

Yale SCHOOL OF NURSING 2016 Year in Review



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BETTER HEALTH FOR ALL PEOPLE





...by educating each generation of nurse leaders, scholars and practitioners; transforming healthcare practice; and advancing science.

– The Mission of Yale School of Nursing

Yale School of Nursing is small by design but we equip our graduates to go out and have an outsized impact by the way they engage in their health systems, governments, communities, and innovative ventures.

Ann Kurth, Dean of Yale School of Nursing

WELCOME to Yale School of NURSING

Since starting as dean at Yale School of Nursing (YSN) in January 2016, I have been deeply inspired by what the people and programs of our storied school are accomplishing, dreaming, and doing.

Yale School of Nursing, like other graduate schools at Yale, is small by design (though growing, p. 10). Our graduates go out into a diverse array of leadership roles, often having an outsized impact on the improvement of health in communities and systems everywhere.

Our alumni lead change and redefine how nurses and midwives are understood nationally and around the world. When the Department of Veterans Affairs (VA) recently decided to grant full practice authority to advanced practice registered nurses, for example, creating one of the only national models of APRNs practicing to full clinical scope and education (p. 5), we did not have to look far for the YSN alumna: Linda Schwartz, '84, assistant secretary for planning and policy at the VA.

Yale nurses deliver evidence-based care and prevention in an era when access to primary care needs are soaring, among populations that are increasingly diverse, aging, and living with co-morbidities. The nursing and midwifery faculty of YSN are working on key scientific fronts – our world-class researchers and state-of-the-art research facilities are productive, collaborative, and focused. Our faculty are producing some of their best work (p. 15), at a time when the contribution of nursing to the scientific enterprise is needed more than ever.

Faculty, staff, and students are thinking and working together for the culture of our School to construct an even "more excellent" Yale School of Nursing, to borrow a phrase from Yale President Peter Salovey's goal for our university. Work at our 'Yale West' campus is thriving and connects integrally to Yale, New Haven, and our region as a whole.

As you look through this collection of selected highlights from the year I trust that you, like me, will be inspired by the impact and innovation of this work. I hope that you'll be stimulated at the opportunities here, encouraged to join us, and to add your support and best energies toward this important work.

Thank you for the privilege of serving as your dean,

Ann Kurth, '90, PhD, CNM, RN, FAAN *Dean and Linda Koch Lorimer Professor of Nursing*

2016 YEAR ⁱⁿ REVIEW

Global needs for quality healthcare – the kind that advanced practice registered nurses (APRNs) provide – are growing. The increase is driven by progress in the kind of care that is possible as much as it is by new diseases, epidemics, social challenges and population patterns. A world healthcare situation often characterized as "in crisis" is also the story of immense success.

YSN's founding commitment is to contribute to and broaden that success: our mission of Better Health for All People. As people's needs shift and expand across the lifespan, we are responding by expanding our capacity and engagement with every nurse and midwife we educate. This year, while remaining the most selective nursing school in the US, we increased the size of our incoming graduate-entry class by over one-third. Our alumni are a relatively small group within the large population of 3.7 million nurses in the US -19 million in world – but as leaders, practitioners, scientists and innovators, their impact is disproportionately high. Students apply to YSN because they want to change the world; to make the start of life, living - and also the end of life and dying - better for millions of people worldwide. It is our mandate that by the time our students leave us, they are prepared to contribute to that mission. From creating clinical guidelines for the care of transgender people to mobilizing a revolution in health funding for Native American populations, YSN students and recent graduates are right now improving access to healthcare for underserved and marginalized communities across the country.

It is, by now, acknowledged that enabling nurses and midwives to practice to the full extent of qualifications and education can meet the healthcare needs of the US and of the world. We celebrate the recent indication that the Department of Veterans Affairs will allow APRNs full practice authority - a change that will help thousands of patients off waiting lists and into a fuller life. As the work of our faculty and alumni consistently demonstrates, nurses and midwives are the best-placed professionals to deliver a wide range of timely and evidence-based patient prevention and care services. Nurses work within the context of patients' lives; to fully represent that context, it is important that the community of midwives and nurses draws on a similar diversity of experience and cultural perspective.



Increasing the diversity of our incoming student body is more than an aspiration: it is essential to our ability to recruit and retain the most excellent candidates and to maintain the healthy intellectual life of our school. This year, we launched an Office of Diversity and Inclusion, led by Associate Dean Dr. Jackie Taylor. We appointed a new Associate Dean of Student Affairs, Saveena Dhall, who brings a history of campus leadership on diversity. We are also partners in Yale University's \$50 million fiveyear initiative to increase diversity in the faculty. As Dean Kurth has said, "a diverse, inclusive faculty is essential because it leads to a stronger, more productive culture at the school and ultimately, a healthier society." And a healthier society is, after all, the aim of all our work.

Midwives and nurses will always be a part of the global network of healthcare workers, scientists, funding bodies, community leaders and governments that strive to improve the health and welfare of us all. But we are an impressively committed, skilled and focused group: for us, the patient is at the core of all we do. In a year at Yale in which we have welcomed our largest-ever cohort of truly brilliant and passionate candidates, we celebrate the steps that are being taken towards that better world, even where there is much work still to be done.

THE ARTS in NURSING



One of our students' assignments during their first clinical experience is to begin a journal. Through their journal they can watch their own transformation. Through their writing we can understand contemporary nursing and midwifery through the eyes, hands, and feelings of these remarkable students and soon-to-be APRNs.

YSN's annual Creative Writing Awards are enlivened by the inspirational presence of YSN Professor Linda Honan (*left*). Yale nursing students submit their narratives, journal entries, and other creative writing for consideration of one of three significant student awards. This annual gathering, beloved by our community, also features prominent writers and thinkers. In 2016, author of *Life, Animated* Ron Suskind delivered a moving keynote address at this event.

Mary Catherine Bateson, called "one of the most original and important thinkers of our time," will join the 2017 Creative Writing Awardees on stage with her keynote remarks.

"That's the thing about cancer – it doesn't discriminate like some other picky eaters of the disease world."

Kellie Kozel • 2016 Creative Writing Award Winner

"I warm the diaphragm of my stethoscope in my hands and put it to his chest, listening to the blood passing through his heart." Leah Mahwinney • 2016 Creative Writing Award Winner

"This organ had been living, until seconds before, somewhat unhappily in the body of the man laying on the table, asleep and trusting virtual strangers to deliver him safely back to his life."
Lisa Rich • 2016 Creative Writing Award Winner

YSN students engage in volunteering at clinics and nonprofits, working with organizations inside and outside of the school and university on a variety of topics and passions. Some examples are below.

The Student Government Organization (SGO) works to build community at YSN. SGO represents the student body by advocating for students and providing a unified voice for students' concerns. The executive board for 2016-2017 is representative of students across the specialties and degree programs and meets throughout the semester to discuss interests and issues of our community. Some initiatives for this year include building relationships between class years within YSN, integrating nursing students into the larger health professional student network at Yale, and leveraging experience and skills in a day of service project in the greater New Haven community. The hope is to enhance connections made between students at Yale University and the communities that health professional students serve.

NEXTYSN is a student coalition that works for a more inclusive campus. The **MINORITY STUDENT NURSES (MSN)** is a student organization that aims to:

- Examine intersections of race / ethnicity with class, gender, and citizenship within health, social service, and practice settings
- Foster opportunities for meaningful collaboration, support and participation with minority and underrepresented professional health students across the Yale campus
- Encourage a wider representation of accepted students into YSN and into the Nurse Practitioner and Certified Nurse Midwife professions.



MSN is dedicated to providing support, guidance, and community for nursing students belonging to underrepresented and marginalized populations.

YALE INTERNATIONAL NURSING GROUP (YING) is a forum where all Yale nursing students interested in international health can join in discussions related to the role of nursing in global healthcare and work with like-minded students to explore opportunities to practice nursing internationally while at YSN and beyond.

Visit NURSING.YALE.EDU to learn more.

BODY

In 2016, the YSN community came together to support the wellness of our students, faculty, and staff, participating in newly offered meditation, mindful movement for stress reduction, and yoga classes. What concerns me is the sense that I get from many that they have lost faith in their ability to improve their health. They feel that forces beyond their control are increasingly determining their health. [We must change this by]...building a culture of prevention [that includes] ...emotional wellbeing.

Vivek Murthy, US Surgeon General, in conversation with YSN at Yale School of Management, 2015



GROWTH of STUDENT BODY

To meet increasing health needs nationally and internationally, greater numbers of advanced practice nurse leaders are required out in the world. YSN stands ready to deliver. Increased numbers of students bring internal benefits too, enriching the talents and viewpoints within each cohort. This has been borne out by the exceptionally stimulating range of intellectual and life experiences represented by YSN's current students – our largest group ever.

Our expansion strategy harmonizes with that of the wider university, where the \$500 million addition of two new residential colleges at Yale College is due for completion in 2017, funded entirely through the generosity of alumni. YSN's plans for growth are two-fold, incorporating both material and curricular development. Our beautiful, purpose-built teaching and research premises are just three years old, yet we continue to develop our space to provide for expanding student numbers, innovative pedagogy, and new areas of scientific investigation. Simultaneously, we have introduced innovations into our curriculum.

Eighty-five percent of entrants to YSN's Masters in the Science of Nursing (MSN) program come via our Graduate Entry Prespecialty in Nursing (GEPN) – the intensive first year of study that enables students to qualify as Registered Nurses. Of these, 80% have degrees in the arts and humanities; many have established careers or achieved further qualifications including masters' degrees and PhDs before coming to YSN.



entrants come via our Graduate Entry Prespecialty in Nursing (GEPN)





In 2016, YSN integrated a full year's Interprofessional Longitudinal Clinical Experience (ILCE) into the core curriculum for all our GEPN students—an innovation we believe to be the first of its kind in the US. Teamwork is absolutely integral to safe, high-quality healthcare, yet few graduates arrive in the work setting with any extended experience of collaborating with their colleagues from other disciplines while students.

Yale's approach revolutionizes this. The University's School of Nursing, School of Medicine, and Physician Associate program worked together for more than three years with an interprofessional faculty leadership team to design and pilot interprofessional teaching and clinical experience for students of all three disciplines. The pilot grew from nine students in the first year to 120 in the third; it was obvious from the success of the program that the experience needed to be part of the curriculum. This year, after an enormous amount of work to align the curricula of three departments, more than 250 students joined one another at 130 different clinical sites for two afternoons per week to learn their work in interprofessional teams. In addition, the student teams have evening sessions with an organizational psychologist to deal with integral topics such as group dynamics and conflict resolution.

Some of the added benefits are surprising. Not only have all students found the experience immensely valuable in preparing them for future work, but initial studies suggest that all participants experienced a measurable increase in empathy scores.



Bashir Hassan ('18) had been accepted for a Masters in Professional Studies at Cornell University when he began to question whether an academic career would

satisfy his desire to effect positive change. Experience working at Bayfront Youth & Family Services in Long Beach and as an intern at Globe Memorial Hospital in Newport Beach, California set him on the path that led to YSN. "I thought, 'Oh man, this is it!" he says. "I wanted to engage directly with people and it is nurses who have direct interactions with patients." He also wanted, he says, "a skill set that would translate anywhere I go." Having completed his first year at YSN, Hassan is interested in dermaoncology; specifically, he questions why limited attention is given to non-Caucasian skin color in current attempts to minimize the lasting visual impact of treatment.

Bashir appreciates the intellectual intensity he experiences at YSN – "They push you and push you!" – adding that, despite the pressure, his cohort is enormously supportive. "Everyone is invested in everyone, and that's critical," he says. "I love our culture a lot."

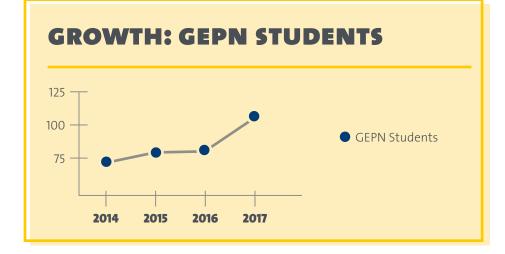


Rane Beal ('17) left his work as an elementary school librarian – and indie rock musician – to study at YSN, opting for the Family Nurse

Practitioner specialty. He has found the approach of his contemporaries and his teachers to be exactly what he had hoped for: "I was definitely attracted to this atmosphere and think it is a great way to learn...They are always pushing us while simultaneously supporting us."

When he graduates, his immediate ambitions are simply to find work and hone his skills on the job, but in the longer term he would like to see changes in the care of patients facing terminal disease. "Ultimately, I would love a cultural shift in how we talk about death," Beal has said, " – a shift away from avoidance and toward open and honest communication. We really don't know what is best for our patients until we ask them what they value, and our plans for care are weak without the patient's input."





Nursing science overlaps with the biological, behavioral, and social sciences at levels from molecules to societies considered in context and over time ... nursing scientists lead and participate in interdisciplinary team science to address complex issues that affect health and the delivery of health care.

Henly et al. including YSN's Dr. Nancy Redeker, 2015



SCIENCE at YSN

People everywhere seek to live in good health, and nursing science is foundational to that goal. In reviewing the current research of our faculty, it is clear how the deep range of work underway is always to further this universal human aim.

For nurses and midwives, our research helps people manage their chronic conditions, prevent disease and disability, cope with symptoms, understand genetic risks, have healthier pregnancies and outcomes at the start of life, and dignified care at the end of life. Our science develops new interventions as well as helps translate successful interventions into effective practice. It often means studying how to achieve the best impact in terms of people who need help, especially for those who have been underserved and vulnerable. It certainly means finding ways to promote health that do not only involve treatment of disease. And, always, it means seeing the individual patient for who they are and what they need, in the context of their family and community.



HOLLY KENNEDY

Shaping the Global Research Agenda

Making the right decisions about what kind of research is undertaken

and which key health questions get answered has the potential to save millions of dollars and, over time, improve even more millions of lives.

This September, Yale's Varney Professor of Midwifery, Dr. Holly Powell Kennedy, reported in *Lancet Global Health* on which areas of research in midwifery practice are most likely to lead to health benefits for women and children worldwide. The *Lancet's Midwifery Series*, published in 2014, revealed that providing educated midwives as part of normal practice to assist all women throughout pregnancy, birth and motherhood can result in more far-reaching benefits than focusing solely on women's access to expert intervention when things go wrong. From the 2014 Lancet Midwifery series: "Midwifery care provided by midwives is cost-effective, affordable, and sustainable." The return on investment from the education and deployment



of community-based midwives, the Lancet concluded, is similar to the lives saved from vaccination.

Kennedy was subsequently part of the international expert team that identified and assessed thirty competing research possibilities in areas of knowledge deficit made evident by *The Lancet* series. The results have been widely reported. With the same team, Kennedy is now organizing a WHO-hosted conference for Spring 2017 to agree on next steps in achieving these priorities. The Geneva-based gathering will bring together donors, researchers, and advocates from around the world with the specific agenda of forging collaborations to explore the highest priority areas of study.

In an area as central to human life as maternal and neonatal health, the impact of asking – and funding – the right questions is hard to overestimate. Inclusion, Dr. Jacquelyn Taylor, indicates that current efforts to remedy the crisis do not go far enough.

Omics (genomics, epigenomics and metabolomics) is a specialty area of Taylor's. She has led many studies on the interactions between genes and the environment in Black populations. In July this year, working with colleagues from YSN and MIT, Taylor published a call in *Nature npj Genomic Medicine* for additional testing and treatment of the residents of Flint. Taylor's argument is founded in previous work, published in 2002, concerning the effects of environmental lead exposure on children in Detroit, Michigan. In this study, she identified a gene – ARSA/ASA – the presence of which indicates increased susceptibility to symptoms of lead poisoning even at blood lead levels below the poison mark of $5 \mu g/dl$. Of the African-American children involved in the study, more than 45% carried this gene: a higher prevalence than among people of European or Hispanic ancestry. An estimated 60% of the population of Flint are African American.

Taylor calls for immediate genetic testing of the residents of Flint. Such screening can be carried out via a non-invasive saliva test, conducted by nurses. Flint residents with blood lead levels lower than 5 μ g/dl are not currently being treated or followed for adverse effects of lead exposure.

JACQUELYN TAYLOR Advocating for Vulnerable

Populations with Genomics

In 2014, the entire population of Flint, Michigan was exposed to contaminated drinking water following a change in the city's source of water. The increased corrosiveness of the water led to significant lead contamination from old pipework. The resulting scandal was reported around the world and the

political, legal, financial and social implications continue to reverberate. So, too, do the effects of drinking contaminated water on the health of the residents. The research of YSN Associate Professor of Nursing and Associate Dean of Diversity and



YSN's Dr. Jacquelyn Taylor (above right) with Dr. Shrikant Mane, Director of Yale Center for Genome Analysis.

But for people who are genetically vulnerable, Taylor argues, further testing and treatment is needed even below this blood lead level to ameliorate long-term effects on health. Further, as infrastructure ages in cities across American – and indeed, across the industrialized world – other urban areas are in growing danger of rising lead contamination from old pipework. The crisis in Flint affords an opportunity for nurses to carry out a state-of-the-science, genetically targeted intervention that could be instrumental in reducing risks to health elsewhere.

NANCY REDEKER, LOIS SADLER, Monica Ordway, Eileen



Redeker

Advancing Research Through Collaboration and Mentorship

Dr. Nancy Redeker's distinguished research career examining the role of sleep disturbance in health and recovery – particularly in patients

with or at risk of heart disorders – is well known. She has also investigated sleep behaviors among adults in acute and critical care settings, and in conditions of economic adversity. Redeker most recently published (in *Nursing Research*) the results of a study of how daytime symptoms mediate the relationship between disturbed sleep and functional performance in patients with heart failure. Her analysis builds on a considerable body of her existing research in related areas and points the way towards next steps for investigation.

A frequent cross-disciplinary collaborator, Redeker is engaged in a joint study – funded by the National Institute of Nursing Research (NINR) of the National Institutes of Health (NIH) – with her SADLER YSN colleague, Professor Lois Sadler, who is additionally affiliated with the Child Study Center at Yale School of Medicine. The study, titled "Community Partnership for Healthy Sleep", involves gathering foundational information in order to work over the longer term with parents of 6–36 month old babies to establish healthy sleep behaviors. The ultimate objective of the program is to promote for those children the lifelong health benefits associated with sufficient, high-quality sleep.

Two lead researchers could hardly be more perfectly paired for a program of this nature. Redeker's experience as a sleep researcher has been discussed, while Sadler has worked extensively with adolescent parents and their children. With colleagues at the Child Study Center, she was instrumental in developing "Minding the Baby" – an intensive home visiting program for young mothers and their children. First launched in 2002, by 2014 the program was designated by the Department of Health and Human Services as an evidence based home visiting model, one of only 17 such models in

America. It is now being expanded into use in England, Ireland and other settings internationally. *Minding the Baby* continues to grow in public awareness and acclaim: earlier this year it was included in a *New Yorker* feature story by Jill Lepore.



Themes of Sadler's research continue to develop through the work of a new generation of scholars like YSN PhD student Eileen Condon. This fall, Condon received a two-year NINR grant to further her doctoral research, a cross-sectional study connecting parent variables with markers of chronic stress in children, including cortisol, C-reactive protein, and inflammatory cytokines. Condon hopes this study will shed light on the ways parents can protect their children from toxic stress, and ultimately improve their long term health.

"I'm interested in how toxic stress impacts the health and physiology of children," says Condon,



YALE SCHOOL OF NURSING'S BIOBEHAVIORAL **Research Laboratory**

In addition to her research and faculty role, Redeker serves as director of the Biobehavioral Research Laboratory at YSN, which extends the work of the Yale Center for Sleep Disturbance in Acute and Chronic Conditions, where she is Principal Investigator.

The Biobehavioral Research Laboratory co-locates a variety of research projects and facilitates closer interdisciplinary collaboration and discovery. Users

include colleagues from a number of departments – notably the Yale School of Medicine – working in any area where the health-related interaction between biology and behavior is relevant. The stateof-the-art facility incorporates spaces designed and equipped for the study of sleep, behavioral and clinical assessment, as well as laboratories and rooms for interviewing, teaching, and conference activities. YSN actively promotes and facilitates interprofessional study and research, in which the Biobehavioral Research Laboratory is a highly effective tool.

who also earned her MSN from Yale. "My research looks at what parents are doing well to determine what components of their parenting are protective against these environmental stressors."



YSN Assistant Professor Monica Ordway's work is informed by the germinal research of Redeker and Sadler, both of whom serve as her faculty mentors. Recently awarded a K23 (clinical research training grant)

ORDWAY from NINR, Ordway's scholarship focuses on examining the role of sleep as a potential buffer to the prolonged stress response associated with toxic stress among very young children living with adversity. "The aim of my study is to understand the relationships among biomarkers [in hair and saliva] of stress response, sleep data collected from an actigraph – a sleep tracker – and social-emotional health in toddlers living in socioeconomically disadvantaged homes," Ordway explains.

She hopes that her research could influence the development and testing of interventions by

identifying what components of sleep - timing, duration, efficiency – may reduce the risk of longterm health outcomes. "My goal is to follow these toddlers into young adulthood, and expand the biomarkers collected, including telomere length. This is a nascent area of science and a place where we could make a real difference in reducing health disparities in these vulnerable children."



NANCY REYNOLDS

Expanding the Global Reach of Nurses with mHealth for Better Outcomes

The most impressive clinical developments in the world can only work if treatment is available and utilized. Even where people have reasonable access to drugs, there may be many other factors – such as mental health issues, lack of support or the stigma of disease that make medication-taking consistency hard to achieve.

Dr. Nancy Reynolds, Independence Foundation Professor of Nursing at YSN, is an investigator of the complexities of medication and treatment adherence, particularly among people living with HIV around the world. Her work seizes on the potential of low-cost, widely used technologies to broaden patients' access to personalized nursing care. Specifically, Reynolds has been instrumental in investigating the use of mobile phone contact from nurse to patient as an easily replicable, effective, and scalable method of encouraging adherence to treatment.

Writing in BMC Health Services Research in collaboration with colleagues in India and Yale, she recently described the protocol being trialed to evaluate a nurse-delivered intervention in India that uses mobile phones to help women with HIV adhere to treatment. The women in the study were selected for their combination of HIV status with psychosocial risk factors including depression, stigma, and discrimination. Crucially, the mobile phone (or "mHealth") intervention is in the form of a phone call - rather than a text - from a trained but non-specialist nurse. Speaking to patients means nurses can be certain they have reached the right person, and circumvents issues of literacy. It enables the nurse to be responsive to patients' individual cues and, perhaps crucially, to build rapport, enabling the nurse to act as a mediator between patient and medical system. If the protocol proves to be a robust tool for delivering evidence that the intervention is effective, there may clearly be myriad uses internationally for similar systems of support in treating chronic



disease. And if such techniques were extended to support prevention as well as treatment regimes, the implications for world health, including towards the current policy goal of ending AIDS, could be substantial.



Dena Schulman-Green

Extending the Reach of Palliative Care

YSN is proud of its role in the development of palliative and end-oflife care, its faculty under former Dean Florence Wald

having been instrumental in introducing hospice to the US in the 1970s. Despite the transformation of cancer treatment and survival rates since those days, palliative care is still an underused, even misunderstood resource. The work of research scientist Dr. Dena Schulman-Green, of YSN and the Yale Cancer Center, seeks to help change that.

Schulman-Green has gained recent recognition for her palliative care research, having been tapped by the Israeli Ministry of Health this year to help expand Israel's palliative care infrastructure.

At Yale, her research expands the reach of palliative care in clinical applications as well: Schulman-Green and colleagues have developed an intervention in the form of written guidance about selfmanagement of care for breast cancer patients and their families. The seven-module intervention, titled *Managing Cancer Care*, seeks to introduce palliative care into self-management of cancer by increasing palliative care literacy.

Two pilot randomized controlled trials, described by Schulman-Green in *Contemporary Clinical Trials*, are underway to test the protocol for a further, largescale trial of the intervention.

As Schulman-Green points out, some health care providers are reluctant to introduce palliative care until far too late during treatment. Patients may also be hesitant to discuss this option, "because it is frequently mistaken as being only for patients at the end of life." In fact, she explains, "palliative care is a care option for seriously ill patients at all points on the care trajectory." Palliative care is specifically developed to help relieve the physical, psychological, social, and spiritual hardships of living with serious illnesses and- crucially – may be offered alongside curative care as part of self-management of the disease.

Sometimes a psychological barrier to communication – in this case, sensitivity about acknowledging the threat of death inherent in cancer – can be all that stands between patients and more effective care. Schulman-Green seeks a solution through empowering the patient to understand and choose from the widest range of options available, including palliative care.



ANN KURTH Defining Primary Care, Setting National Standards

Members of the Yale School of Nursing community shape primary care in many ways through their clinical practice and research. The current work of Dean Ann Kurth, '90, includes service to the United States Preventive Services Task Force (USPSTF), which sets clinical preventive services guidelines for the US and where her approach is informed by her experience as a Yale nurse midwife, researcher, and epidemiologist.

Appointed by the US Department of Health and Human Services, members of the USPSTF are independent and non-governmental experts in primary care and prevention, supported by the Agency for Healthcare Research and Quality which has been authorized by the US Congress to convene and support the Task Force. The Task Force evaluates the evidence to determine the efficacy of clinical preventive services, including screenings, counseling, and preventive medication. Members serve four-year terms and represent a range of expertise from the fields of preventive medicine and primary care – Dean Kurth is currently the sole nurse on the Task Force and the first-ever certified nurse midwife to serve. "Nurses and midwives are true believers in evidence-based research, practice and care. That's what makes this work particularly appealing to me."

The Affordable Care Act (ACA) currently requires that private insurance



companies cover the cost of the Panel's "A" and "B" recommendations, in order to make those preventive services accessible without cost-sharing like co-pays, deductibles, or co-insurance. "[The implementation of the ACA] brought a new level of impact and subsequent scrutiny on the Panel's processes," Kurth states, "further heightening the importance, care, and rigor with which we work."

The group's work is published in the Journal of the American Medical Association (*JAMA*) and other major scientific journals. The JAMA site also includes podcasts and patient materials about key Task Force recommendations. Indicative of the public's interest and engagement, the recommendations are discussed and reported on by national media outlets every week. Each year the Task Force also submits a report to the US Congress, including highlighting those areas of clinical preventive services for which there is insufficient evidence; these research gaps are also reviewed by the National Institutes of Health as they weigh future funding calls needed to address key health priorities for the nation.

Dr. Kurth currently leads the Dissemination and Implementation workgroup at USPSTF. "The goal is to make a beneficial impact in primary care practice and at the population level," Kurth explains. There's a very necessary part of science in clinical guideline implementation."

For more information on science at YSN visit **NURSING.YALE.EDU**

The advances of clinical science and nursing science, which cannot now be stopped, will always contribute to a nursing shortage, because what those advances do is create more work. When nurses know more, we can do more, and we find more that needs to be done."

TA

Donna Diers, Former YSN Dean,'64 – Speaking of Nursing



DIVERSITY INCLUSION

Students, staff, and faculty at YSN have focused on ways to help the university as a whole become more inclusive. YSN's Student Affairs Office supports the school's wellness programming to encourage a culture of stress reduction. Staff and faculty are actively engaged in a joint workplace culture committee to enhance climate and community at YSN.

The **Summer Intensive** will utilize an interdisciplinary health sciences approach to addressing social justice and health equity. YSN will have five diverse scholars from across the country participate. The goal is to support diverse nursing scholars to enhance the discipline overall as well as a strategic approach to diverse faculty career development and to actively enhancing diverse scholars in nursing science. The summer Intensive will be held on Yale's West Campus. during the week of June 2017. Through the Summer Intensive, we aim to:

- Identify and encourage early-career nurse scientists from diverse backgrounds in nursing and midwifery who aspire to careers in academic nursing
- Enrich nursing and midwifery science to address social justice and health equity
- Mentor and support early-career nurse scientists from diverse backgrounds to conduct such research

The YSN Visiting Scholars Program focuses on supporting scholars from outside institutions who do a range of areas and work, to engage with our community during focused stays on campus. Scholars will be selected for their contributions to their professions, and their potential contributions to the life of the YSN Office of Diversity and Inclusion. The Program will be open to individuals of any underrepresented group, with an emphasis on the appointment of scholars who demonstrate an interest in health equity and/or social justice. The goal is to immerse the visiting scholar in the Yale University research environment to collaboratively generate effective work to improve the contribution of nursing and midwifery to key health issues worldwide.



JACQUELYN TAYLOR, PHD, PNP-BC, RN, FAHA, FAAN

Dr. Taylor was appointed Associate Dean of Diversity and Inclusion this year. Dr. Taylor leads the YSN Office of Diversity and Inclusion in its goal to actively enhance diversity at YSN and her role focuses particularly on diverse faculty recruitment and retention. "It is truly an honor to be selected to serve YSN as the inaugural Associate Dean of Diversity and Inclusion," stated Taylor. "This is an exciting time at YSN, and we are all engaged in taking these important steps toward a more diverse and inclusive environment. We have a dynamic action plan to begin these changes at YSN, and I am energized to lead the charge that will help our school to enact and live our mission of 'better health for all people.'"



HEATHER REYNOLDS, MSN, CNM, FACNM

After serving as key Midwifery program faculty for 30 years, Heather Reynolds is staying at YSN in her role as minority student coordinator. She helps lead YSN's efforts to enhance a culture of diversity and inclusiveness at YSN and her role focuses on diverse student recruitment, retention, and education. Reynolds says, "my mission is to facilitate the development of a competent, caring and astute cadre of practitioners to care for all people, especially for communities that are disenfranchised and have the greatest need for that care."

YALE NURSES PUBLISH LETTER TO POLICE IN HUFFINGTON POST

Dr. Mark Lazenby, Dr. Jacquelyn Taylor, Dean Ann Kurth, and alumnus Everol Ennis recently teamed up to write an op-ed in the Huffington Post, "The Power to Serve, The Imperative to Protect: A Letter to Police from Nurses." While the authors acknowledge the importance and inherent danger in the police profession, they demand action to address the public health crisis of men of color, particularly Black men, dying at the hands of police. These Yale nurses emphasize "as nurses, and nurses of color, we can no longer be silent witnesses to this epidemic."



Student-Alumni NETWORKING & MENTORING

Yale School of Nursing Alumnae/i Association (YSNAA) Board of Directors is an active provider of programming for YSN students. Run by motivated and interested alumni who are passionate about giving back to students, they develop programs to enhance the student experience.

One of the most popular programs is the student-alumni mentoring program, where students are matched with alumni mentors from a geographical region where they intend to practice or in their specialty area.

A popular "Speed Mentoring" event is held every fall semester. Inspired by "speed dating" events, this gathering features small groups of rotating students working with one alumna/us at a time for 10-minute intervals. Other programs include resume-review services, mock interviews, and the Career Panel, showcased each spring. The panel provides a range of career advice to students including how to approach and negotiate with future employers.

Under the direction of YSNAA Board President Mary Geary '74, one of the Board's current goals is to engage even more students and different alumni perspectives in programs throughout the year. The alumni board and association overall offers invaluable advice and networking opportunities, and provides access to a lifelong network for students and alumni alike.



Mentor / Mentee Spotlight Jae Patton, '99 and Kelsey Schuder, '16

"I'm in Baltimore for a curling meet – can I stay with you for a night?" my mentee, Kelsey Schuder's email read. I had encouraged both my mentees to reach out if they were ever in the DC/Baltimore region and was thrilled to hear from Kelsey. Over dinner, we talked about her background as a Peace Corps volunteer and her interest in trauma and emergency fellowships. She also expressed her concern that she hadn't been able to

get an ER or trauma clinical placement. Saint Agnes Hospital, where I work, has a small but busy ER serving the west side of Baltimore. I found a PA there who was happy to take a YSN student. Kelsey spent three intense weeks over Christmas break – including New Year's Eve! – completing a clinical experience in Baltimore. Kelsey now has the real world experience to help her decide if ER work is for her, and she feels she's much more competitive for an ER fellowship if she chooses to apply. And as a bonus, I now have a colleague in the ER who I never would have met, creating more opportunities for my clinic to collaborate. Mentoring always seems to help the mentor as much or even more than the mentee.

–Jae Patton, '99

My reason for attending was to make a difference in the world of policy."

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Lynn Malerba, '15 DNP



DOCTOR of NURSING PRACTICE

The YSN Doctor of Nursing Practice (DNP) program for mid-career nurse leaders, launched four years ago as Yale's first-hybrid degree program, immediately attracted astounding candidates and continues to do so. In keeping with our mission, the emphasis of YSN's program is on management, leadership and policy, to equip graduates as health systemlevel advocates and nurse-leaders in pursuit of *better health for all people*.

RONICA MUKERJEE, DNP Student

Transgender persons are underserved both by healthcare and insurance services. Almost a quarter of all transgender people have had the experience of being refused healthcare on the basis of their gender identity. It is unsurprising, then, that many trans people are likely to forgo care altogether, or to explore alternative, often unsafe sources for the treatment they require, rather than risk rejection or a hostile reception in the clinical environment.

As part of her DNP program at YSN, Ronica Mukerjee is drawing up clinical guidelines for care of transgender people from the perspective of cultural safety: currently, few exist. Mukerjee is a full-time professor at St. Francis College in Brooklyn, NY as well as a clinician-researcher at SUNY Downstate, in an HIV-health center. She has worked with transgender people for more than eight years. Every aspect of her work also involves fighting to improve transgender patients access to and experience of care. "Here's the cliché," says Mukerjee. "I spend 24 hours a day doing it. There's no way to provide healthcare for transgender patients without doing advocacy work."

YSN's focus on management, leadership and policy in the DNP program is clearly ideal for Mukerjee, who is already a pioneer in her field – although she is relieved to point out that there are, increasingly, more people in healthcare doing work like hers.

"This isn't just for nurses," she says. "It's the same for many doctors and other healthcare workers. I spend a lot of time educating people that this isn't an identity politics issue – it's a human rights issue."

Lynn Malerba, '15 DNP

Chief Marilynn (Lynn) "Many Hearts" Malerba is the lifetime Chief of the Mohegan Tribe. She is also a Yale DNP – one of the first class to graduate, in 2015. She came to Yale as a BSN – a former critical care nurse in cardiology – having meanwhile been elected as tribal leader and gained a Masters in Public Administration with a focus on public policy. She was attracted to YSN's program, she explains, because of "its focus on policy and leadership. My reason for attending was to make a difference in the world of policy."

She is now an advocate at the highest level of policy-making. In addition to her duties to the Mohegan Tribe, Chief Malerba sits on many federal advisory committees to uphold the interests of all Indian tribes throughout the US. Most recently, she welcomed President Obama to the stage at the 2016 Tribal Nations conference *(below)*, praising the outgoing President for his interest in partnering with the Native American peoples."



Throughout the celebratory and ceremonial activities her role involves, her focus on hard realities remains clear: she is "trying to ensure that not only does the government uphold the right to health care for all American Indians and Alaska Natives but that we address the social determinants of health as well." In Chief Malerba, her constituents have a representative who knows both healthcare and healthcare policy intimately as a practitioner and a scholar. "Particularly in the realm of healthcare, there is such inequitable treatment between the Indian Health Service (IHS) and all the other federal health programs," she has written, "despite the fact that we are the only people with treaty rights to healthcare."

"Many Hearts" – Mutáwi Mutáhash – is the name given to Chief Malerba by the Mohegan's medicine women as symbolic of her two careers: "You have held many hearts in your hands and as chief, you hold all our hearts in your hands." These are responsibilities to which the Chief has dedicated her life as a nurse, a campaigner and the representative of a marginalized population. YSN could not ask for an alumna who more clearly embodies our mission.

For more information our hybrid DNP program visit **NURSING.YALE.EDU**

Hybrid DNP Program at YSN

The unique educational format of the hybrid DNP program at YSN includes in-person intensive sessions throughout the semester, along with online coursework, use of modern group collaboration tools, and remote participation with lectures and meetings. Below, a YSN group demonstrates the use of Eve, a robot that hosts a remote user, allowing them to communicate and move within and among DNP meetings and other learning environments.



The faculty are very empowering. They give you the responsibility to create your own path, and encourage you to realize that your ideas are good and you can make your own career.

Jose Gutierrez, YSN PhD Student

DOCTOR of PHILOSOPHY

Yale School of Nursing is recognized as the birthplace of clinical nursing research and is long renowned for its excellence in graduate education. Early nurse researchers such as Virginia Henderson, Rhetaugh Dumas, Florence Wald, Jean Johnson, and Donna Diers did their pioneering work here. The PhD program builds on this rich history. This degree program prepares intellectual leaders with analytical skills who can contribute to the development of nursing science. Nursing science has as its goal the development of a body of knowledge to be used as the basis for nursing practice.



ABBE MULLER, PhD Student

"Stretched" is the term most often used by students at every level when talking about their nursing studies at Yale. For Abbe

Muller, embarking on the first year of her PhD in Nursing Science (infectious disease), the level of intellectual challenge has already been "fantastic – a unique and wonderful experience. My Masters [in Epidemiology and Global Health] seems rote and automatic by comparison. This makes you a more thoughtful nurse and scientist."

Indeed, the freedom of the PhD curriculum is one of the things that attracted Muller to Yale in the first place. "They have so many researchers available that they let you explore while being very supportive," she enthuses, while acknowledging that, "It's pushed me – I'm in charge of my own education."

Muller's recent professional life has involved nursing care for the "international-national" population: recent immigrants with complex issues relating to poverty, uprooting and homelessness, as well as medical problems that have become rare in the wider US community. With Kurth, she has been looking at Hepatitis C spread and management in Kenya. "Once you understand how the disease moves in a population, you can pinpoint where and how to design your intervention where it impacts the most people," she explains.



Jose Gutierrez, PhD Student

Jose Gutierrez earned his MSN at YSN and knew he wanted to continue researching the prevention of HIV/AIDS,

particularly developments in pre-exposure prophylaxis (PrEP). During his lifetime, he has seen how far management of the disease has come. "When I was younger, HIV/AIDS was pretty much a scary killer disease and now, in the US it's a chronic disease," he explains."The trick these days is to get people to adhere to their medication."

Adherence is a major research interest for Gutierrez and was an important factor in choosing to continue his studies at Yale: he was eager to work with faculty member and (among other things) adherence specialist, Nancy Reynolds. "She was top of my list as a research mentor," he says. Through Reynolds, he has immediately become involved in a study in Ghana investigating the impact on the health of HIV-positive children of their caregivers' literacy and numeracy levels.

Gutierrez is used to responsibility. In addition to his qualifications as a RN and MSN, he has been an active member of the US military since leaving high school and remains affiliated, fulfilling regular training commitments. He is now 2nd Lieutenant with Massachusetts Air National Guard. If he is in Ghana collecting data, he is confident there will be a back-up plan: he has found YSN and the military supportive and flexible in allowing him to fulfill his obligations to both.

For more information our PhD program visit **NURSING.YALE.EDU**

Science at Yale is a university-wide endeavor, including the Schools of Medicine, Nursing, and Public Health, Forestry & Environmental Studies, the Faculty of Arts and Sciences, and beyond.

Science can change – and improve – the world. The discoveries and new knowledge that emerge from our faculty members' research will help solve some of the most pressing issues of our time.

> Peter Salovey, President of Yale University, in his 2016 outline of academic priorities

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