Save the Date
The Bill and Melinda Gates Institute for Population and Reproductive Health is co-hosting with the Ministry of Health, Government of Senegal:

International Conference on Family Planning: Research and Best Practices
Dakar, Senegal
November 29 – December 2, 2011
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Next Issue: Technology and Public Health
Text messages. Smart phones. Electronic health records. mHealth. GIS. High-performance computing cores... Technology is revolutionizing our world—and public health—at an ever-accelerating pace. Our upcoming special issue will document how high-tech (and low-tech) strategies are preventing disease and saving lives. Look for it in January 2012.
You do it once, and then again, and soon it has you hooked. It pulls you away from family and friends. Ruins your ability to focus on school or productive work. Drives you into debt, desperation—even thievery. And as you spiral downhill, the brief rush that it gives you becomes your only solace.

"Problem gambling is like a drug addiction; the behavioral and health consequences are virtually the same. And what most people don’t realize is that it is much more common among adolescents than adults," says Silvia S. Martins, MD, PhD, an epidemiological psychiatrist in Mental Health and senior author of two new studies of gambling behaviors among youths in West Baltimore.

With their still-developing forebrains, youths tend naturally to be more impulsive than adults, and to that extent are less resistant to addictive drugs and behaviors. Male youths, with their testosterone-driven culture of risk taking, seem particularly vulnerable. And what of youths in blighted inner-city neighborhoods? “No one had studied gambling behaviors in such a population before,” says Martins.

The Brazilian-born epidemiologist began her career with studies of problem gamblers in São Paulo. When she came to Hopkins to do postdoctoral research in 2003, she learned of an ongoing study in West Baltimore, headed by Mental Health Professor Nicholas Ialongo, PhD. Since 1993, researchers had been doing annual, school-based surveys of a single cohort of several hundred mostly African-American youths, and the study was designed among other things to highlight the childhood social and psychological antecedents of criminal and other undesired behaviors. Starting in 2004, when the youths in the cohort were about 17 years old, Martins and her colleagues added a standard gambling questionnaire known as the South Oaks Gambling Screen.

Gambling turned out to be the norm among the surveyed adolescents, especially the males, and “problem gambling”—a label that applied to about 12 percent of the sample—was much higher than the 1 to 3 percent normally observed in U.S. and Canadian adult populations. But the measured prevalence of gambling and problem gambling was not greatly different from what epidemiologists have seen in Caucasian adolescent populations. The types of gambling—card games, sports betting, lotteries, graduating to casino-type gambling as the youths grew up and could drive to Atlantic City, N.J.—also
were similar to those seen in other studied populations. “If we had done that study with white suburban kids in Baltimore County, we probably would have seen the same kinds of gambling activities,” says Martins.

For the boy gamblers—the girl gamblers being too few to permit much analysis—the data suggested a link between problem gambling and very bad experiences in childhood. “We found that certain kinds of adverse events, such as being directly threatened, or being involved in violent or other criminal behavior, were associated with frequent gambling in later adolescence,” says Martins. These findings were published online in May of this year in the Journal of Gambling Studies, with Carla Storr, ScD, MPH, a professor at the University of Maryland School of Nursing, and an adjunct professor in the Bloomberg School’s Department of Mental Health, as first author.

In a related analysis, Martins and colleagues, including first author Grace Lee, MHS, a Mental Health doctoral student, found that signs of depression at age 12 were linked to a greater likelihood of problem gambling in late adolescence.

“This replicates some other research that shows that if you have a lot of problems in your life, your parents are divorced, or you’ve lost relationships or you’ve had a sibling who’s died or been shot, then that increases your stress level—and gambling may be used as a way of escaping that,” says Jeffrey L. Derevensky, PhD, of McGill University, an expert on gambling and other adolescent high-risk behaviors, and a co-author of the Storr study.

One lesson from this may be that, as Martins says, “public health practitioners need to be more aware that kids in these bad situations are not only at greater risk of using drugs and alcohol to alleviate their mental health or depressive symptoms, they also may be at greater risk of getting into problem gambling—and so we need to think about how we can intervene effectively in such situations.”

But adolescent problem gambling isn’t merely an adverse outcome; it also seems to be a reliable marker of other ongoing behaviors whose ill effects are apt to cascade into adulthood. “It can be seen as part of a problem-behavior syndrome in adolescence, with potential adverse consequences in later life from the lack of education because the gambler dropped out of school, has a criminal record and so on,” says Martins.

What makes the situation in Baltimore particularly worrisome is that the opportunities for urban youths to gamble are about to expand. In 2008, Marylanders voted for a referendum that would enhance state revenues by allowing slot machines in certain locations; and discussions are under way to build a slot-machine casino in the Inner Harbor. “Prior studies have shown that the closer you are to a casino, the more likely you will be to gamble,” Martins says. “And slot machines are widely considered the most addictive form of gambling.”

—Jim Schnabel

ANTIDEPRESSANT SURGE

More Americans with no diagnosed mental illness are taking antidepressants and more non-psychiatrists are writing prescriptions for them, concludes Ramin Mojtabai, MD, PhD, MPH, associate professor in Mental Health and lead author of a study in the August Health Affairs. Analyzing data from the 1996—2007 National Ambulatory Medical Care Surveys, researchers found that the number of patients with no psychiatric diagnosis who were prescribed antidepressants grew from 60 to 73 percent of all antidepressant prescriptions; the share of non-psychiatrist providers who prescribed antidepressants with no diagnosis of mental illness rose from 30 to 55 percent.

“A BLOW TO BACTERIA

An experimental treatment for chronic obstructive pulmonary disease (COPD) relies on sulforaphane—present in broccoli in a precursor form—to strengthen the lungs’ bacteria-fighting properties by activating the Nrf2 pathway, according to a report in the April 13 Science Translational Medicine. Senior author and Environmental Health Sciences Professor Shyam Biswal, PhD, and researchers found that sulforaphane treatment restored the ability of macrophages—bacteria-killing white blood cells—from COPD patients to clear bacteria from the lungs, important in stimulating the lungs’ immune defenses. The research raises the potential for new COPD treatment approaches.

OFSMOKE AND TAXES

The 2009 U.S. federal cigarette excise tax increase (from $0.39 to $1.01 per pack) drove some smokers to search online for ways to quit smoking, while many more used the Internet to search for cheaper cigarettes, according to a study in the March 16 PLoS One. Lead author John Ayers, a doctoral candidate in Health, Behavior and Society, and colleagues analyzed queries to search engines a year before and after the tax increase. Smoking cessation searches rose about 50 percent but quickly returned to pre-tax levels; cheap-cigarette searches rose about 300 percent, and remained 60 percent higher a year later.
It was the closest thing to a research slam-dunk.

In 1999, after several years of painstakingly distributing vitamin A, beta carotene (a form of vitamin A) or placebos to thousands of pregnant women in Nepal, it seemed clear to Keith P. West, Jr., DrPH ’87, MPH ’79, that vitamin A was a public health powerhouse. West, the George G. Graham Professor of Infant and Child Nutrition, and his colleagues published a paper that year showing that women who had received the supplements had about a 40 percent lower risk of death up to three months after delivery than those who took capsules containing plain vegetable oil.

But in May 2011, West’s team published new results from a similar study in Bangladesh that, on the surface, seemed contradictory. There, the supplements seemed to have no effect on helping mothers and their babies survive, leading some public health researchers to question whether women anywhere might benefit from vitamin A at all. Why would these two populations—so close to each other—show such different results?

“It’s a reminder of how important context is for research, especially for nutrition,” explains West, director of the Center for Human Nutrition in the Department of International Health.

When he and his colleagues started planning the seven-year study in 1999, Nepal and Bangladesh were roughly equivalent in terms of poverty, with the resulting fallout on education, resources and nutrition. However, Bangladesh has gradually managed to pull itself up a few critical rungs on the economic ladder. Within a few decades, it has transitioned into a country where the population as a whole, including women and children, is becoming more educated. Roads were built at a dizzying pace, transporting Bangladesh’s more plentiful resources from place to place. As the country’s economic conditions improved, women had more access to vitamin A–rich foods, including fish, liver, dairy products, and fruits and vegetables.

“Even though Bangladesh is very poor, it’s still better off than Nepal,” says West. “In Bangladesh, vitamin A had already made its impact through a better diet, so the women there didn’t need supplements.”

Nancy L. Sloan, DrPH, an assistant professor in Population and Family Health at Columbia University, points out that another recent study by British researchers examining the effects of vitamin A supplementation in Ghana also showed no difference in deaths between those who received the nutrient and those who didn’t.

“Some people will say that now you have two out of three studies indicating vitamin A supplementation does not reduce maternal mortality, but I don’t think that’s necessarily conclusive,” she says. Sloan explains that as in Bangladesh, women in the study area of Ghana had no clinical vitamin A deficiency because they already eat a diet rich in vitamin A in the form of red palm oil, a favorite local condiment.

Until researchers can conduct more vitamin A research in different environments where clinical vitamin A deficiency continues to exist—an unlikely prospect, since each of the preceding studies held multimillion dollar price tags—the true value of supplementation could remain unknown, says Sloan.

—Christen Brownlee

Value of Vaccines

Vaccines can save a life for far less than the cost of a latte. But for cash-strapped countries, every cent adds up.

What’s the return on their vaccine investment? It’s potentially hundreds of billions of dollars, according to two new studies. Lead author Meghan L. Stack, MHS ’09, research associate at the International Vaccine Access Center (IVAC), and colleagues evaluated the potential economic benefit of the Decade of Vaccines—a global collaboration initiated by the Bill & Melinda Gates Foundation’s pledge to invest $10 billion over 10 years. Results show that if its goals are achieved, governments and households in the poorest countries could save about $151 billion on treatment and productivity. The study was published in the June Health Affairs.

In the same issue, Sachiko Ozawa, PhD ’10, MHS ’07, assistant scientist, and colleagues calculated that saving 6.4 million children’s lives through the Decade of Vaccines would be worth $231 billion in the value of the lives saved.

“Donors are increasingly focused on value for money. We’re showing that the cost is dwarfed by benefits. If you spend this money, you’ll see tangible results,” says Orin Levine, PhD, senior author of both studies and IVAC director.

—CB
In the centuries-long battle against malaria, people have tried a variety of ways to fight Plasmodium, the microscopic parasite responsible for the disease. They’ve strung up bed nets, sprayed insecticides and used repellents to prevent infectious bites from Plasmodium’s mosquito hosts, and they’ve developed assorted medications that poison this parasite inside humans. Soon, scientists might have one more weapon to add to the anti-malarial arsenal: a microscopic foe. Researchers including George Dimopoulos, PhD, and Jason Rasgon, PhD, both associate professors in Molecular Microbiology and Immunology, are taking aim at Plasmodium using bacteria.

Dimopoulos’ strategy relies on native bacteria that live in a mosquito’s gut—much like the endemic bacteria that line people’s intestines. In 1999, his lab was one of the first to discover that these bacteria can activate the mosquito’s immune system in a way that kills Plasmodium. However, it was unclear then whether their results were relevant only to mosquitoes living under lab conditions, which may behave differently from mosquitoes in the wild.

In new research, Dimopoulos and his colleagues sampled bacteria from mosquitoes field-caught near the Johns Hopkins Malaria Research Institute site in Macha, Zambia. They discovered a species of Enterobacter bacteria that thwarted growth of the parasite by up to 99 percent, rendering most mosquitoes unable to transmit malaria.

Surprisingly, these bacteria work their magic without stirring up the mosquito’s immune system. In a May 13 Science article, Dimopoulos’ team discovered that this Enterobacter species spews out free radicals, which effectively block Plasmodium’s development. (Free radicals are highly reactive molecules that can cause tissue damage.) Eventually, Dimopoulos says, people might feed this bacterium to mosquitoes—perhaps mixed in artificial nectar, sprayed on vegetation—to kill the parasite before mosquitoes can transmit it to people.

“This approach would be low-cost, ecologically friendly andlogistically simple,” Dimopoulos says. “It could be another great weapon in the fight against malaria.”

Rasgon’s approach takes a different tack. His lab works on Wolbachia, a group of bacteria that infect many insect species—but not typically Anopheles, the mosquito genus that carries malaria. For the past decade, Rasgon has been working on goading Wolbachia to infect Anopheles, inspired by work on other mosquito species showing that the bacterium can knock out pathogens that infect people, such as dengue. In a new study, Rasgon’s team showed for the first time that artificially infecting Anopheles with Wolbachia by injecting the bacterium into the insects significantly reduces Plasmodium loads. Additionally, a particular strain of Wolbachia proved fatal to the mosquitoes when they fed on a blood meal, potentially also from production of free radicals.

If researchers can figure out how to more readily infect Anopheles with the bacterium, both effects could be useful to fight malaria, Rasgon notes, either through clearing the mosquitoes of the parasite or killing off mosquitoes altogether.

Such interactions between bacteria and disease-causing parasites have occurred from time immemorial. So, why are researchers just taking advantage of them now? It’s all in the technology, says Serap Aksoy, PhD, a Yale researcher who studies native bacteria in tsetse flies and how these might fight the parasite responsible for the African sleeping sickness these flies transmit.

“Many bacteria, often symbiotic in nature, cannot be cultured in the laboratory,” she says, “so researchers are only becoming aware of these microbes and their potential after PCR-based methods and genomic sequencing technologies became available. In general, we now have a greater appreciation of the extent of influences microbes have on their host’s biology.”

Gaining a better understanding of these newly discovered microbes won’t be the magic bullet against malaria, Aksoy says, but it could play an important part in the battle. “The toolbox against this disease is still so limited,” she says, “so any advance is well worth trying.”
HIV-Free Girls: It Takes a Community

When it comes to educating children in less-developed countries about HIV prevention, it isn’t realistic to think they can go it alone in avoiding risky behavior, says Carol Underwood, PhD, assistant professor of Health, Behavior and Society.

“Girls in particular often live in environments that aren’t conducive to safe behavior,” says Underwood, a senior research associate at the Center for Communication Programs.

In parts of Botswana, Malawi and Mozambique, girls are often pressured by authority figures to engage in “transactional sex”—sex for favors. Some teachers demand sex for passing grades, and some mothers send their girls out to “bring home dinner.” Such arrangements are often viewed as consensual. Laws and school regulations to the contrary are ignored.

“It’s important to place some of the responsibility [for HIV prevention in children] on the larger social structure,” says Underwood.

To do that, she and her CCP colleagues created a yearlong program for promoting HIV safety for girls in three regions. It emphasized community, school and parent involvement. The results were encouraging. “We ended up with both statistical and anecdotal evidence that the interventions took hold, and were making a difference in the girls’ lives,” she says.

The CCP program—called Go Girls!—worked with local schools to make sure teachers understood they could be fired or criminally prosecuted for having sex with students. The program also pressured families to stop pushing daughters into transactional sex and prevented girls from illegally entering the many bars where they are typically welcome. Go Girls! also established “mobilization groups” of community members who, in some cases, confronted adults taking advantage of girls. Underwood’s team also tried to connect adults and girls with local agencies that could provide financial assistance and job training.

To reach the children, Go Girls! assisted schools in weaving “life skills” like safe behavior, reproductive and relationship information into existing classes. It produced a radio show that featured local people telling personal stories that reinforced the program’s themes. And groups of parents were trained in listening and talking skills.

In Botswana, about 60 percent of participating schools reported a decrease in teachers offering favors for sex, compared to a decrease of 35 percent in non-program schools. And in Malawi, about 90 percent of the daughters of mothers who had participated reported improved relationships with their mothers, versus an improvement for half the girls whose mothers didn’t participate.

Though Go Girls! has ended, many of its school- and community-based elements have become self-sustaining.

Mary Ellen Duke, gender adviser for the U.S. Agency for International Development in Mozambique, credits that encouraging sign to the program’s community emphasis. “It engaged the community from the very beginning,” she says. “That let local groups take ownership, instead of feeling that this was yet another project being imposed on them.”

—David Freedman

The Go Girls! program helped to create an environment that protected girls from transactional sex.

“Girls in particular often live in environments that aren’t conducive to safe behavior. … It’s important to place some of the responsibility on the larger social structure.”

—Carol Underwood

CCP’s Global Meetup

Nearly 200 Center for Communication Programs staff from around the world gathered in late June in Baltimore to share best practices in strategic health communication.

Experts from Tanzania, Egypt, India and other countries shared evidence on the impact of strategic health communication programs that put families and communities in the driver’s seat to achieve social and behavior change, says Susan Krenn, CCP director. The meeting emphasized local ownership and sustainability as well as the use of new media such as texting, robo-call push messages, interactive games and contests using mobile phones.
Linking Sexual Pleasure to Healthy Development

For decades, the public health community has proclaimed that sexual health is more than the absence of disease and violence. Sounds good, but the science to back up the claims hasn’t been there. Few high-quality, population-level research studies ventured to answer questions like, Are the ostensible positive aspects of sexual health, such as sexual pleasure, related to other aspects of human health and development? If they are related, are the associations the same across the population?

With a June 2010 study in the Journal of Adolescent Health, Adena Galinsky, PhD ’09, and colleagues took a step toward answering these and other questions. Using data from 3,237 adults ages 18 to 26 who participated in the National Longitudinal Study of Adolescent Health, the study linked sexual pleasure among young adults to healthy psychological and social development. “Public health policy documents have been saying for decades that sexual health is more than the absence of sexual negatives, and for the first time we’ve done a study that looks at how one kind of positive sexual health is distributed in the population and is associated with other kinds of well-being,” says Galinsky, who recently finished her doctorate in the Department of Population, Family and Reproductive Health (PFRH), and is now doing postdoctoral research at the University of Chicago.

Previously, the national longitudinal study data had often been used to examine the links between sexual behaviors and attitudes and negative health consequences, such as sexually transmitted diseases. “The research typically has had a problem focus, and we have ignored the fact that people engage in these behaviors because they have positive consequences,” says Freya L. Sonenstein, PhD, a PFRH professor and senior author of the study.

In this recent study, Galinsky and Sonenstein compared the respondents’ self-reports of sexual enjoyment with three positive psychological measures: empathy, autonomy and self-esteem. “For the women respondents, all three of these psychological measures turned out to correlate significantly with measures of sexual enjoyment,” says Galinsky.

For men as well as women, empathy was consistently associated with the types of sexual pleasure examined in the study. “It’s a mythbuster, in the sense that people tend to think of young men as ‘natural predators’ with little variation in their levels of sexual pleasure,” says Sonenstein, director of the Bloomberg School’s Center for Adolescent Health.

Previous qualitative work revealed the social pressures on young women to prioritize their partner’s wishes over their own and focus on their appearance rather than their own feelings and desires, says Galinsky. “In this context, a higher than average sense of autonomy and self-worth may enable young women to overcome the barriers they face in recognizing and effectively communicating their own sexual preferences and limits,” she says. An alternative take may also be true: Because the barriers are higher for women, achieving sexual enjoyment may boost their sense of autonomy and self-esteem in a way that it doesn’t for young men, says Galinsky.

Though it hasn’t yet reached a Lady Gaga level of celebrity, the Bloomberg School has a growing mix of online fans, friends and followers. A go-to source for public health news and information, the School currently has more than 138,000 Twitter followers (with 1,000 more joining each week) as well as more than 4,000 Facebook fans, reports Tim Parsons, director of Public Affairs in the School’s Department of Marketing and Communications. “With our Twitter posts, we offer a mix of news about the School and information on important public health issues,” Parsons says. “The response has been terrific and has led to prominent media placements and increased interest from the general public.”

Look for JohnsHopkinsSPH (the School’s social media moniker) on Twitter, Facebook and YouTube.

Tweet-Tweet: Fan of JohnsHopkinsSPH Yet?

— Natalie Wood-Wright
A Perfect Policy Marriage

In the world of public policy, an important new union is under way, as the Johns Hopkins Institute for Policy Studies joins the Bloomberg School’s Department of Health Policy and Management (HPM).

“The Department and IPS are both interested in making positive change through policy, and that’s what makes it a perfect marriage,” says Ellen MacKenzie, PhD, the Fred and Julie Soper Professor and chair of HPM. “What they bring to the table—and what we’re most excited about—is the focus on public policy across a wide range of issues.”

HPM has a long history of research in health and health care policy, while IPS is a leader in public policy, conducting research on such diverse topics as education, the environment, social issues, criminology, housing, health and international development.

Created in 1987 as a stand-alone program reporting to Johns Hopkins’ provost, IPS is nationally recognized. U.S. News & World Report ranked its two-year Master of Arts in Public Policy (MPP) 13th among such programs nationally. Its graduates go on to work in government agencies, nonprofits, corporations, consulting firms and other organizations.

The union actually began in 2010 and is almost complete. The 2012 incoming class will be the first to be granted the MPP degree by the Bloomberg School. Seventy-two students are starting the MPP degree this year—more than last year and about double the number of previous years. The School’s Master of Science in Public Health (MSPH) in health policy will continue to be offered, as will the MPP, which will allow students to broaden their studies to other areas of public policy.

Donald M. Steinwachs, PhD, professor of Health Policy and Management and interim director of IPS, says the new arrangement will address several challenges associated with the Institute’s unusual stand-alone structure.

“For example, it will make it easier to recruit new faculty. IPS currently has five core faculty, and until now, it has had to rely on cross-appointments from other departments for its tenure-track positions. Within three years, IPS will likely add another three or four full-time faculty.”

“There’s a compelling rationale [for the union],” says Sandra Newman, professor of Policy Studies, who was director of IPS for 12 years. “Both public policy and public health share the same orientation. They use high-quality methodologies and evidence-based interventions. Both are concerned with making a healthier society.”

MacKenzie says IPS will continue to address policy issues across an expansive range of topics and not focus its work on health policy alone. “After all, changes in education and housing policy, for example, can have major impacts on the health of our populations and are critical in assuring overall quality of life,” she says. “We’re very keen on keeping the breadth of IPS.”

—Kurt Kleiner

Podcasting from the Frontlines

“What will I do with a degree in public health?”

Students often ask this of Tom Burke, PhD, MPH, associate dean for Public Health Practice and Training. As host of the Bloomberg School’s new podcast series Public Health: On the Inside, he hopes to provide some answers in a monthly exploration of life on the frontlines of public health.

“I want folks to know that there is more to public health besides teaching and research,” says Burke. The first episode, released in June, featured Tala Fakhouri, MPH ’11, now a “disease detective” with the U.S. Epidemic Intelligence Service. Burke followed that podcast with veterinarian Monica Murphy, DVM, MPH ’10, who has pursued rabies from Bali to New York.

“I want to give listeners a feel for what’s really going on out there,” says Burke, a veteran of public health practice in New Jersey state government. New episodes will be available every month at jhsphs.edu/podcast.

—Jackie Powder
Racing and bouncing through open country atop a growling 600-pound beast offers a basic, perhaps primal sort of thrill. That probably explains the explosive popularity of all-terrain vehicles (ATVs) in America over the last four decades—which has brought with it an explosive rise in ATV-linked deaths and injuries, even among children.

"From 1997 to 2006, the number of children hospitalized with ATV injuries rose from 1,618 to 4,039," says Stephen M. Bowman, PhD, MHA, an assistant professor in Health Policy and Management, and lead author of a recent study in the Journal of Trauma: Injury, Infection, and Critical Care. "Four thousand hospitalized kids is a lot, and a third of them had traumatic brain injuries. Something should be done about this."

Something was done about this in the 1980s, when thrill riding on ATVs first caught on in the U.S., and accident numbers rose sharply. The federal Consumer Product Safety Commission got ATV makers to agree, in 1988, to a set of injury-reducing measures—from a U.S. ban on selling new three-wheeled ATVs, which are even less stable than four-wheelers, to a prominent warning to buyers not to allow young children to operate the ATVs that were sold. Most of those measures have remained voluntarily in place since that “consent decree” expired in 1998. Yet the enthusiasm for ATVs seems to be growing, and annual ATV crash deaths among children have been averaging double what they were in the 1990s.

In the late 2000s, Bowman was on the faculty at the University of Arkansas for Medical Sciences. “We frequently heard anecdotal reports of increases in serious ATV-related injuries, especially to children,” he remembers. “That prompted my interest in doing research in this area.”

With his University of Arkansas colleague Mary Aitken, MD, MPH, a pediatrician and public health expert, Bowman began to study national data.

In an initial study, published in 2009 in Injury Prevention, they and their colleagues determined that severe brain injuries happened to unhelmeted ATV riders almost three times as often as to helmeted riders—and fatal brain injuries occurred about two and a half times as often. “For motorcycles, helmet laws are the norm in many states, but for ATVs, very few such laws are in place,” says Bowman, now a faculty member of the Center for Injury Research and Policy at the Bloomberg School. The strikingly high proportion of children among these brain-injury cases prompted Bowman and Aitken to follow up with the recent child-hospitalization study.

The question of what to do about all of this remains. “Many ATVs are driven on private land and in very isolated settings, so there’s the issue of who would have the resources and the will to enforce new laws restricting their use,” says Aitken, who did her pediatric internship and residency at Johns Hopkins Hospital in 1988–91. “Perhaps the most important factor is the very low level of awareness among parents about the dangers of ATVs, particularly for kids; in many areas, owning and riding an ATV is very much the norm and is not really considered risky; so I think there’s going to have to be some awareness building along with any new laws.”

—JS
Sweet Persistence

On a warm day in April 2010, Katherine Reiter drove her silver Honda Civic back to Baltimore after visiting a small house near Gunpowder Falls State Park.

Her precious cargo, carefully nestled in her backseat, weighed only 2 pounds but was droning an urgent tune. “I was terrified,” recalls Reiter, a Sommer Scholar and PhD student in Biochemistry and Molecular Biology.

Reiter was transporting about 2,000 live and buzzing *Apis mellifera linguistica*—honeybees—for the inaugural hive of Sommer Scholars Apiary Club.

Before the bees’ arrival, Reiter and PhD students Stefanie Trop and Sarah Khasawinah had to win approval from School officials to build a hive on campus. After considerable back and forth, the students got the okay to place the hive beneath the trees on the south side of the Hampton House building. (“I don’t know that it’s the strangest request we’ve had, but it’s certainly a novel request,” says Michael Schoeffield, director of Facilities Management.)

Over the next 16 months, the hive thrived. The bees now number more than 60,000 and have produced 60 pounds of honey, says Khasawinah, a bee enthusiast who’s been stung more than 40 times in her apiary career.

Besides producing honey, honeybees provide a critical service in food production: They pollinate one-third of the world’s food sources. But they’re also under threat. Since about 2006, scientists have documented a dramatic disappearance of honeybees that they call “colony collapse disorder.” CCD occurs when a hive’s worker bees abruptly disappear. U.S. bee experts say CCD may be caused by everything from pesticides to varroa mites, nutritional deficiencies and viral infections.

With support from the Sommer Scholars, the Center for a Livable Future and the Hopkins Alumni Association, the club hopes to contribute to preserving honeybees against CCD. They also hope to raise awareness about the importance of honeybees and increase agricultural sustainability in Baltimore, say members who now include students from the schools of Medicine and Nursing as well as undergraduates from the Homewood campus.

On a drizzly Wednesday evening in August, a dozen or so students and friends watched as Reiter and Khasawinah opened the hive for the honey harvest. The plan is to bottle the honey and sell it on campus. (They haven’t yet decided on a name, though the alliterative “Hopkins Honey” has been suggested.)

What began as a quirky hobby has become a consuming passion. Reiter says she’s now much more aware of where her food comes from and that she incorporates honey into her diet whenever possible. Khasawinah is developing an antibacterial cream made partly from propolis, the hard, sticky, gum-like substance collected by honeybees from tree buds and bark.

“It started off as a little idea and has become a big movement with thousands of bees across Baltimore helping pollinate plants and make Baltimore beautiful,” says Khasawinah.

—Stacey DiLorenzo

*Apiarists Sarah Khasawinah (left), Katherine Reiter (right) and friends have built a campus hive that yields research possibilities and lots of honey.*
Kids in the U.S. are often bombarded with ads hawking high-sugar or high-fat foods and beverages. And families are buying these less-healthy foods in staggering quantities, with children now getting as much as a quarter of their calories from junk-food snacks alone.

But how do the child-focused ads get converted into parental purchases at the grocery store? The answer, according to a new Bloomberg School study, is simple enough: Kids nag their parents.

Dina Borzekowski, EdD, an associate professor in Health, Behavior and Society, and PhD candidate Holly Henry, MHS, interviewed 64 mothers of children ages 3 to 5 years in order to tease out some of the ties between the marketing and the nag factor, as well as to understand how parents react to the nagging. The results, if not entirely surprising, are a bit disconcerting. The study, published in August’s *Journal of Children and Media*, found that packaging and ads directly lead to children nagging parents for junk food, and that nagging typically pays off. “Parents give in,” says Borzekowski, “even though they know it’s a poor strategy.”

All the mothers, including those of the 3-year-olds, reported facing nagging for junk food, and many described the results in terms such as “battle” or “overwhelming.” A particularly strong trigger for the nagging, the mothers said, was marketing that enlisted popular characters from children’s media—a technique now employed in some 10 percent of advertising aimed at kids. A child’s exposure to commercial television appeared to be a strong predictor of nagging, and many of the mothers mentioned SpongeBob SquarePants, Dora the Explorer and others as figuring prominently in the nagging.

A problem highlighted by the study is that parents lack the proper tools for coping with nagging, according to Amy Jordan, director of the Media and the Developing Child program at the University of Pennsylvania’s Annenberg Public Policy Center. “They often have difficulty denying their children what they want, and don’t have a ready arsenal of scripts to deal with a meltdown in the grocery aisle,” she says.

Pinning down effective coping strategies is a challenge Borzekowski says she’d like to take on in a follow-up study. In the meantime, she notes that among some of the approaches the mothers reported as useful were simply keeping the children out of grocery stores, and shifting children’s attention to healthier food options that are also associated with popular characters—Dora the Explorer graces packages of a reduced-sugar Yoplait yogurt, for example. “But consistency seems the key,” adds Borzekowski. “If you [tell] your child she can have just one ‘special’ item, you have to stick to that.”

Just tell them SpongeBob said so.

—DF

In Memoriam

Rajanikant Arole, MBBS, MPH ’70, founding director of the Comprehensive Rural Health Project in Jamkhed, India, died on May 25 at age 77. Arole and his late wife, Mabelle, ran the project for more than 40 years, promoting health as a basic human right and training community health workers.

Ross Joseph Brechner, MD, MPH ’91, an ophthalmologist and former Maryland state epidemiologist, died on August 18 of heart disease at age 71.

Bernice Cohen, PhD, MPH ’59, a retired professor in Epidemiology and faculty member for over 50 years, died on April 12 at age 86. She joined the School’s Division of Chronic Diseases in 1960 and directed the School’s Genetic Epidemiology Program for more than a decade.

David French, MD, MPH ’69, a former Howard University professor who helped to coordinate first-aid efforts at major civil rights protests in the 1960s, died on March 31 at age 86. He established a network of health centers in Boston before moving to Africa in the 1970s where he led an effort to improve public health in 20 countries.

Adam Lisiewicz, a retired research associate in what was then the Health Services Administration department from 1979 to 1982, died on April 28 at age 76. He had a part-time appointment in International Health in the 1990s and was director of Monitoring and Evaluations at Jhpiego from 1991 to 1993.

Barbara Starfield, MD, MPH ’63, a professor in Health Policy and Management and a longtime champion of strong primary health care systems, died on June 10 at age 78. She helped develop important methodological tools for assessing diagnosed morbidity burden. A member of the Institute of Medicine, she led HPM’s Division of Health Policy for 19 years and was named University Distinguished Service Professor in 1994. A memorial service for Dr. Starfield will take place October 18 at the Bloomberg School.