methods appears to have a benefit. Most recently, research led by the University of Melbourne, Australia, and including QCBR and other researchers in Hawai’i showed that waixenicin A disrupts the ability of the *Plasmodium falciparum* parasite—the most lethal form of malaria in humans—to infect red blood cells. The research was published last month in the journal *eLIFE*.

The QCBR has numerous publications on TRPM7, many published in the world’s most prestigious journals. In addition, Dr. Fleig received the Rudolf J. Schweyen Award for Outstanding Work in Researching Molecular Aspects of Magnesium Homeostasis in 2014, which was awarded by the International So-

QHS Launches Antimicrobial Stewardship Program

ACCORDING TO THE CENTERS for Disease Control & Prevention (CDC), 20 to 50% of all antibiotics prescribed in U.S. acute care hospitals are either unnecessary or inappropriate. The misuse of antibiotics has also contributed to the growing problem of antibiotic resistance. Unlike other medications, the potential for the spread of resistant organisms means that the misuse of antibiotics can adversely impact the health of patients who are not even exposed to them.

As a result, The Queen's Health Systems and other hospitals nationwide have launched Antimicrobial Stewardship Programs to optimize treatment of infections and reduce adverse events associated with their use. The Joint Commission recently set new standards to this effect (see sidebar), which will likely be a focus of the next accreditation visit. At Queen's, the Antimicrobial Stewardship Program (ASP) has been in effect since 2015 and there is a full-time pharmacist to oversee the pro-



gram, Lynn Matsukawa PharmD, BCPS, and a physician champion, Jonathan Dworkin, MD, to liaison with other doctors. To date, the stewardship program has significantly reduced the use of broad spectrum antibiotics at both Queen's - Punchbowl and West O'ahu.

Every single day, Lynn or another pharmacist on duty checks the dosing and microbiology results at QMC - Punchbowl and West O'ahu. "We actually catch a lot of situations and are then able to talk to the doctors about it," she said. While there are certain target medications or conditions that get a definite second look, a software program helps to sort all the active orders for anything that might be questionable.

The main goal of the ASP is to reduce the use of broad spectrum antibiotics and halt the evolution of multi-drug resistant bacteria. "When a patient is first admitted, they may be appropriate," Lynn commented. "But once we've figured out what the specific problem is, it's time to de-escalate and look to the microbiology to guide our choices correctly."

Dr. Dworkin says that it's truly a cultural change away from the traditional solution. "We need to learn not to overprescribe antibiotics, to be more mindful of how they are used. Bacteria evolve in real time," he explained, "and it's particularly concerning when they evolve a resistance to an antibiotic. If we want antibiotics to be useful in the future, we need to learn to use them wisely." He added that it's important to have protocols in place concerning infection control, and stressed the importance of simple things like getting vaccinated and consistently using good hand hygiene. The public also needs to become more aware and he discourages widespread use of

than on O'ahu, further supporting the need for specialized equipment to serve this special population.

Thanks to Teri McCormack and her Cardiopulmonary Services team, NHCH is prepared for laryngectomy patient emergencies. Cardiopulmonary Services can be reached at extension 4870.

TJC Antimicrobial Stewardship Standards



New Antimicrobial Stewardship Standard
The Joint Commission Requirement effective January 1, 2017

- Leaders establish antimicrobial stewardship as an organizational priority
- The hospital educates staff and licensed independent practitioners involved in antimicrobial ordering, dispensing, administration, and monitoring about antimicrobial resistance and antimicrobial stewardship practices. Education occurs upon hire or granting of initial privileges and periodically thereafter, based on organizational need.
- The hospital educates patients, and their families as needed, regarding the appropriate use of antimicrobial medications, including antibiotics.
- The hospital has an antimicrobial stewardship multidisciplinary team that includes: infectious disease physician, infection preventionists, pharmacists, practitioners, leadership commitment, accountability, drug expertise, action and tracking, reporting and education.
- Organization-approved multidisciplinary protocols
- Collection, analysis and reporting of data on the program
- Action on improvement opportunities identified by the program

antibacterial products in the home. "Just randomly trying to kill off all bacteria has a boomerang effect," he warns.

"We're making an impact," Dr. Dworkin encouraged, "though we acknowledge that we are in the early stages. We're trying to do practical things, and education is a critical one. Just like with any other environmental problem, to solve it we need the buy-in from those involved, and so far, everyone has been pretty responsive. We need to create a cultural shift that gets patients on the narrowest use of antibiotics. The stewardship is about shaping the environment, not killing the good bacteria. Think of it like any other environmental problem, only our environment is the hospital."

The bottom line: "We want people to get the right treatment," Lynn concluded. If you have any questions about the Queen's Antimicrobial Stewardship Program, call 691-4833.



NHCH Makes Airway Kits

NORTH HAWAI'I Community Hospital (NHCH) Cardiopulmonary Services has put together specialized emergency airway kits for total laryngectomy patients. Kits are available in the Emergency Department and in Cardiopulmonary Services. The kits contain critical equipment for laryngectomy patients. Patients with tracheotomies have very different needs than those with laryngectomies, as laryngectomy patients do not have an upper airway and cannot be resuscitated through the mouth.

It is believed that there are more total laryngectomy patients on Hawai'i Island