

# PEDIATRIC NURSE PRACTITIONERS *all the* POSSIBILITIES

*To illustrate the kinds of opportunities that are open to pediatric nurse practitioners (PNPs), we've assembled profiles of six PNPs, all graduates of the School of Nursing or members of the faculty, or both. It's a remarkable group: a school nurse with an innovative touch; an emergency room nurse and self-styled expert in international health; a specialist in adolescents with HIV/AIDS; an authority on diabetes, with experience in data mining; an expert in mentoring, parenting issues related to incarcerated women, and developmental screening; and a specialist in informatics, childhood obesity, and school nursing.*

## BACK TO SCHOOL

*Sharron Close, BS '01, MS '03*

At first glance, it would be easy to mistake Sharron Close for one of those stereotypical suburban soccer moms whose lives revolve around car-pools, doctor's appointments, and other routine activities. Indeed, she has two children, a physician husband, a comfortable house in Westchester County, and the requisite SUV. But the similarity begins and ends there.

Every weekday, Ms. Close commutes three hours roundtrip to work as a pediatric nurse practitioner (PNP) in two school-based health programs in Hell's Kitchen — midtown Manhattan's western edge — where the consequences of substance abuse, unsafe sex, and violence are part of the daily clinical mix.

"I can't wait to get up in the morning," she says, despite the long commute and gritty destination. "I love my patients, the community. I get to see nursing and community outreach at its best."

Actually, Ms. Close was a soccer mom for a brief time. But as her children got older, she began to think about a career in nursing. It wasn't as big of a leap as it might seem. For more than two decades, she had worked as an audiologist in academic medical centers in Texas, her longtime home.

"I come from a medical family," she adds. "My dad was a general practitioner in Maine. He had an office in our house when we were small. I remember him delivering babies on the dining room floor and picking

*by* GARY  
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*Sharron Close, PNP,  
with a patient.*

pieces of windshields out of people's foreheads on the front porch. So I gravitated toward biology and the physical sciences, and then I worked with doctors and nurses throughout my professional career. As my mommy years came to an end, I realized I just love working with children, so why not go back to school? I decided to become a nurse practitioner because I wanted a bigger piece of the medical pie than I had in audiology."

Ms. Close brushed up on her sciences and then enrolled in the School of Nursing's accelerated Combined BS/MS Program, which prepares non-nurses for a career in advanced practice nursing. In 2003, as a newly minted PNP, she went to work in two school-based health programs in Manhattan, in P.S. 51 Elementary School and in Norman Thomas High School. Both programs are run by Bellevue Hospital Center's Department of Pediatrics.

Historically one of the city's toughest neighborhoods, Hell's Kitchen is no longer filled with slaughterhouses, tenements, bootleggers, and thugs. But it's still a magnet for new immigrants and low-income groups of all stripes, with all the attendant health and social ills — asthma, lice, obesity, unplanned pregnancies, dating violence, HIV, and so on. These problems inevitably surface in the schools,



and in Ms. Close's clinical practice. As one might expect, she has faced some extraordinary clinical challenges, such as the 12-year-old girl who was sexually active but not using birth control or practicing safe sex. Making matters worse, the girl would regularly lash out at her boyfriend in jealous fits of rage. "I can't stand it when he doesn't hit me back," she explained to Ms. Close. "I don't respect that. I can't be with a guy I don't respect. The first guy who hits me back, that's the man I'll marry." Ms. Close took the case in

stride, even turning it into a paper on dating violence prevention, published in 2005 in the *Journal of Child and Adolescent Psychiatric Nursing*.

She seems to relish every aspect of nursing. "I love the Sherlock Holmes part of nursing, the deductive reasoning, seeing a patient with a set of symptoms, going through the differential diagnosis and coming up with possibilities," she says.

Ms. Close also welcomes the

thankless task of wrangling with bureaucracies, so as to ensure that her treatment recommendations are actually put into practice. "If the parent can't afford the medication I just prescribed, I make sure that they get it. I find a way," she says. "It's up to the nurse practitioner to finesse the system and figure out how to access the available resources."

Working in school-based health has unearthed the innovator and scholar within. To engage and educate mothers and fathers in childhood health issues, Ms. Close started a monthly "Parent Health Chat," incorporating breakfast get-togethers with short lectures on such topics as rashes, child abuse, and stress.

In another novel program, she's taken on the rising problem of childhood obesity. After a school-wide screening revealed that more than half the students at P.S. 51 were overweight, Ms. Close and her colleagues created "GeoFit," a combined fitness and

educational program designed to motivate children to exercise by awarding them 'mileage' toward specific destinations in the United States. "Each grade was given a destination city," she explains. "We engaged the teachers as well, by having each class contact the mayor and an elementary school in their destination town. The kids got goody bags and mail from out of state and learned what it is like to go to school in other cities. As the kids learned more about their destination state, it motivated them to exercise more. The classes got very competitive with one another. The first class to reach their destination won \$100, which they were able to put toward a physical activity. This year, it was bowling."

In 2005, Ms. Close and her colleagues won a School Health Index mini-grant from the Centers for Disease Control and Prevention that is supporting the creation of a continuing health and fitness education program for the students and families of P.S. 51.



*Sharron Close, PNP,  
with students at P.S. 51  
Elementary School in  
New York City.*

With two baccalaureate degrees and two master's degrees in hand, Ms. Close thought she was done with higher education forever. That was until faculty member Kristine Gebbie, DrPH, the Elizabeth Standish Gill Associate Professor of Nursing, learned about GeoFit. Dr. Gebbie saw in Ms. Close a budding scientist and encouraged her to pursue a doctorate in nursing science.

It didn't take much convincing. "In practice, I've seen any number of things that bother me," she explains. "In Texas, we say, 'That's a burr under my saddle blanket.' For instance, I want to know why many adolescents choose not to use birth control, and why there is so much child abuse. I want to be able to look at these and other questions critically and set up experiments to test my theories."

Today, Ms. Close is a first-year Doctor of Nursing Science student at Columbia, as well as a full-time PNP. Not surprisingly, she's brimming with ideas for her dissertation. "I'm very interested in obesity prevention in children. I might choose to study health policy, to learn how to write laws for the protection of children. I would like to look into Internet sexual predation — why there is predator recidivism and why some children are more vulnerable than others. Once again, I like everything, so choosing a topic is going to be a challenge," she says.

"Two years ago, if you 'Googled' me, you would have discovered that I had once won first place in a recipe contest," she says with a laugh. "That was my claim to fame." Now, she has one published paper to her credit and a second in progress (on gray ethical areas in providing confidential reproductive health services for adolescents). Google will surely have a lot more to reveal about Ms. Close in the years ahead.

## MARY CARES

### *Mary Lou Larkin, MS '98*

Haiti is one of those forsaken places that enter the American consciousness only when disaster strikes, from bloody coups to epidemics to hurricanes. So, when Mary Lou Larkin was asked if she were interested in doing volunteer work there, her initial reaction was, quite reasonably, "I'd love to, but is it safe?"

Seven years and more than a dozen visits to Haiti later, Ms. Larkin would answer the same query with an emphatic 'yes.' "Once you go, there's something about the country and the people," she says. "They are wonderful. It's so upsetting, in the paper all you see is the violence, and you think, 'What a violent culture!' But it is not that way."

Ms. Larkin has become something of an expert on health in Haiti, the poorest nation in the Western Hemisphere. Since 1999, she has played a lead role in a volunteer effort to bring basic health care and other services to Jacquesyl, a primitive village of 1,200 on Haiti's northeast coast. Small in size but large in impact, her non-profit group, called Haiti Marycare, Inc., has built an array of clinical services that have profoundly improved the quality of life in this isolated rural outpost.

Remarkably, Ms. Larkin accomplished this without a whiff of prior experience in international health, all the while holding down a full-time job as a nurse practitioner in the pediatric emergency room at Jacobi Medical Center in the Bronx. What Ms. Larkin did have was a wealth of nursing expertise. One could say she had been preparing for this role her entire career.

Fresh out of nursing school, in 1974 she took a position with Kentucky's storied Frontier Nursing Service, a pioneer in rural public health nursing and nurse-mid-

wifery. The experience was priceless. Working alongside seasoned nurse practitioners, she learned first-hand that advanced practice nurses were eminently capable of managing patients with little oversight, even in the most challenging settings.

It was a lesson that Ms. Larkin would never forget, although she would wait almost a quarter century to become a nurse practitioner herself. Simply put, life intervened — a husband, four kids, a mortgage. During those years, the longtime Danbury, CT, resident worked as a critical care nurse, an emergency room nurse, a staff nurse in a private pediatrics practice, and as a school nurse.

She also found time for community service, volunteering in a free health clinic, Bedford Hills State

Prison Children's Program, and Danbury Federal Correctional Institute, bringing her into contact with women and children from the world over, most struggling at the bottom rung of the socioeconomic ladder.

Through it all, the thought of becoming a pediatric nurse practitioner and practicing with more responsibility and autonomy, never faded. Finally, in the mid-nineties, realizing it was now or never, she enrolled in Columbia's PNP program. Upon graduating in 1998, she joined the staff at Jacobi, where she oversees the care of children with everything from broken bones to sickle cell anemia to influenza, a range of ailments not uncommon to urban ERs. It's everything she hoped advanced practice nursing would be.



*Mary Lou Larkin, PNP, holding a child in front of a door with a vaccination sign written in chalk.*

*photo by T. Larkin*

Mary Lou Larkin, PNP,  
examining a child held by  
her mother.

photo by T. Larkin



Around the same time came the opportunity to volunteer in Haiti. On her first trip to Jacquesyl, she found a village barely removed from the Middle Ages. Infant and maternal mortality rates were sky high. Kids were getting infectious diseases for want of routine vaccinations or suffering from dysentery and dehydration for lack of potable water. Malaria was commonplace.

Inspired by Paul Farmer (the Harvard physician who founded Partners In Health, the international health and social justice organization), Ms. Larkin started a rudimentary primary care clinic in Jacquesyl. Staffed by a doctor, a nurse, and a lab technician, all Haitian, the clinic offers an array of services: vaccinations, infant and maternal care, nutrition and hygiene classes, home visits, and more.

Her husband, Tom, joined the effort as well, equipping the clinic with a simple water filtration system. Soon, the whole town was gathering at the clinic for

clean water, overwhelming the supply. A trade-show-display salesman by vocation, Mr. Larkin proceeded to teach himself the basics of wells and water systems and teamed with a Canadian outfit to build two more wells. They also trained a group of men from Jacquesyl to clean old wells and dig new ones, with an eye toward establishing a locally run, self-sustaining well water business.

Now that the clinic is running smoothly, Ms. Larkin travels to Haiti twice a year, where a good portion of her time is spent making home visits. "When I first went there, I never saw any handicapped kids," she says. "It turned out their families were either too poor to come to the clinic or they were embarrassed. So, I asked to be taken to their houses. In the home, you see so many problems that you don't see in the clinic, because everybody comes dressed in their Sunday best." She also makes home visits for the elderly, who were similarly invisible to the clinic.

In addition, Ms. Larkin takes time each trip to consult with the local health committee. "I've found it is best to ask what the people need, and to take my guidance from them," she says.

Once crammed into a single room in the village school, the clinic is now located in a building of its own, replete with four exam rooms, an office, and a modest laboratory — thanks to another nongovernmental organization, Plan International, and the hard work of the Jacquesyl community.

Haiti Marycare's services are constantly expanding. One year, she brought along a dental hygienist and another year a physician, who offered hypertension and gynecology clinics. In 2006, the clinic started giving Hemophilus type B influenza vaccinations, supported by a grant from the National Association of Pediatric Nurse Practitioners and Wyeth Pharmaceuticals.

Malaria prevention has become another priority. The clinic has run educational workshops for adults and children, teaching preventive measures such as eliminating standing water and cleaning up garbage. Ms. Larkin also raised funds to buy a bed net for every resident, a venture two years in the making — offering a glimpse of how difficult it is to raise funds for and carry out even the simplest international health project. "Paul Farmer says that the poorest of the poor are the last ones to get anything because they don't have the infrastructure," she explains. "The roads here are terrible. We had a truck, but it was stolen by the rebels in the last coup. We borrow one from the bishop when we need to transport something to Jacquesyl."

Like so many other non-profits, Haiti Marycare struggles to make ends meet. Back home, Ms. Larkin devotes a good deal of time to fund raising — a necessary evil, in her mind.

Slowly, things are getting better in Jacquesyl. "Our

hope is that people will stay and build a life there," says Ms. Larkin, rather than move to the capitol, Port au Prince, which is wracked by poverty, disease, and violence. "There are no jobs there. A lot of people come back with AIDS. I haven't seen anything good happen when people have left for the city."

But Ms. Larkin prefers to focus on the positive, a spirit captured in the Haitian proverb she likes to quote: "Lespwa fe' viv" — hope makes us live. One of her hopes is that the Jacquesyl clinic will serve as a model for other villages. "As far as primary care goes, there's nothing except our clinic for miles around," she says. "People travel hours to get to our clinic. What we do can be duplicated."

For more information about Haiti Marycare, go to [www.haitimarycare.org](http://www.haitimarycare.org).

## FEET IN THE MUD, HEAD IN THE CLOUDS

*Susan Ledlie, MS '92, PhD*

If anyone had told Susan Ledlie, Assistant Professor of Nursing, at the outset of her career that she would eventually become an Ivy League professor and researcher, she would have said, "You have the wrong woman."

Back then, Dr. Ledlie was studying for an associate's degree, at a school that only a year before had been a hospital-based diploma program. Soon she would become a staff nurse in pediatrics at Methodist Hospital in her native Brooklyn, with her "feet in the mud," as she describes it, doing the hard work of nursing. Columbia University was only a borough away, but it might as well have been on another continent. "I used to think that places like that were ivory towers," peopled with researchers with their "heads in the clouds," she says.

*Susan Ledlie, PNP, at the  
School of Nursing.*



Now, as a pediatric nurse practitioner (PNP) in private practice and a National Institute of Nursing Research (NINR)-funded investigator at Columbia, Dr. Ledlie has a very different view of academe. How she changed her mind, and how she transformed from RN to PhD, is a tale worth telling.

Things began to change for Dr. Ledlie in the mid-eighties,

after eight years in acute-care pediatrics and obstetrics. She can pinpoint the precise time — a classic ‘aha!’ moment — when a certain teenage girl with chronic asthma was admitted to her floor for the umpteenth time. As she recalls, “I remember saying to myself, ‘This kid is back again, and in an hour she’s going to be in the ICU on a ventilator. There’s got to be a better way to

keep her asthma under control.’ I knew I could do better.”

With that teenager in mind, Dr. Ledlie earned her BS in nursing and then enrolled in the PNP program at Columbia, working three part-time nursing jobs to make it happen. “The faculty really knew their stuff, because they were practicing clinicians,” she says.

Upon graduation in 1992, she became director of the newly created AIDS Center at Woodhull Medical & Mental Health Center in Brooklyn, part of the city’s Health and Hospitals Corporation. It was a crushing time to work in pediatric AIDS, especially in New York City. Perinatal transmission of HIV was peaking, with the highest number of cases statewide at Woodhull, and little could be done to stop the progression of the disease. “I had many kids who died before they ever went to kindergarten,” she says. “The only drug we had was AZT, and it wasn’t used in children until they were very, very ill. Otherwise, it was palliative and supportive care, and a lot of family involvement, since many of these kids had lost their mothers to AIDS and were in foster care or living with a grandmother.”

She was particularly drawn to the family dynamics of chronic illness.

"I was good at that," explains Dr. Ledlie, a mother of three, with a son diagnosed with insulin-dependent diabetes at age six.

Over the next decade, the center flourished, attracting federal funding under the Ryan White Comprehensive AIDS Resources Emergency Act. It also became the first New York State Department of Health Designated AIDS Center.

Academically, Dr. Ledlie flourished, too. In 1993, she enrolled in the doctoral program at the University of Pennsylvania School of Nursing, curious to learn more about the care of chronically ill children. "It was for my own scholarship, not to find myself as a researcher or an academician — although I probably didn't write that in my application essay," she says with a laugh. For five years, she shuttled between Philadelphia and New York, juggling responsibilities at school, work, and home.

All the while, the outlook for children with HIV was improving, as reflected in the subject of her dissertation, which looked at how families disclose a diagnosis of HIV to children who were infected perinatally. It was a new challenge for caregivers and providers, since more and more children were surviving. "Early on, disclosure wasn't

inevitable," she says. "It was 'if' — now it's 'when.'"

Hooked on academics, Dr. Ledlie continued at the university to complete a two-year postdoctoral fellowship within a new institute for research on vulnerable women, children, and families. She also published an article based on her dissertation in *Nursing Research*, a coup for a budding investigator.

Dr. Ledlie's transformation from staff nurse to academic nurse was almost complete. "I realized I had not worked a full five-day week in my clinic in seven years," she says. "I didn't think I could do that anymore. I wasn't the same person." In 2000, she joined the faculty at Columbia, negotiating a part-time position so she could keep an active role in clinical practice.

The clinical aspect of her life was about to undergo a radical change as well. In 2002, she and her long-time Woodhull colleague decided to open a practice of their own: Atlantic Medical Associates, P.C., a family centered medical and dental practice, with a special emphasis on HIV care. Most of the families she saw at Woodhull followed her to the new practice.

Dr. Ledlie knew she arrived in academe when she was awarded an NINR grant in 2005. Entitled, "Self-care in Youth with Perinatally-

acquired HIV," the two-year exploratory study aims to understand factors that influence self-care as well as how families manage to transition aspects of HIV care to their children. The ultimate goal is to develop interventions that support families during this critical juncture in care and improve health outcomes. "The system is not prepared to deal with these youths — medically, financially, vocationally — but here they are," she says.

Having nurtured dozens of children with HIV into adolescence or young adulthood, Dr. Ledlie has become an expert in pediatric HIV. "We've kind of grown up together," she says. "I've gotten grayer, and they've gotten older. One of my teens had a baby, so I'm a grandmother, I guess. That's a milestone for all of us."

According to Dr. Ledlie, apparently fully at home in academe, "The best research questions are driven by clinical practice. If you study what you know, you can't go wrong."

She has also come to understand that not all academicians are isolated in ivory towers. "We can have our feet in the mud and our head in the clouds," she says, "and maybe that is the best way that questions come about for study."

## COUNTERING DIABETES, ONE STUDY AT A TIME

*Arlene Smaldone, DNSc '03*

Young girls, and more recently young boys, may dream of becoming a nurse. But what child has dreamed of becoming a nurse-scientist? It's not that nurses aren't interested in scientific inquiry, just that they tend to come to it a bit later in their careers — after amassing enough clinical experience to ask the right questions, only to realize they need a compendium of tools to find the right answers.

To a tee, that describes the professional arc of Arlene Smaldone, who over the course of a 36-year career, has steadily added to her clinical and investigative skills — first with a master's degree, then with a nurse practitioner certificate, followed in recent years by a doctorate in nursing science at Columbia and a postdoctoral fellowship at the Joslin Diabetes Center and Harvard Medical School.

Today, poised at the top of the research pyramid, Dr. Smaldone, Assistant Professor of Nursing at Columbia, is asking and answering a host of questions about diabetes care and education, barriers to care for children with special needs, and sleep impairment.

Dr. Smaldone didn't envision a career in diabetes care and research at the start of her career, choosing instead pediatric and neonatal intensive care nursing. Some two decades later, while at University Hospital and Medical Center in Stony Brook, NY, she changed her focus to outpatient care, handling a large case-load of children with cystic fibrosis, many of whom also suffer from a secondary form of diabetes.

As Dr. Smaldone quickly realized, it takes a different set of skills to care for inpatients with acute illness

than it does to help children and families manage the demands of chronic illness. In 1994, she became a certified pediatric nurse practitioner (PNP), opening a new chapter in her career. She remained at Stony Brook, but now, as a PNP, she was managing the care of children with diabetes, in collaboration with a group of pediatric endocrinologists.

Her education didn't end there. "Another part of my job was to participate in clinical growth disorder trials," she recalls. "It became clear to me that I had a lot to learn about research." Dr. Smaldone then enrolled in the Doctor of Nursing Science (DNSc) Program at Columbia, which teaches research relevant to health outcomes and health policy. All the while, she continued to work and teach full time at Stony Brook.

Following graduation, she was off to the Joslin Diabetes Center and Harvard Medical School to begin a postdoctoral fellowship in behavioral mental health. "These days, it's unusual for anybody in any field to be prepared to do independent research without a postdoc," she explains this chapter in her education. "Having more tools in your toolbox is very helpful. Also, funding is highly competitive and the pots of money are shrinking. Every experience broadens you."

Having acquired the requisite tools and experiences, Dr. Smaldone is now a researcher in full, with the studies and papers to prove it.

In *Diabetes Care*, she published a paper on risk factors that lead children with diabetes to be repeatedly hospitalized with diabetic ketoacidosis (DKA), a serious complication that can lead to coma or even death. Her study, an analysis of large data sets from hospitals in California, found that only 28 percent of children with recurrent DKA had received care in hospitals with specially trained pediatric endocrinology teams. "DKA

hospitalizations are costly," she concludes. "Because access to diabetes teams may decrease the incidence of recurrent DKA, specialist visits may actually be cost-saving to society."

In another diabetes study, she cast a critical eye on self-management education classes for adults with diabetes, asking whether it made sense to combine those with type 1 and type 2 diabetes in group classes, a common cost-savings practice. Dr. Smaldone found that the two groups had widely differing treatment, lifestyle, self-management, and psychosocial issues, concluding that the groups should be taught separately.

Dr. Smaldone is currently studying how parents cope when a young child is diagnosed with type 1 diabetes. "It can be overwhelming to learn that your child has diabetes," says the researcher. "The diagnosis changes your life, the way your family functions. There

is so much to learn. It's very stressful. When an infant or toddler is involved, the challenges are even greater, since the child cannot communicate that he or she is not feeling well." In this pilot project, Dr. Smaldone will study about 20 parents of young children diagnosed with diabetes at age five or younger. Among her goals are to describe the parental impact, explore the parents' receptiveness to computer-based interventions, and examine the relationships among parental stress, parental age, self esteem, depressive symptoms, treatment intensity, and other variables. As she writes in her study proposal, "Examination of this issue from the broader perspective of parenting and the family will provide insight into strategies to promote positive adaptation to the demands of chronic illness in a young child thereby improving health outcomes."

On occasion, Dr. Smaldone branches out to examine other issues in children's health. In one such study, she (along with faculty members Judy Honig and



*Arlene Smaldone, PNP, demonstrating diabetes care with a teddy bear.*

Mary Byrne) found that one in 12 children in New York State with special health care needs — some 40,000 children — was not receiving all routine health services. The predominant reasons were lack of insurance and poor communication with health care providers. The bright spot in this dim picture is that both factors are modifiable, leading to the study's take-home message: State programs "should pay particular attention to reducing barriers that lead to delayed and foregone care," as she writes in the *Maternal and Child Health Journal*.

Dr. Smaldone's most recent publication, which looks at the "invisible phenomenon" of inadequate sleep during childhood, is another departure from diabetes. Through analysis of the 2003 National Survey of Children's Health, she (again collaborating with Drs. Honig and Byrne) discovered that almost one in three parents surveyed reported that their children had experienced one or more nights of inadequate sleep during the previous week. These children were more likely to have a variety of chronic health conditions or to have experienced problems at school, compared to their well-rested peers. Although the study, published in *Pediatrics*, does not establish cause-and-effect, it may offer new insight into the hidden life of children and families. "Sleep impairment may provide a critical alert for primary care providers to search for undiagnosed physical or psychological comorbidity, suboptimal coping, family dysfunction, or threats in school or community," she writes.

One study at a time, Dr. Smaldone is helping children and families cope with health issues — and inspiring other nurses to become nurse-scientists.

## MENTOR IN RESIDENCE

*Mary W. Byrne, MS '94, PhD*  
*Professor of Clinical Nursing*

The path to a career as a researcher is well-defined. But what route does one follow to become a research mentor? What are the keys to successful research mentoring? How does a fledgling researcher find a suitable adviser?

For some answers and advice, mentors and mentees alike would do well to talk to Mary Byrne, Professor of Clinical Nursing, who has counseled more than her fair share of investigators and doctoral students and has crafted an award-winning mentoring model.

Ironically, Dr. Byrne didn't have a mentor of her own for most of her research career, now stretching back three decades. Nonetheless, she rose through the academic ranks, winning numerous grants and publishing widely in the field of pediatrics, eventually finding herself in demand as a mentor of others.

Dr. Byrne didn't give the mechanics of the role too much thought until the late nineties, when she won a Mentored Research Scientist Development Award, also known as a K01, from the National Institutes of Health, which provides mid-career investigators opportunities to pursue intensive, supervised research or advanced training. (Dr. Byrne used her award to study home care monitoring of HIV-exposed children, complementing her efforts to develop interventions that support healthy parenting of infants and toddlers in stressed situations.) Surprisingly, there was little in the literature about K01 mentoring, leaving Dr. Byrne and her supervisor to work out their mentor-mentee relationship on their own.

"All of these experiences led me to reflect on the nature of mentorship within the nursing profession

and the best ways to accomplish it," says Dr. Byrne.

Her reflections ultimately coalesced in two papers, including "A Mentoring Experience (KO1) in Maternal-Infant Research," published in the *Journal of Nursing Scholarship* in 2003. The article, co-authored by Dr. Byrne's KO1 mentor, Maureen R. Keefe, PhD, Dean

of the University of Utah College of Nursing, delves into mentoring with the context of KO1 grants, initiating and sustaining funded mentoring relationship, and staying focused over the long haul, among other topics. What's more, the paper features a model for mentoring, outlining "critical dialogue checkpoints" that help both parties navigate the many shoals

of the KO1 process. The model has since been adopted for use by Sigma Theta Tau International, nursing's honor society.

Clearly, Dr. Byrne has tapped into the essence of mentoring. In just the last five years, she has been asked to be the primary sponsor for 12 candidates in Columbia's Doctor of Nursing Science (DNSc)

*Mary Byrne, PNP, (second from right) with research staff (left to right) Lorie Smith Goshin, DNSc student, Keosha Bond, and Sarah Joestl, MPH candidate.*



Program. In addition, she has served on the dissertation committees for 21 doctoral students and is regularly contacted for advice by graduate students and researchers in medicine, psychology, international health, and social work, including those as far flung as Sweden, Ghana, and Australia.

An expert in developmental pediatrics, Dr. Byrne is also known for her studies of a rare and remarkable prison nursery in the Bedford Hills Correctional Facility, which allows women inmates to live with their newborns during the first year of infancy, the all-important period for childhood development and maternal-infant bonding. The nursery, the oldest in the nation, was established in 1901 by farsighted prison reformers, but until now no one has stopped to cast a scientific eye on this longstanding social experiment.

With funding from the National Institute of Nursing Research and the National Institute of Child Health and Human Development, Dr. Byrne is tracking about 100 prison nursery babies from birth, through their stay in the nursery and their first year outside of prison, asking a host of questions about their development.

The final results are not yet in, but it does appear that “the children develop a healthy attachment to their mothers, and that their development is on par for the first year of life,” says the researcher, who also earned a pediatric nurse practitioner (PNP) certificate from the School of Nursing in 1994.

It seems that the mothers benefit, too. According to Dr. Byrne, “The recidivism rate is not as high,” compared to a similar subset of mothers whose children were forcibly separated. “But we have not measured over a long period of time. We expect that rate to go up somewhat as we continue to monitor these women.” In sum, she says, “Clearly, some good things are happening inside the nursery.”

Now, Dr. Byrne is studying what happens to these mothers and children once they return to the community, when they face a new set of challenges such as finding housing, paying for food, and applying for health insurance.

The prison study has captured the attention of policy makers around the country, including officials in several states now considering whether to open prison nurseries of their own. The National Institute of Drug Abuse is also interested, as separation from a parent is a known risk factor for drug abuse later in life.

Another of Dr. Byrne’s interests is early developmental screening, which is often overlooked. As a result, many childhood disorders are discovered late or missed altogether. Seeking to remedy this glaring practice oversight, the American Academy of Pediatrics (AAP) recently issued a policy statement declaring that “developmental surveillance be incorporated at every well-child preventive care visit.” A major stumbling block, however, is that many pediatricians aren’t familiar with this type of screening or have not kept up with the latest advances. “Also, we are in the era of the eight-minute office visit,” adds Dr. Byrne. “So it is a challenge figuring out how to do this screening in a routine care visit, when you have to address a multiplicity of issues.”

In the days ahead, Dr. Byrne plans to develop a practice as a consultant, helping pediatricians learn how to do developmental screening, how to intervene when problems are found, how and when to refer, how to interface with children who have communication disorders, how to work with parents and schools, and, of course, how to bill for these various activities.

This could be a perfect niche for PNPs, says Dr. Byrne, ever the mentor. “There have been demonstration projects across the country in which PNPs work in partnership with pediatricians or family physicians,

focusing just on the developmental piece. It can take a lot off the shoulders of a pediatrician or family practitioner.”

## NO COMPROMISE

### *Rita Marie John, DrNP '05*

The events of 1979 — the year Rita Marie John earned her pediatric nurse practitioner (PNP) certification — seem like pieces of history from a strange parallel universe. Back then, the U.S. had warm relations with Saddam Hussein. The Soviet Union had just launched a long, ultimately fruitless war in Afghanistan. One of the most popular TV shows was ‘Dallas,’ a series on the exploits of several generations of a rich and powerful Texas family. Most startling of all — from a nursing perspective at least — a nurse practitioner “could spend an hour with a patient, and there wasn’t even any question,” reports Dr. John.

Today, Saddam, the Soviets, and the Ewings are all gone. But not pediatric nurse practitioners, of course, who are around in far greater numbers than ever before. But the challenges they face, from the unrelenting growth of scientific information to the time pressures imposed on clinicians by managed care, are far greater, too.

A lucky few, namely those studying at the School of Nursing, have Dr. John, Assistant Professor of Clinical Nursing and Director of the PNP Program, to prepare them for this brave new world of health care. Over the past three decades, Dr. John has worked in pediatrics and obstetrics units, in emergency rooms and ICUs, in schools and youth development clinics, and in private medical and nursing practices. She has also served as a clinical preceptor, consultant, researcher, writer, and teacher.

When asked about her long career, Dr. John is most eager to talk about the last decade, the time she has spent at Columbia nurturing the next generation of PNPs. “It’s very rewarding to watch them grow and develop new skills, to see the changes in their critical thinking, even in their views of the world,” she says.

A major way that Dr. John promotes the education of PNPs is through online learning, which the program didn’t offer when she first joined the faculty. Today, students can view cases online, participate in discussion boards with their classmates, and access a host of clinical resources in pediatrics — supplementing, not replacing, traditional classroom and clinical experiences.

Dr. John reviews each student’s electronic clinical log in order to see what types of cases they might be missing. She then posts cases — many from her own experiences — online, ensuring that students are exposed to the widest possible range of patients and clinical scenarios.

A strong advocate of informatics in practice and education, Dr. John has been an eager participant in the School of Nursing’s pioneering electronic clinical log program, in which students use PDAs (personal digital assistants) in place of traditional paper-based logs. “The nurse practitioner of the future will have to learn how to access and evaluate information,” she says. “Not only are we moving to electronic medical records, but we are going to build clinical decision support into those records.”

That is exactly what is happening in the next phase of the PDA project, in which Dr. John is also involved. Led by Suzanne Bakken, DNSc, Alumni Professor of Nursing and Professor of Biomedical Informatics, the PDA project is now testing PDA decision support in the diagnosis and management of smoking cessation, obesity, and depression. The randomized controlled

trial will study a sample of advanced practice nursing students to determine the effect of the PDAs on adherence to clinical practice guideline recommendations.

We can expect to hear more from Dr. John in years to come. She is now in the middle of completing her second doctorate, a research-focused EdD (her first was the clinically focused DrNP degree from Columbia). Her thesis for the EdD will examine primary care approaches to treating pediatric obesity, including interventions that focus on the parents, rather than the children. "Parents control what kids eat," she explains. "I took care of a little girl who was drinking 48 ounces of juice a day. We had the parent decrease the child's juice intake to 4 ounces a day, and she is now normal weight. We try simple interventions. I'm not a believer in fancy diets. It's better to try one intervention at a time, and to encourage the parents to do what they think they can using the principles of motivational interviewing."

Dr. John is already well known for her contributions to school nursing. In the early nineties, while on the faculty of the University of Medicine and Dentistry in Newark, NJ, she performed school physicals for a child study team. "I got to learn about school nursing, and about what school nurses needed," she says. She was soon in demand as a lecturer and consultant, helping schools and nurses around the country manage children with an expanding array of health problems, from chronic illnesses such as diabetes and asthma to obesity and mental health issues.

"School nursing has changed tremendously," says Dr. John, who over the years has lectured to some 40,000 school nurses. "School nurses have to make very high level decisions about triaging patients. They also deliver a lot of primary care. Schools are a great place for health education, to teach about healthy diets and exercise and other aspects of wellness."

The research and the lecturing notwithstanding, Dr. John sees herself first and foremost as a practitioner. "I'm really a clinician by nature," she says. "I love working with children and families. Being a PNP has never been boring or routine. There is a new challenge each day."

At the same time, Dr. John, who spends one day a week in a pediatrics practice in Elizabeth, NJ, does admit that clinical practice is becoming harder and harder, even for an experienced practitioner. "You would like to spend an hour with each patient," she says. "That's the way pediatrics should be, where you get to know a family and their diseases, even their cousins and aunts and uncles. It is not the way that the real world functions today."

"I saw a patient the other day who had eight different problems," she continues. "Taking care of eight problems in 15 minutes is impossible. So you ask the patient to come back for additional visits. You can also spend a little more time with harder cases and a little less with easier ones, say, a child with a sore throat. But the reality is that some days I don't get to four patients in an hour. Fortunately, I didn't sign a contract for that — but some of our graduates have been asked to do that. My goal is to give care. There is no compromising care," she says.

Evidently, her patients appreciate it. After caring for a generation of children, she's starting to get calls from patients from past practice sites who are having kids of their own and want Dr. John to be their child's primary care practitioner. It's hard to imagine a higher compliment for a PNP.